

Zircon U-Pb Age Constraints on the Exhumation of the Lesser Himalayas from the Laxmi Basin, Arabian Sea

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Abstract

The Indus Fan, located in the Arabian Sea, contains the bulk of the sediment eroded from the Western Himalaya and Karakoram. Scientific drilling in the Laxmi Basin by the International Ocean Discovery Program (IODP) provides an erosional record from the Indus River drainage dating back to 10.8 Ma, and with a single sample from 15.5 Ma. We dated detrital zircon grains by U-Pb geochronology to reconstruct how erosion patterns changed through time. Long-term increases in detrital zircon U-Pb components of 750–1200 Ma and 1500–2300 Ma show increasing preferential erosion of the Himalaya relative to the Karakoram at 7.99–7.78 Ma and more consistently starting by 5.87 Ma. An increase in the contribution of 1500–2300 Ma zircons starting by 1.56 Ma indicates significant unroofing of the Inner Lesser Himalaya (ILH) by that time. The trend in zircon U-Pb age populations is consistent with bulk sediment Nd isotope data implies greater zircon fertility in Himalayan bedrock compared to the Karakoram and Transhimalaya. The initial change in spatial erosion patterns at 7.0–5.87 Ma occurred during a time of drying climate in the Indus foreland. The increase in ILH erosion postdates the onset of dry-wet glacial-interglacial cycles suggesting some role for climate control. However, erosion driven by rising topography in response to formation of the Lesser Himalayan thrust duplex, especially during the Pliocene may also be important. The influence of the Nanga Parbat Massif to the bulk sediment flux is modest, in contrast to the situation in the eastern Himalaya syntaxis.

Table 1

Sample	Age (Ma)	SiO ₂ (%)	Al ₂ O ₃ (%)	CaO (%)	Fe ₂ O ₃ (%)	MgO (%)	Na ₂ O (%)	K ₂ O (%)	P ₂ O ₅ (%)	MnO (%)	TiO ₂ (%)	Ba (ppm)	Zr (ppm)	Se (ppm)	Mean Grain Size (µm)	In Clift et al. [2019]
U1456A-11H-6 60-69 cm	0.93	56.53	14.00	3.14	8.68	2.86	1.98	1.96	0.21	0.04	1.44	323.5	174.4	244.1	31.9	Yes
U1456A-26F-3 50-58 cm	1.32	71.08	12.15	1.50	3.80	1.52	1.99	2.47	0.12	0.04	0.57	345.1	214.9	141.3	125.1	
U1456A-51F-3 100-110 cm	1.56	71.69	12.23	1.54	3.81	1.66	2.10	2.52	0.13	0.04	0.60	399.7	216.1	151.4	137.4	Yes
U1456A-61F-3 40-50 cm	1.92	72.28	11.36	1.87	3.33	1.40	2.03	2.22	0.11	0.04	0.54	321.7	223.8	158.3	142.2	Yes
U1456A-70F-2 10-16 cm	3.02	60.92	16.16	1.06	5.87	2.69	1.37	3.23	0.12	0.04	0.80	491.7	168.7	130.5	13.5	Yes
U1457C-31R-1 94-100 cm	3.17	62.19	15.57	1.24	5.70	2.59	1.91	3.67	0.16	0.05	0.74	541.3	177.2	151.7	46.5	
U1457C-33R-3 10-17 cm	3.39	66.93	13.55	1.38	4.72	2.31	1.89	2.74	0.12	0.05	0.71	409.6	142.2	147.2	132.1	Yes
U1456C-45X-3 45-51 cm	3.57	64.81	14.33	1.13	5.25	2.39	1.59	2.87	0.10	0.04	0.73	423.6	138.9	132.1	60.3	
U1456D-5R-1 12-20 cm	5.72	61.90	15.40	1.11	5.75	2.57	1.50	3.05	0.13	0.04	0.80	473.8	219.7	132.5	29.8	Yes
U1457C-41R-2 20-26 cm	5.77	64.85	14.74	1.20	5.28	2.37	1.57	2.73	0.14	0.04	0.77	413.8	210.2	135.0	47.1	
U1457C-42R-1 80-88 cm	5.82	70.30	11.81	1.56	3.51	1.51	2.02	2.21	0.12	0.04	0.53	393.4	195.3	168.4	69.1	
U1457C-43R-2 52-60 cm	5.87	65.58	14.25	1.27	4.99	2.30	1.69	2.93	0.13	0.04	0.74	395.4	193.8	141.4	103.5	Yes
U1456D-12R-1 30-36 cm	7.00	67.20	13.36	2.05	4.70	2.24	2.06	2.37	0.14	0.05	0.67	318.5	170.0	187.9	94.6	
U1456D-13R-1 30-38 cm	7.07	63.84	13.55	1.60	4.84	2.37	1.95	2.62	0.12	0.04	0.68	336.2	156.7	163.8	99.1	Yes
U1456D-15R-1 55-61 cm	7.27	65.51	13.66	1.62	4.79	2.33	1.92	2.61	0.13	0.04	0.69	331.1	169.2	165.6	43.3	
U1456D-19R-2 20-26 cm	7.66	64.67	14.54	1.53	5.09	2.39	1.97	2.97	0.16	0.04	0.71	398.3	175.2	169.4	64.0	
U1456D-20R-1 95-103 cm	7.72	63.54	14.45	1.36	4.86	2.45	1.64	2.85	0.15	0.04	0.75	304.9	190.6	145.2	32.3	
U1457C-51R-4 80-88 cm	7.77	66.13	13.89	1.43	4.75	2.31	1.85	2.66	0.12	0.04	0.70	311.3	153.7	154.2	63.0	
U1456D-22R-1 73-83 cm	7.84	62.40	15.48	1.31	5.42	2.63	1.55	2.94	0.14	0.04	0.78	338.4	170.0	146.3	27.2	Yes
U1457C-61R-1 8-18 cm	7.98	67.73	13.23	1.56	4.65	2.27	1.97	2.37	0.13	0.04	0.62	309.6	151.3	160.6	75.3	
U1456D-26R-2 37-43 cm	8.08	67.41	12.96	1.66	4.51	2.28	2.12	2.37	0.14	0.04	0.64	348.4	208.4	166.1	71.8	
U1456D-27R-2 100-106 cm	8.15	62.63	15.15	1.16	5.43	2.69	1.44	2.79	0.16	0.04	0.82	325.5	162.1	135.6	23.4	
U1456D-28R-1 40-46 cm	8.20	62.57	14.94	1.18	5.28	2.58	1.59	2.72	0.16	0.04	0.75	362.7	187.9	141.2	23.5	
U1456D-29R-2 24-34 cm	8.27	62.11	15.26	1.13	5.38	2.68	1.50	2.81	0.14	0.04	0.78	352.3	181.0	133.2	25.5	Yes
U1456E-19R-3 10-20 cm	15.57	65.14	13.85	1.15	4.97	2.72	1.70	2.68	0.15	0.04	0.69	315.8	182.4	141.7	53.1	Yes
Indus Marine A1-1620	3.60	58.33	15.42	1.58	6.89	3.21	1.36	3.09	0.20	0.06	0.80	4954.7	193.6	15.1	17.2	
Indus Marine A1-2200	5.16	56.88	13.97	2.90	8.90	2.59	1.35	2.68	0.20	0.09	0.70	1368.1	229.2	13.6	14.0	
Indus Marine A1-3180	6.93	53.46	14.16	1.96	7.23	2.52	1.13	2.68	0.19	0.05	0.74	32834.9	192.8	13.2	13.7	
Indus Marine A1-3960	8.29	57.99	14.60	2.10	8.99	2.69	1.65	2.84	0.19	0.06	0.76	715.1	228.2	13.5	16.2	
Indus Marine A1-4180	8.68	57.30	14.68	1.91	8.27	2.72	1.53	2.75	0.18	0.06	0.75	1145.3	224.7	13.1	15.3	
Indus Marine A1-4840	9.83	59.23	15.59	1.22	7.63	2.70	1.54	2.95	0.18	0.05	0.77	671.3	202.5	14.3	14.1	
Indus Marine A1-4940	10.00	60.71	15.24	0.88	6.46	2.60	1.59	2.87	0.17	0.05	0.77	7977.0	222.6	13.5	13.9	
Indus Marine A1-5360	10.72	57.44	15.63	1.46	8.77	3.11	1.31	2.80	0.21	0.06	0.83	686.6	203.3	14.6	12.8	
Indus Marine A1-5920	11.67	56.44	16.72	0.62	7.96	2.96	1.18	3.28	0.16	0.05	0.85	532.3	185.7	15.5	10.4	
Indus Marine A1-6360	12.35	57.18	16.77	0.71	7.15	3.08	1.16	3.12	0.16	0.04	0.86	534.6	191.3	15.7	12.0	
Indus Marine A1-6460	12.51	60.96	16.20	0.72	7.15	2.96	1.23	2.87	0.17	0.04	0.81	498.5	177.5	14.2	9.9	
Indus Marine A1-6680	12.86	58.50	18.08	3.68	6.92	3.42	1.19	3.05	0.18	0.04	0.84	420.1	178.5	15.1	10.3	
Indus Marine A1-6890	13.19	58.98	16.90	0.84	7.04	3.11	1.06	3.04	0.17	0.04	0.87	488.8	192.4	15.3	10.7	
Indus Marine A1-7090	13.50	58.76	16.27	0.62	7.05	3.13	0.79	2.96	0.16	0.04	0.88	420.8	206.2	14.6	12.0	
Indus Marine A1-7190	13.66	59.46	15.38	0.66	8.12	2.88	0.90	2.72	0.16	0.05	0.83	763.8	223.4	13.9	11.9	
Indus Marine A1-7400	13.99	58.12	16.08	0.64	7.82	3.06	0.93	3.08	0.15	0.04	0.84	520.6	197.6	15.6	11.7	
Indus Marine A1-7500	14.14	59.07	16.23	0.58	7.58	3.06	0.69	3.04	0.15	0.04	0.88	518.3	225.1	15.6	10.4	
Indus Marine A1-7620	14.33	58.48	16.12	0.57	7.17	3.05	0.82	2.99	0.16	0.04	0.86	483.7	224.5	15.7	12.0	
Indus Marine A1-7720	14.49	58.75	16.42	0.74	7.06	3.20	0.87	3.15	0.15	0.04	0.87	454.1	216.7	14.9	11.7	
Indus Marine A1-7820	14.64	57.76	16.12	0.59	7.00	3.07	0.88	2.91	0.15	0.04	0.86	530.2	215.8	14.8	10.8	
Indus Marine A1-8040	14.99	58.43	16.32	0.58	7.07	3.12	0.83	3.14	0.15	0.04	0.87	465.6	206.4	15.4	10.7	
Indus Marine A1-8140	15.15	58.48	16.47	0.53	7.34	3.20	0.84	3.15	0.16	0.04	0.87	359.5	214.8	14.6	11.4	
Indus Marine A1-8240	15.30	57.92	16.05	0.79	7.01	3.34	0.81	2.99	0.17	0.04	0.88	366.9	224.7	16.4	12.5	
Indus Marine A1-8340	15.46	57.50	15.41	0.72	6.88	3.23	0.80	2.88	0.15	0.04	0.84	15154.2	226.9	15.2	13.6	
Indus Marine A1-8450	15.63	53.35	11.98	0.77	6.18	2.37	0.72	2.10	0.12	0.03	0.67	67660.3	207.5	11.8	17.5	
Indus Marine A1-8650	15.94	39.71	7.64	0.55	3.87	1.29	0.53	1.25	0.10	0.02	0.44	94222.9	225.8	8.5	16.9	
Indus Marine A1-8950	16.42	48.08	9.12	0.72	4.51	1.64	0.87	1.51	0.11	0.03	0.55	95848.9	278.7	7.4	14.5	
Indus Marine A1-9170	16.76	52.48	11.88	0.70	6.54	2.42	0.83	2.15	0.14	0.04	0.66	74337.3	187.9	10.4	20.9	

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Zircon U-Pb Age Constraints on the Exhumation of the Lesser Himalayas from the Laxmi Basin, Arabian Sea

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Key Points:

- First basin-wide study of how regional erosion patterns have changed through time since 15.5 Ma in the Western Himalaya and Karakoram.
- Geochemical and geochronological analyses show increased relative erosion from the Himalaya compared to the Karakoram at 7.99–7.78 Ma.
- Changing patterns of erosion correlate with climatic drying at ~7.7–6.3 Ma, and relate to solid Earth tectonic forces building topography.

Abstract

The Indus Fan, located in the Arabian Sea, contains the bulk of the sediment eroded from the Western Himalaya and Karakoram. Scientific drilling in the Laxmi Basin by the International Ocean Discovery Program (IODP) provides an erosional record from the Indus River drainage dating back to 10.8 Ma, and with a single sample from 15.5 Ma. We dated detrital zircon grains by U-Pb geochronology to reconstruct how erosion patterns changed through time. Long-term increases in detrital zircon U-Pb components of 750–1200 Ma and 1500–2300 Ma show increasing preferential erosion of the Himalaya relative to the Karakoram at 7.99–7.78 Ma and more consistently starting by 5.87 Ma. An increase in the contribution of 1500–2300 Ma zircons starting by 1.56 Ma indicates significant unroofing of the Inner Lesser Himalaya (ILH) by that time. The trend in zircon U-Pb age populations is consistent with bulk sediment Nd isotope data implies greater zircon fertility in Himalayan bedrock compared to the Karakoram and Transhimalaya. The initial change in spatial erosion patterns at 7.0–5.87 Ma occurred during a time of drying climate in the Indus foreland. The increase in ILH erosion postdates the onset of dry-wet glacial-interglacial cycles suggesting some role for climate control. However, erosion driven by rising topography in response to formation of the Lesser Himalayan thrust duplex, especially during the Pliocene may also be important. The influence of the Nanga Parbat Massif to the bulk sediment flux is modest, in contrast to the situation in the eastern Himalaya syntaxis.

Keywords: Erosion, zircon, monsoon, Himalaya.

1 Introduction

Collision between India and Eurasia, starting about 50–60 Ma [Garzanti *et al.*, 1987; Jaeger *et al.*, 1989; Klootwijk *et al.*, 1992; Najman *et al.*, 2010], has resulted in the formation the largest mountain ranges on Earth. The timing of collision remains controversial but is best addressed by consideration of the stratigraphic record that shows the onset of mixed Indian-Eurasian sediments. Sedimentary rocks in the central and eastern Himalaya imply initial collision at 59 ± 1 Ma [Hu *et al.*, 2016]. Recent work combining Hf isotopes with U-Pb ages in zircon grains from the Tethyan Himalaya now show that sediment eroded from Eurasia, rather than oceanic island arcs, was reaching NW India by 54 Ma, requiring India-Eurasia collision before than time [Najman *et al.*, 2017]. The Himalaya have continued to evolve both in topography and structure as a result of ongoing tectonic deformation coupled with erosion, largely modulated by the strength of summer monsoon rains [Bookhagen *et al.*, 2005; Clift *et al.*, 2008b; Wobus *et al.*, 2003]. Sediments eroded from the Western Himalaya has been deposited in the Arabian Sea where they form the second largest sediment body on Earth, the Indus submarine fan [Clift *et al.*, 2001; Kolla and Coumes, 1987].

The sedimentary deposits of the Indus submarine fan represent an archive of the erosion and weathering processes in the Western Himalaya since the onset of continental collision, at least since ~45 Ma [Clift *et al.*, 2001]. While bedrocks exposed at the surface in the mountains can be used to reconstruct the uplift and exhumation of those particular rock formations, the submarine fan sedimentary record captures spatial and temporal variations of the long-term history of denudation, albeit one buffered by sediment transport processes. Because older portions of bedrocks have been completely removed by erosion and their exhumation history no

longer accessible, the sedimentary record becomes the only record of the earlier erosion and exhumation history. Although this record is partially available in the Himalayan foreland basin, these proximal, continental syn-tectonic deposits are more difficult to date at high resolution, and the sequence is truncated by significant unconformities, and deformed by progressive incorporation into the sub-Himalayan fold and thrust belt [Najman, 2006]. Moreover, any given section in the accreted foreland basin can only represent the sediment deposited from paleo-rivers that once flowed in front of the mountains in that region. As such a given section would preserve a history of erosion in a limited catchment of a particular part of the mountains, but does not provide a more integrated orogen-scale overview.

Sediments from the western Himalaya are delivered to the Arabian Sea by the Indus River and its eastern tributaries in the Punjab (Fig. 1A). The Indus is particularly sensitive to variations in the strength of the Asian monsoon because it lies on the western edge of the zone affected by this climatic phenomenon. As a result, variations in monsoon strength can have a major impact on both patterns and rates of erosion in the various ranges that comprise the western end of the Himalayan mountain chain (Fig. 1B). A number of studies have suggested that changes in monsoon intensity have significantly impacted the erosion history of the western Himalaya [Bookhagen *et al.*, 2005; Clift *et al.*, 2008a; Clift *et al.*, 2008b].

Debate continues regarding what controls the erosion of the Himalaya, with some workers favoring tectonic processes that drive rock uplift [Burbank *et al.*, 2003], as being the critical control, while others have argued for a dominance by monsoon rainfall and/or glaciation [Whipple, 2009; Wobus *et al.*, 2003]. These focus the sediment producing regions across a relatively narrow band of the range front and in turn drive exhumation of deep buried rocks [Thiede *et al.*, 2004]. It is however known that the erosion of the Himalaya is sensitive to climate change because sediment supply during and shortly after the Last Glacial Maximum (LGM) was preferentially focused in the Karakoram, while the strongest erosion has shifted into the Lesser Himalaya since the onset of the Holocene [Clift *et al.*, 2008a].

In this study we focus on the Late Miocene-Recent history and examine evidence for coupling between the tectonic evolution and the changing strength of summer monsoon rains. We take advantage of recently recovered sediments collected by the International Ocean Discovery Program (IODP) in 2015 from the Eastern Arabian Sea, which provide a record of erosion extending back to ~10.8 Ma, with one sample dated at ~15.5 Ma [Pandey *et al.*, 2016d]. An earlier lower-resolution study using detrital zircon grains and numerous bulk sediment Nd and Sr isotopes argued that changes in erosion across the Indus Basin were unconnected to climate change and largely manifest as increasing erosion of the Lesser Himalaya, especially starting at 1.9 Ma [Clift *et al.*, 2019b]. We test this model using an expanded set of new U-Pb ages from detrital zircon sand grains (1882 new ages from 15 additional samples, compared to 1335 ages from ten samples in the earlier work) coupled with a more sophisticated statistical treatment of the total data set in order to reconstruct the evolving patterns of erosion.

2 Geologic Setting

The sediments analyzed in this study were retrieved from the Laxmi Basin in the Eastern Arabian Sea (Fig. 1A and 1B). This basin is separated from the rest of the Arabian Sea by a continental block known as Laxmi Ridge [Pandey *et al.*, 1995]. Rifting in Laxmi Basin preceded the breakup of the main Arabian basin, west of Laxmi Ridge, and likely occurred in the latest Cretaceous [Bhattacharya *et al.*, 1994]. Since that time 2–3 km of sediment have accumulated in the Laxmi Basin. Initial provenance investigation of these sediments using Nd isotopes and limited zircon U-Pb dating indicates that while some fine-grained material might be derived in from peninsular India, immediately to the east of the Laxmi Basin, most of the sediment was sourced from the Indus Delta, located around 800 km towards the north [Clift *et al.*, 2019b]. Continuous sedimentation in Laxmi Basin was interrupted by the emplacement of a large mass transport complex (MTC) just before 10.8 Ma, which eroded most of the Middle Miocene at Site U1456 [Calvès *et al.*, 2015; Dailey *et al.*, 2019]. At Site U1457 the MTC removed almost the entire sediment fill from the edge of Laxmi Ridge leaving only a thin deposit of red Paleocene mudstones [Pandey *et al.*, 2016b].

We also compare our sediments with those recovered as drill cuttings from the industrial borehole Indus Marine A-1 located on the Indus shelf (Fig. 1A). Because Indus Marine A-1 is located close to the Indus River mouth the source of sediment is more straight forward, and cannot have involved influence from the Indian Peninsula, as might be the case in the Laxmi Basin. This site penetrated into the Middle Miocene [Shuaib, 1982] and drill cuttings have been used to look at the evolving provenance using Nd isotope methods, going back further in time than possible at the IODP sites [Clift and Blusztajn, 2005; Clift *et al.*, 2019b]. The Indus Marine A-1 drill site is located on the relatively flat continental shelf and is only affected by growth faulting, but has otherwise escaped major tectonic deformation since the breakup of the Arabian Sea, except along its western edge adjacent to the Murray Ridge [Clift *et al.*, 2002a; Gaedicke *et al.*, 2002]. Unfortunately, the recovered sediments from Indus Marine A-1 are fine-grained and are not conducive to detrital zircon U-Pb dating in this proximal area. We examined the major element chemistry of the sediments at Indus Marine A-1 for comparison with the more distal drill sites sampled by IODP in order to demonstrate their Indus provenance. Neodymium isotope data indicate that Indus Marine A-1 sediments were derived from the Indus River, consistent with their proximal location, providing a useful comparison with the deep-water materials [Clift and Blusztajn, 2005].

Determining the provenance of the sediment delivered to the Arabian Sea is facilitated by the leverage of the significant spatial diversity of bedrock ages and lithologies within the Indus drainage basin [Hodges, 2000; Searle, 1996]. Geochemical and isotopic differences between bedrock sources are transferred to the eroded sediment and although grains may be altered during the transport process, many of these differences are preserved in the final deposited sediment, allowing us to deconvolve the sources and variations using appropriate proxies. Figure 1C shows the various mountain ranges that comprise the main distinct source regions to the modern Indus River, including the Greater and Lesser Himalaya, the Tethyan Himalaya that lie further north, and that represent the telescoped, passive continental margin of Greater India [Garzanti *et al.*, 1987]. This unit is separated by the Indus Suture Zone from magmatic arc rocks of the Transhimalaya and Kohistan (Fig. 1C) that were largely emplaced in the Cretaceous and

Paleogene [Khan *et al.*, 1997; Rolland *et al.*, 2002]. Further north, across the Shyok Suture Zone, lie the Karakoram, the old active margin of continental Eurasia, which also comprises Mesozoic arc rocks, and experienced magmatism after India-Eurasia collision, most notably in the form of the Early Miocene Karakoram Batholith [Ravikant *et al.*, 2009; Searle *et al.*, 1989]. The Karakoram region was uplifted in response to both compressional tectonics and strike-slip displacement on the Karakoram Fault [Searle and Phillips, 2007]. Farther to the west the Hindu Kush mountains are characterized by a similar pre-collisional history as the Karakoram, but subsequently did not experience such dramatic or rapid unroofing [Hildebrand *et al.*, 2001; Zhuang *et al.*, 2018]. In addition, the Western Syntaxis of the mountain chain is marked by the Nanga Parbat Massif (Fig. 1C), characterized by high-grade metamorphic and igneous intrusive rocks that experienced recent, very rapid exhumation [Zeitler *et al.*, 1989]. However, it is unclear exactly when this process began because the rocks now at the surface are very young. Nonetheless, this does not preclude an earlier onset to erosion [Chirouze *et al.*, 2015].

The Greater Himalaya were emplaced along the Main Central Thrust (MCT) after ~24 Ma, placing them over the Lesser Himalaya [Catlos *et al.*, 2001; Stephenson *et al.*, 2001]. These in turn were unroofed and brought to the surface due to motion along the Main Boundary Thrust (MBT) and associated thrust duplexing [Bollinger *et al.*, 2004; Huyghe *et al.*, 2001]. Evidence from the Siwalik Group foreland basin sedimentary strata indicates that the Lesser Himalaya were exposed locally only after 9 Ma and more widely after 6 Ma in NW India [Najman *et al.*, 2009], although the Nd isotopes at Sites U1456 and U1457 imply that widespread unroofing of the Inner (Crystalline) Lesser Himalaya only began at 1.9 Ma [Clift *et al.*, 2019b]. The Siwalik Group rocks themselves have been up-thrusted and are presently eroding, recycling older sediments back into the river system. However, estimates derived from the incision of terraces in the Nepalese frontal Himalaya suggest that the Siwaliks contribute no more than about 15% of the total flux [Lavé and Avouac, 2000]. The western edge of the Indus drainage basin is characterized by fold and thrust belts (Sulaiman and Kirthar ranges, Fig. 1A), similar to the Siwalik Group in character [Roddaz *et al.*, 2011], but experiencing a more arid climate. Nonetheless, this environment need not limit erosion rates because of the strong erosion associated with occasional flash flooding events in vegetation-poor settings [Molnar, 2001], although study of heavy minerals in rivers draining these ranges and the lower Indus indicate that their contribution to the net sediment load is minor [Garzanti *et al.*, 2020].

Other potential sources of sediment delivered into the Laxmi Basin include the Precambrian cratonic rocks of peninsular India and associated Gondwanan sedimentary sequences [Mukhopadhyay *et al.*, 2010; Yin *et al.*, 2010], characterized by old (>500 Ma) bedrock zircon U-Pb ages, similar to those observed in the Himalaya, especially the Lesser Himalaya. Zircon U-Pb dating, given its high closure temperature [Hodges, 2003], only records the initial crystallization or high-temperature metamorphism, and thus, does not allow us to exclude such old grains as having been derived from peninsular India rather than the Himalaya. Sediments eroded from the Deccan Plateau, the latest Cretaceous flood basalt province that dominates the Western Ghats, immediately onshore from the drilling area, were erupted around 65 Ma [Courtilot *et al.*, 2000] over a relatively short period of time. While these would be very distinctive, basalt is characterized by a very low zircon fertility and might not provide significant zircon grains of that age into the adjoining basin. Nd and Sr isotopic evidence suggests enhanced flux in muddy sediments to the Laxmi Basin during interglacial times [Khim *et al.*, 2019]. Low-

192 resolution apatite fission track and zircon U-Pb studies have so far identified just a single sand at
193 the IODP drill sites that was derived from the Indian peninsula [Zhou *et al.*, 2019].

194 3 Sedimentology and Stratigraphy

195 Drilling at Sites U1456 and U1457 penetrated ~1100 m below the seafloor in both
196 locations, with the basement being reached at Site U1457 (Fig. 2)[Pandey *et al.*, 2016b]. Drilling
197 at Site U1456 only just penetrated through the MTC, allowing a very short core of Middle
198 Miocene sandstone to be recovered [Pandey *et al.*, 2016a]. Age assignments at both sites are
199 made by combining biostratigraphy and magnetostratigraphy and we follow the age model of
200 Pandey *et al.* [2016a] for Site U1456 and Pandey *et al.* [2016b] for Site U1457 (Fig. 2), with
201 updates from Routledge *et al.* [2019]. Ages of individual samples are calculated assuming linear
202 sedimentation between the dated points. At Site U1456 the sediments are relatively mud-rich, but
203 with a number of silt and fine sand turbidite interbeds at 460–730 mbsf (meters below seafloor;
204 Fig. 2A), which are overlain by a sequence of mud and carbonate-rich sediments. A thick, sand-
205 rich package was recovered between 360 and 140 mbsf and interpreted as a submarine fan lobe
206 [Pandey *et al.*, 2016a]. Above this sand-rich package, the section is dominated by mud and
207 carbonate, interpreted as the product of hemipelagic sedimentation. Site U1457 is characterized
208 by much lower proportions of sand, reflecting the drilling location on the flanks of the Laxmi
209 Ridge. However, a sand-rich interval between 670 and 810 mbsf is overlain by a carbonate and
210 mud-rich interval between 600 and 670 mbsf. More sand-rich beds were encountered between
211 470 and 600 mbsf. As at Site U1456, sediments shallower than 200 mbsf at Site U1457, are mud
212 and carbonate-rich (Fig. 2). The coarse-grained intervals are again interpreted as lobe deposits
213 [Pandey *et al.*, 2016b]. The sandy sediments are interpreted to be deposited by turbidity currents,
214 with the muddy sediments representing hemipelagic intervals between depositional events.
215 Changes in grain size might be driven by changes in the erosional power in the source regions,
216 the discharge stream power of the river, or by changes in sea level, but could also reflect
217 avulsion in the main depositional lobes in and out of Laxmi Basin and the main part of the
218 Arabian Sea towards the West. Such auto cyclic behavior is commonly observed in submarine
219 fans [Deptuck *et al.*, 2008; Shanmugam and Moiola, 1991].

220 4 Methods

221 U-Pb geochronology of detrital zircon grains has become a powerful and widely
222 employed tool for discerning provenance in siliciclastic sedimentary systems. The methodology
223 is based on the concept that different bedrock source rocks are characterized by distinct and/or
224 different age populations of zircons. A zircon budget is not the same as an eroded rock budget
225 because of differences in the relative fertility of bedrock sources with regard to zircon. Zr
226 concentrations have been used as a proxy for the relative abundance of zircons in sediment
227 [Amidon *et al.*, 2005], but the reliability of this approach has recently been questioned [Malusà *et al.*
228 *et al.*, 2016]. Malusà *et al.* [2016] developed a method using mineralogy and density data from the
229 sediment to infer the fertility of the source bedrock. Unfortunately, this approach is not practical
230 for this work because the sample sizes available from IODP were small (<50 cm³) so that all the
231 material had to be processed for zircon extraction and even required amalgamating neighboring
232 samples in order to generate enough data to make a statistically meaningful result in some cases.
233 We use previously published geochemical data from modern rivers as a guide to zircon fertility

as this data already exists and we cross check this prediction against other provenance methods to assess its credibility. Our erosion budgets are however largely zircon based, not bulk sediment.

Zircon is a robust mineral and its grains do not generally experience significant physical abrasion during transport, unless they had previously accumulated major radiation damage. Hence, zircon can undergo multiple episodes of recycling and redeposition. Although the concentration of zircon in any given sediment can be affected by hydrodynamic sorting, this process may not be a strong influence on the resulting detrital age spectra unless there is a relationship between grain size and crystallization age, which we investigate below. Work on Yangtze River sediments indicates that the typical grain size range analyzed using LA-ICP-MS technology is representative of the overall population in the sediment without a bias related to grains size [Yang *et al.*, 2012]. Detrital zircon U-Pb dating has been widely applied in provenance studies in the Western Himalaya due to the large range of zircon U-Pb age differences between the various source terrains described above. Furthermore, studies of the modern Indus River documented a close correlation between the modern zircon U-Pb age spectra and the bedrock sources, albeit one implying focused erosion in several sub-basins [Alizai *et al.*, 2011; Zhuang *et al.*, 2018]. Several studies have also used detrital zircon dating to investigate the provenance of the Siwalik Group foreland basin sedimentary rocks [Baral *et al.*, 2015; Bernet *et al.*, 2006; DeCelles *et al.*, 2004; Zhuang *et al.*, 2015] and Quaternary sediments in the delta and offshore [Clift *et al.*, 2008a; Li *et al.*, 2019], allowing evolving erosion patterns to be reconstructed.

4.1 Major Element Analyses

In addition to detrital zircon U-Pb dating, bulk sediment samples were analyzed for their major element contents by Inductively Coupled Plasma Emission Spectrometry (ICP-ES) at Boston University (BU), USA. Sediment samples were decarbonated with acetic acid, washed with distilled and deionized water with a purity of 9–12 megaohms, and hand powdered at Louisiana State University (LSU) before total fusion preparation at BU. Glass beads for each sample were made in a muffle furnace under 1050°C by fusing 100 ± 0.5 mg of sample mixed with 400 ± 0.5 mg lithium metaborate (LiBO_2). The melted mixture was then dissolved in 5% HNO_3 , sonicated, manually shaken until no visible grains were observed, and further diluted for analysis [Dunlea *et al.*, 2015]. Precision for all elements was better than 1% of the measured value, and accuracy was confirmed by repeated analyses of International Standard Reference Materials (Basalt, Hawaiian Volcano Observatory, BHVO-2)[Wilson, 1997]. Results of the geochemical measurements are shown in Table 1.

4.2 Grain size Analysis

For quantitative grain size analysis, samples were prepared using standard procedures as described by Howell *et al.* [2014]. We put a small amount of sample into a cleaned 50 ml plastic centrifuge tube and added 5–7 ml of sodium phosphate solution. The tube was capped and vortexed to deflocculate clay-sized sediment and separate organic particles. The sample was poured through an 850 μm sieve and funneled into a 15 ml glass test tube. After centrifuging and removing the clear supernatant, 2–3 ml of sodium phosphate and 5 ml of 30% H_2O_2 were added.

Tubes were vortexed again and then put into a hot bath that was heated to 70°C. This step requires persistent monitoring to prevent loss of reactant by spraying it with acetone until the reaction is stabilized. Reactants then sat overnight to completely oxidize organic matter. Reacted supernatant was removed, and 5 ml of sodium phosphate was added. These treated samples were then rinsed with deionized water, transferred into clean 50 ml plastic centrifuge tubes, and topped with sodium phosphate into a sample solution of up to 40 ml. Samples were vortexed again prior to grain size analysis. Grain size analysis was conducted on a Beckmann Coulter LS13 320 laser diffraction particle size analyzer at LSU. The obscuration of all running samples in the aqueous liquid module (ALM) was between 8–12 %. Result of the analysis are provided in Table 2.

4.3 Zircon U-Pb dating

After standard mineral separation, zircon grains were sprinkle-mounted onto double-sided tape on 1" acrylic discs and analyzed at random using depth-profiling LA-ICP-MS U-Pb geochronology [Marsh and Stockli, 2015]. Although this method differs from the more common analysis of cut and polished grains there is no indication that this profiling approach yields results that differ significantly from earlier work, including work done in the Himalaya [Colleps *et al.*, 2019]. For each sample at least 120 zircons were analyzed to obtain provenance datasets that resolve all components that comprise >5% of the total population [Vermeesch, 2004]. The analyses were completed using a PhotonMachine Analyte G.2 Excimer laser (30 µm laser spot size) with a large-volume Helex sample cell and a Thermo Element2 ICP-MS using procedures described in Hart *et al.* [2016] at the UTChron facilities at the Jackson School of Geosciences at the University of Texas at Austin. GJ1 was used as the primary reference standard [Jackson *et al.*, 2004] and a secondary in-house zircon standard (Pak1 with a TIMS $^{206}\text{Pb}/^{238}\text{U}$ age of 43.0 Ma). The data from the analyses were then reduced using the Iolite data reduction software VizualAge [Paton *et al.*, 2011; Petrus and Kamber, 2012]. For analyzed detrital zircons, the $^{206}\text{Pb}/^{238}\text{U}$ age was used for grains younger than 850 Ma and the $^{207}\text{Pb}/^{206}\text{Pb}$ age was used for grains older than 850 Ma [Gehrels *et al.*, 2008]. All ages reported use 2σ absolute propagated uncertainties. $^{207}\text{Pb}/^{206}\text{Pb}$ ages are less than 30% discordant, and $^{206}\text{Pb}/^{238}\text{U}$ ages are less than 10% discordant [Gehrels *et al.*, 2011]. The discordance reported is calculated with the $^{206}\text{Pb}/^{238}\text{U}$ and $^{207}\text{Pb}/^{235}\text{U}$ ages if <850 Ma and the $^{206}\text{Pb}/^{238}\text{U}$ and $^{207}\text{Pb}/^{206}\text{Pb}$ ages if >850 Ma. Although some studies have suggested older crossovers between the $^{206}\text{Pb}/^{238}\text{U}$ and $^{207}\text{Pb}/^{235}\text{U}$ ages and the $^{206}\text{Pb}/^{238}\text{U}$ and $^{207}\text{Pb}/^{206}\text{Pb}$ ages (e.g., 1.5 Ga [Spencer *et al.*, 2016]) blindly picking a crossover at 1.5 Ga leads to culling of discordant $^{206}\text{Pb}/^{238}\text{U}$ ages, or unacceptable smearing and loss of age mode definition between 800–1500 Ma for many samples. Picking a 1500 Ma crossover cutoff and a 20% discordance filter would result in the loss of 80% of the data between 850 and 1500 Ma making the data bad provenance proxies. The 850 Ma crossover was chosen in accordance with the approach of Spencer *et al.* [2016] and Marsh *et al.* [2019]. The data are reported in Table 3.

When accurately dating a geological event, high concordance is a requirement but when assigning grains to broad age populations for provenance work the emphasis is on high numbers of grains rather than on high precision in order to improve the statistical reliability. The appropriate level of discordance filter needs to be determined for each data set in light of the goals of the study and the complexities encountered. If a study yields a mix of Phanerozoic and

Archean ages, and the relative proportions of these ages are important, a generous (e.g., 30%) discordance cutoff is appropriate so that most Precambrian ages are retained [Gehrels, 2012].

5 Results

5.1 Grain-size of sediments

The sediments were assessed using the classification scheme of Folk [1974](Fig. 3). Sediments range from silty sand to silt and mud, both the new samples processed here and those from the earlier study we integrate with here {Clift, 2019 #152}. The grain size variation in single samples can be better assessed by plotting the proportion of each grain size fraction as a spectrum (Fig. 4). We see generally good sorting (positive kurtosis) and a negative skew, meaning a dominance of the finer grain sizes and a tail of coarser grains comprising a diminishing proportion of the sediment. This is especially true for the coarsest grained sediments. The vast majority of the sediment considered here is classified as fine sand to silt, with only small amounts of medium and coarse sand in a minority of samples, three from Site U1456 dated at 1.92–1.32 Ma and one from Site U1457 at 3.02 Ma. Three of the new samples do contain significant volumes of medium and even coarse sand (3.39, 7.00 and 7.27 Ma). The spot size of the laser used for the U-Pb dating means that grains smaller than ~30 μm were not considered in this study. Depending on the sample this represents a wide range of the total sediment load. Only 9% of Sample U1456A-51F-3, 100-110 cm was less than 30 μm , while 89% of Sample U1456A-70F-2, 10-16 cm is smaller than that threshold. See Table 2 for full results.

5.2 Bulk Sediment Chemistry

The general geochemical character of the sediments can be seen on a CN-A-K ternary diagram [Fedo *et al.*, 1995](Fig. 5A). The IODP samples plot in an array with a Chemical Index of Alteration (CIA) of ~65 to 73 [Nesbitt *et al.*, 1980]. They form a roughly linear array trending towards the illite end member and suggestive of its progressive involvement as the primary mineral breakdown product. The Laxmi Basin samples can be compared with sediments from the Quaternary Indus delta [Clift *et al.*, 2010], Indus Canyon [Li *et al.*, 2018], the Indus Marine A-1 borehole, as well as modern sediments from the western Indian shelf and slope between the Saurashtra peninsula and Bhatikal [Kurian *et al.*, 2013](Fig. 1). Rivers south of Bhatikal have a different composition and are unlikely to be sources to the Laxmi Basin sites.

The Laxmi Basin sands have very similar bulk compositions to the Quaternary Indus canyon and delta, as well as the Indus Marine A-1 samples (Fig. 5A), but plot below or to the right of the array of the western Indian shelf sediments. Only the shelf sample taken near Bhatikal (the southernmost shelf sample that overlies the Precambrian crystalline basement of India, rather than the Deccan Traps), plots below the Laxmi Basin sediments, with a lower CIA value. This plot confirms that the analyzed sands have little in common with material eroded from peninsular India and appear consistent with an Indus River origin. Likewise, the sediments plot close to the Quaternary Indus sediments and those of Indus Marine A-1 on the discrimination diagram of Herron [1988](Fig. 5B). The IODP samples plot with slightly lower $\text{Fe}_2\text{O}_3/\text{K}_2\text{O}$ values compared to the proximal sediments. The Laxmi Basin sediments form an

array defined as shales and wackes, while the western Indian shelf sediments fall into the Fe shale, litharenite, sublitharenite and Fe sand fields.

We further assess whether grain size has any relationship to zircon concentrations by plotting Zr contents against median grain size (Fig. 6). Although the original source characteristics and hydrodynamic sorting of the sediment might be expected to concentrate zircons in certain size fractions this does not appear to be a significant factor within the range of grain sizes considered here.

5.3 Detrital Zircon U-Pb

We examined the range of zircon U-Pb ages using a kernel density estimate (KDE) diagram (Fig. 7) to assess similarities between different sampled sediments and potential source regions (Fig. 7). All of the sediments analyzed in this study show a significant zircon U-Pb component younger than 200 Ma. In addition, we see significant components dated at 350–1250 Ma and 1500–2300 Ma. The abundance of these older age components overall increases with decreasing sample depositional age. The 350–1250 Ma age component appears to increase in all sediment samples dated at 5.87 Ma or younger compared to the older sediments. A particularly prominent age mode at ~1800 Ma first occurs in sediments deposited at 3.43 Ma and becomes extremely prominent in all samples younger than 1.92 Ma. This age mode is also observed in the modern sediment from the Indus river mouth [Clift *et al.*, 2004].

Examining the <200 Ma zircon U-Pb ages in detail, we see that the vast majority of grains are younger than 120 Ma with prominent age peaks at around 100–120 Ma and 40–70 Ma (Fig. 8). In the youngest samples, especially those deposited starting at 3.02 Ma, we see another age mode at ~20 Ma, although this is also seen in the sample dated at 5.78 Ma. One sample deposited at 3.17 Ma differs in its <200 Ma age spectra from the other samples as it is characterized by a prominent age peak at 100–120 Ma, with a general lack of other young zircon grains.

6 Discussion

Major element discrimination diagrams (Fig. 5) suggest that the Laxmi Basin sediments are most similar to deposits found in the Quaternary and modern Indus River/delta/canyon, as well as the older sedimentary rocks from Indus Marine A-1 (Fig. 5). However, they are distinctly different from sediments sampled from the modern western Indian shelf, and largely derived from the Deccan Plateau and underlying units [Kurian *et al.*, 2013]. These geochemical data suggest that the Laxmi Basin sediments, most likely originated from the Indus River mouth.

We assessed the overall geochemical characteristics of the sediments by plotting the major element composition of each sample normalized to the upper continental crust (UCC; Fig. 9) [Taylor and McLennan, 1995]. Most of the samples display a relatively uniform topology in these diagrams and are broadly similar to both post-LGM sediments from the Indus Delta (KB-40-4), the Holocene delta (TH-10-1) and, the modern Indus river (Thatta TH-1). Most of the samples show a similar major element composition compared to the UCC, with a consistent enrichment in TiO₂, suggestive of a higher content of Ti-bearing heavy minerals (e.g., rutile,

anatase, brookite, ilmenite, titanite). This enrichment is particularly strong in the 0.93 Ma sample which apatite fission track data indicate to have a unique provenance [Zhou *et al.*, 2019]. There are also relative depletions in CaO and Na₂O, as well as P₂O₅, implying both a lower plagioclase and apatite content relative to the UCC. This relative depletion in CaO is strongest in the modern river mouth sediment and weakest in the post-glacial delta sediments, with the fan sediments plotting between these extremes. The systematically lower abundance of plagioclase and apatite likely reflects chemical weathering in the floodplains prior to deposition in the ocean, because these phases are less stable under conditions dominated by chemical weathering [Guidry and Mackenzie, 2000; White and Brantley, 1995]. However, all samples show this effect and there is a general consistency in the overall composition, we conclude that we are comparing sediments of a similar bulk character. All fan sediments show Zr abundances relatively close to the UCC average

6.1 Changing Provenance

Before using the changing zircon U-Pb age spectra to infer changing sediment provenance we examine the possible role of grain size in controlling the results. Sediment grains are fractionated during transport because different densities and shapes affect their settling characteristics [Garzanti *et al.*, 2009]. Zircons all have the same density but the size and shape of the grains from a given source may vary and influence the final conclusions. If one source is associated with smaller or larger grains compared to other sources then this may prejudice the analysis, especially if the grains are too small to be analyzed. Garzanti *et al.* [2009] concluded that this effect was moderate in the Ganges-Brahmaputra catchment, which has strong similarities to the Indus. We plot major, provenance-related age populations (0–25, 40–70, 70–120, 300–750, 750–1250 and 1500–2300 Ma) against median grain size for all samples considered here to see if grain size plays a strong role in controlling the age spectra. Figure 10 shows that there is not a strong correlation between sediment median grain size and the proportion of various provenance-sensitive age groups. However, we note that the four coarsest sediments (>100 µm) do contain more 750–1250 and 1500–2300 Ma grains compared to the 40–70 and 70–120 Ma groups. The effect is especially strong with the 1500–2300 Ma group. In contrast to work on the Amazon River by Lawrence *et al.* [2011] who showed that older grains were significantly smaller than younger ones, the reverse may be true in the Indus. It is however noteworthy that the coarser sediments are all young 3.02 Ma and younger and as demonstrated below the provenance inferred from similar aged finer sediment is not greatly different and also consistent with neighboring bulk sediment Nd isotope constraints. We conclude that there may be a grain size issue with the coarsest sediment, but that this is not dominant in controlling the U-Pb age spectra.

The zircon U-Pb age spectra are used to track the source evolution of sediment reaching the Arabian Sea and compared to bedrock zircon U-Pb age signatures of possible source areas (Fig. 7). The abundance of grains younger than 200 Ma correlates well with young bedrock from the Indus Suture Zone, particularly in Kohistan, the Transhimalaya and Karakoram, as well as Nanga Parbat (Fig. 8). The abundance of these young zircon grains clearly points to sediment being supplied by the Indus River and not by peninsular India, where no magmatism <200 Ma is known outside the Deccan Plateau. Detrital zircon grains older than 350 Ma also largely correlate with various bedrock sources known in the Himalaya. Detrital zircon age modes

between 350 and 750 Ma have been correlated with bedrock sources in the Tethyan Himalaya [Alizai *et al.*, 2011], although it is generally agreed that there is little real difference in terms of U-Pb ages, between Tethyan and Greater Himalaya zircon signatures [Gehrels *et al.*, 2011], and these are in any case not always mapped consistently by different groups [Webb, 2013]. Consequently, zircons with ages between 350 and 1250 Ma could be derived from either source. The older samples show relatively low abundance of grains in this age range, but these increased significantly starting at 5.87 Ma and become very abundant in the last few million years. Older grains, dating between 1500 and 2300 Ma, are particularly common in Lesser Himalayan sources, although they are also present in smaller amounts in the Tethyan and Greater Himalaya [DeCelles *et al.*, 2000; Gehrels *et al.*, 2011]. These mainly Paleoproterozoic zircon grains are almost entirely absent from the Laxmi Basin Miocene samples, but show a marked increase beginning at 5.72 Ma, and becoming very abundant beginning at 1.56 Ma (Fig. 7). We therefore interpret these patterns to indicate a progressive increase in erosion from the Himalaya starting after 7.0 Ma, and especially starting at 5.72 Ma, with strong erosion from the Tethyan and Greater Himalaya. After 3.02 Ma there is a dramatic increase in erosional flux from the Lesser Himalaya, which have had a strong influence on the river system since the onset of the Holocene [Clift *et al.*, 2004; Clift *et al.*, 2008a].

If we only consider the zircon grains younger than 200 Ma then we can see that there is evidence of erosion, from both Kohistan and from the Karakoram, in most of the samples analyzed (Fig. 8). Kohistan is particularly noteworthy for having zircon dated between 40 and 70 Ma [Alizai *et al.*, 2011; Zhuang *et al.*, 2018], although there are similar aged units in the Karakoram as well. However, zircon grains older than 70 Ma but younger than 120 Ma are almost exclusively known only from Karakoram bedrock sources [Searle, 1996]. The 3.17 Ma sample does not show the younger 40–70 Ma population, suggesting that it did not receive any significant material from Kohistan/Ladakh.

The youngest (<25 Ma) zircon grains are more enigmatic in terms of their provenance. While very young zircons are known from the present-day Nanga Parbat massif, these are generally younger even than the 25 Ma zircon U-Pb age component observed in many of the samples [Zeitler *et al.*, 1993]. Our new data also show an increased influx from bedrock sources with very young zircon starting at 3.02 Ma, as well as a brief appearance at around 5.78 Ma. It is possible that this increase starting at 3.02 Ma reflects the emergence of Nanga Parbat, although we cannot exclude the influence of other young sources in the southern Karakoram metamorphic belt, which also contains rocks of this age and have experienced very rapid exhumation in the last few million years [Wallis *et al.*, 2016]. Because the Deccan Plateau volcanic rocks were erupted rather quickly around 65 Ma, it is hard to completely exclude their influence because grains of a similar age are also known in Kohistan, and in the Karakoram. However, the erosion from the Deccan Plateau would not account for the other young grains and an influx from that area should result in a clear peak age at 65 Ma, which is not observed.

We also assessed the evolving provenance patterns of sediments in Laxmi Basin using a multidimensional scalar (MDS) analysis of the detrital zircon U-Pb dates [Vermeesch *et al.*, 2016]. In this plot, which is a type of principle component analysis, samples with similar age spectra plot close to one another, while distinct samples are far separated. Figure 11A shows all the detrital samples data, along with a modern river mouth and a delta sample (KB-40) dating

from shortly after the LGM [*Clift et al.*, 2008a]. The MDS analysis shows clear and coherent patterns. Samples deposited at and after 1.56 Ma, are relatively similar to the modern river. In contrast, the oldest samples plot in a cluster suggesting a similar Miocene provenance and a subsequent progressive shift from right to left with decreasing depositional age, although with some reversals, most notably at 3.17 and 3.57 Ma. This reflects an overall shift in the zircon age spectra through time. Nonetheless, the LGM sample has stronger similarities with sediments deposited on the fan during the Late Miocene. Earlier work implied that erosion during the LGM was focused in the Karakoram [*Clift et al.*, 2008a] compared to the modern river or during the Holocene when the summer monsoon was strong [*Caley et al.*, 2014; *Fleitmann et al.*, 2003; *Gupta et al.*, 2003]. The new data indicate that older Miocene samples were also deriving their material from Karakoram sources, and this was followed by a shift to more Himalayan sources, especially in the last few million years. The plot implies that the change might be step wise, with a change starting between 7.0 and 5.87 Ma and again at 1.56 Ma.

The fact that the youngest turbidite sands are most similar to the modern interglacial river, and not the compositions of the Indus shortly after the LGM, also implies that most of the sediment deposited in the Indus Fan has been eroded during interglacial times when the monsoon was strong, even if final deposition did not occur until the sea level fell during the onset of the subsequent glaciation. We envisage fast interglacial erosion generating great volumes of sediment, which is then mobilized, transported, and delivered to the delta as the rains strengthened [*Jonell et al.*, 2017]. The sediment would then be stored on the shelf or in the upper canyon during sea level high stands before being eroded and redeposited as sea level fell [*Li et al.*, 2018]. This emphasizes the importance of monsoon intensity in controlling erosion and sediment delivery in the Western Himalaya.

We also compared the Arabian Sea sediments with known zircon ages from bedrock sources themselves. Figure 11B shows the progressive changes from the Miocene to the present and emphasizes the fact that the stratigraphically oldest detrital zircon samples plot closest to sources in the Karakoram and have similarities with analyses from the trunk stream (upper reaches) of the main Indus River, before it mixes with the Himalaya-draining Eastern tributaries, such as the Jhellum, Chenab, Ravi, Sutlej and Beas (Fig. 1). Conversely, the stratigraphically youngest sediments plot on this diagram closest to Himalayan sources and have greater similarity not only to the modern river mouth, but also Himalayan tributaries such as the Ravi, Chenab and Jhellum rivers.

These data also imply that Nanga Parbat has not been a very important contributor to the bulk sediment flux. Whether this is actually true or not is not entirely apparent because the bedrock analyses from Nanga Parbat were focused on igneous rocks in the center of that metamorphic massif, and might not be representative of the net erosional flux from this particular source. However, the relationships displayed in Figure 11B can be readily explained as a simple mixing between Karakoram and Himalayan sources, with a progressive shift towards the Himalaya through time.

6.2 Unmixing Sources

In order to further characterize the evolving source of sediments to the Indus Fan we employ the unmixing software of Sundell and Saylor [2017], which analyzes the U-Pb age spectra from each of the samples and compares them with the defined end-member compositions of the different source ranges compiled from the published literature. This approach works particularly well in the western Himalaya where the sources are well defined and often unique. Data from the Tethyan, Greater and Lesser Himalaya were compiled from DeCelles *et al.* [2004]. Data from the Karakoram are from Le Fort *et al.* [1983], Parrish and Tirrul [1989], Schärer *et al.* [1990], Fraser *et al.* [2001] and Ravikant *et al.* [2009]. Data from Nanga Parbat are from Zeitler and Chamberlain [1991] and Zeitler *et al.* [1993]. Data from the Transhimalayan are from Honegger *et al.* [1982], Schärer *et al.* [1984], Krol *et al.* [1996], Weinberg and Dunlap [2000], Zeilinger *et al.* [2001], Dunlap and Wysoczanski [2002], Singh *et al.* [2007], and Ravikant *et al.* [2009].

This unmixing method uses a Monte Carlo approach to estimate the contributions from the different sources that would be required to generate the modes and modal abundances of U-Pb ages seen in the sediment samples. Because this is relatively objective the method is considered robust for analyzing potential source contributions, assuming that the sources themselves have been well characterized. The bedrock sources of the Indus catchment have significant differences between many of them and are some of the best characterized worldwide. Results of the Monte Carlo simulation are provided in Table 4, showing the output using all three statistical comparison methods, cross-correlation, the best V value in the Kuiper test, as well as the best D value in the K-S test. The method involves creating 10,000 model mixed sediments using the defined bedrock source end members. The DZMix software then compares the model with the measured spectra and retains the best 1% of these models in order to estimate which sources were contributing the sampled material. We favor the unmixing models derived from the cross-correlation approach as being geological reasonable and favored by Sundell and Saylor [2017].

The results of our unmixing calculations show a progressive provenance evolution that is consistent with that seen in the MDS diagram (Figs. 11 and 12). The very oldest sample deposited at 15.5 Ma shows a dominance of sediment eroded from the Karakoram and from the Tethyan and Greater Himalaya. Most of the Miocene samples dated between 8.2 and 7.0 Ma are more dominated by material from the Karakoram but also usually show significant Tethyan and Greater Himalayan contributions. This Himalayan component is particularly noteworthy at 7.99, 7.84, 7.78, 7.66, and 7.0 Ma during this interval. The proportion of Karakoram zircons shows a significant decrease starting no later than 5.72 Ma and again at 3.02 Ma. The sediment deposited at 3.17 Ma shows the greatest amount of modeled erosion from Karakoram sources of any sample.

From 3.02 Ma onwards the Himalaya dominate as sources to the submarine fan, with significant amounts of material from the Lesser Himalaya first appearing at 1.56 Ma. The sample dated as being deposited at 0.93 Ma is anomalous for being very similar in source signature to Tethyan and Greater Himalayan bed rocks sources. However, we note that fission track data indicate that this sample was derived from peninsular India [Zhou *et al.*, 2019]. The unmixing

analysis largely mirrors the pattern shown by the MDS diagram, in showing a progressive long-term increase in erosion from the Himalaya relative to the Karakoram, although with significant steps making the evolution nonlinear. All of the samples contain a small amount of very young <25 Ma zircons. None of the samples analyzed show a close similarity with post-LGM river compositions. Delta samples deposited at 6.6 and 15 ka are strongly enriched in Karakoram-derived grains compared to fan sediments deposited at and after 3.02 Ma. This short term variability is interpreted to reflect the short-term changes in erosion patterns linked to monsoon strength, modulated by glacial cycles since the onset of the NHG.

6.3 Relationships to Climate Change and Tectonics

The progressive increase in the relative flux from the Himalaya since the Middle Miocene represents the progressive unroofing of these units. Structural reconstructions of the Western Himalaya predict that prior to 5.4 Ma the Greater and Lesser Himalaya were not exposed [Webb, 2013] implying that the Himalayan contribution was derived entirely from the Tethyan Himalaya during the Miocene. As we are not able to distinguish between Tethyan and Greater Himalaya derived sediment we focused on the first appearance of significant amounts of 1500–2300 Ma, Inner Lesser Himalayan detritus starting at 1.56 Ma. Previous studies considered these ranges to have been exposed somewhat before 1.6 Ma. Study of the Siwalik Group in the area of the Beas River Valley indicated an initial exposure of these units around 9 Ma and significant exposure by 6 Ma based on Nd isotope data [Najman *et al.*, 2009]. Our data support the findings of Clift *et al.* [2019b] that this exposure may only reflect the local situation in the paleo-Beas River area, but that widespread regional exposure of the Inner Lesser Himalayan units comes somewhat later. While Clift *et al.* [2019b] favored increased Inner Lesser Himalaya erosion starting at 1.9 Ma our new zircon data imply that 1.56 Ma is a more accurate age for this transition.

Our result also contrasts with the suggestion by Myrow *et al.* [2015] that the Inner Lesser Himalaya were widely exposed and eroding by 16 Ma. Although we cannot exclude this from happening further east in the Ganges Basin our data do not support this over a wide area of the western Himalaya until much later.

The timing of Lesser Himalayan unroofing may reflect the development of the thrust duplex, which characterizes the structure of the Lesser Himalaya in this area [Huyghe *et al.*, 2001; Webb, 2013]. Integrated metamorphic and geochronologic data indicate rapid cooling of the Inner Lesser Himalaya before 6 Ma, following peak metamorphism around 10 Ma [Caddick *et al.*, 2007; Thiede *et al.*, 2009]. We note that rapid cooling does not however require synchronous unroofing. The first major flux of Himalayan zircons to the submarine fan is dated at 7.99 to 7.78 Ma, although widespread Himalayan unroofing may not have started until 5.72 Ma, followed by Inner Lesser Himalayan unroofing starting around 1.56 Ma. This timing is younger than reconstructed by Colleps *et al.* [2018] who favor exposure of the Outer Lesser Himalaya after 16 Ma and of the Inner Lesser Himalaya after 11 Ma, although that study was again located in an area further east, within the wetter Ganges catchment, and need not apply to the drier Indus basin. A more erosive climate further east might favor earlier unroofing in that area. The erosion data support the concept of significant along strike diachroneity of unroofing.

Uplift of the Lesser Himalayan Duplex would have created a topographic barrier, susceptible to erosion as monsoon rains were focused along this topographic front. The increasing Himalayan character of the total zircon input comes at a time when the summer monsoon rains were generally weakening after ~8 Ma [Dettman *et al.*, 2001], or after 7.7 Ma based on new environmental data from Site U1456 [Clift *et al.*, 2019a](Fig. 13). Moisture delivery to this area from the winter westerlies has also been shown to have reduced around 7 Ma [Vögeli *et al.*, 2017]. In the recent geologic past, since the LGM, strong Himalayan rather than Karakoram erosion has occurred when the summer monsoon was strong, during interglacial times and not when it was weak during glacial times [Clift *et al.*, 2008a]. The increase in Himalayan erosion over longer periods of time, correlating with the weakening monsoon, is the opposite of this shorter-term trend. It is possible that solid Earth tectonic forces, rather than climate, have dominated the long-term evolution of erosion, although the temporal correlation of provenance and aridity is suggestive of a climatic control.

All of the samples show the presence of very young zircons (<25 Ma) that possibly correlate with bedrock dates from Nanga Parbat, although these are never very numerous. It is also possible that some of these young ages may in fact be derived from erosion of fast exhuming rocks in parts of the southern Karakoram [Wallis *et al.*, 2014]. However, even if that this material was derived from Nanga Parbat, the low abundance of such zircon grains in the Laxmi Basin sediments would suggest that this massif was not generating very high proportions of sediment in the trunk Indus river, unlike the situation in the eastern syntaxis [Garzanti *et al.*, 2004; Stewart *et al.*, 2008]. This is consistent with the U-Pb zircon ages in the modern Indus River downstream of Nanga Parbat [Alizai *et al.*, 2011] that show neither many <25 Ma zircons or older 1500–2300 Ma grains that would be associated with less deeply buried rocks but with the Lesser Himalayan affiliation typically made with Nanga Parbat [Whittington *et al.*, 1999].

We compare our detrital zircon budget with that of the Nd budget published by Clift *et al.* [2019b]. Translating zircon budgets into rock erosion budgets is not easy due to bedrock zircon fertility variations. However, whole-rock geochemical analysis of Alizai *et al.* [2012] suggested that on average the eastern, Himalaya-draining tributaries are around 2.2 times more fertile in zircon than the trunk Indus. If we simply use the source percentages from the zircon unmixing calculation described above and the average ϵ_{Nd} values for these different units then it is possible to predict the average composition of the bulk sediment through time. We use an ϵ_{Nd} value of -14.6 for the Greater and Tethyan Himalaya, -21.7 for the Lesser Himalaya, -9.3 for the Karakoram, -20 for Nanga Parbat and +5.1 for Kohistan and the Transhimalaya based on synthesis of the bedrock data, but especially the composition of river sediments that are derived from wide areas of these ranges [Clift *et al.*, 2002b]. Transhimalaya Nd data are from Rolland *et al.* [2002], Singh *et al.* [2002], and Khan *et al.* [1997]. Greater and Lesser Himalayan data are from Ahmad *et al.* [2000], Deniel *et al.* [1987], Inger *et al.* [1993] and Parrish and Hodges [1996]. Karakoram data are from Crawford and Searle [1992] and Schärer *et al.* [1990].

The results of this estimate are shown next to the smoothed long-term Nd isotope evolution from bulk sediment analysis [Clift *et al.*, 2019b] (Fig. 13). We account for the $\pm 1 \epsilon_{Nd}$ uncertainty value estimated from the Indus Quaternary [Jonell *et al.*, 2018]. We note that before 6 Ma the estimates overlap with the bulk sediment record that was derived from muddy lithologies, suggesting similar sources. After this time both the estimated and measured ϵ_{Nd}

values became more negative. However, the predicted Nd isotope compositions are always more negative than those measured from the bulk sediment and this implies an over estimation in the flux from isotopically negative sources, i.e. the Himalaya, using the zircon method. This is consistent with the geochemical data indicating that the Himalaya are more abundant in zircon than the Karakoram, but have similar concentrations in Nd [Alizai *et al.*, 2011]. As a result, our zircon budget (Fig. 13) represents an overestimate of the influence of the Himalaya compared the Karakoram through time in terms of total rock eroded. Nonetheless, the overall trends in the two data sets are consistent and the reconstruction of increasing Himalayan erosion since the 5.72 Ma may be considered robust.

7. Conclusions

Sandy and silty sediments recovered from the Laxmi Basin in the Eastern Arabian Sea provide a relatively continuous erosional record derived from the Indus River and spanning the last 15.5 m.y. In this study samples were taken from IODP Sites U1456 and U1457 for geochemical and geochronological analyses. Detrital zircon grains were dated by U-Pb methods to determine their provenance. The sediments themselves are defined as wackes and are relatively immature in composition, with bulk sediment characters similar to those found in the Quaternary delta of the Indus and in its submarine Canyon. They are readily distinguishable from sediments on the Western Indian Shelf, confirming their derivation from the Indus River and not the peninsula with one exception. The sediments are mostly of silty sand to silt size, with only a few being classified as fine sand. Although the sediments are relatively depleted in Ca, Na and P relative to the upper continental crust this reflects chemical weathering during transport and does not affect the provenance analysis conducted here.

Detrital zircon U-Pb ages fall into a number of categories which can be correlated with bedrock sources in the Himalaya. The ubiquitous presence of zircon grains younger than 200 Ma requires the sediments to be the erosional products of the Himalaya/Karakoram and not peninsular India. The progressive increase in zircon grains dating at 350–1250 Ma, as well as 1500–2300 Ma, indicates that the erosional flux from the Himalaya increased through the studied time interval. Almost all the samples contain grains that could be derived from the Karakoram or from Kohistan, and there is an appearance of very young zircon grains, younger than 25 Ma, that is especially marked since 3.17 Ma. Such young zircon grains may be from Nanga Parbat or parts of the eastern Karakoram. Statistical analysis shows that there are a number of groupings and an increase in Himalayan erosion through time. High flux from the Himalaya was noted at 7.99–7.78 Ma and starting between 7.0 and 5.87 Ma. Since 1.32 Ma the sediments are similar to the modern Indus River, but not like the glacial-era river, which has more similarities with the Miocene Laxmi Basin samples and with enhanced erosion in the Karakoram. Detrital zircon population unmixing techniques allow us to objectively confirm the progressive increase of Himalayan erosion relative to the Karakoram, and the sharp jump in erosion from the Inner Lesser Himalayas starting at 1.56 Ma. This is somewhat younger than the anticipated unroofing of these ranges derived from earlier foreland studies, although much of the earlier data comes from further east in the Ganges catchment. The shift to more Himalayan erosion through time occurs as the monsoon climate weakened, as well as when the Lesser Himalayan Duplex formed. This suggests that the changing patterns of erosion could be largely a function of solid Earth tectonic forces building topography, although the correlation of unroofing to the Late Miocene

690 drying trend does raise the possible role for climate too, albeit in the opposite fashion to that seen
691 since the LGM, when more Himalayan erosion correlates with strong summer monsoon rains.
692

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Figure Captions

Figure 1. A) Shaded bathymetric and topographic map of the Arabian Sea and surrounding area showing the location of the drilling sites considered by this study. Map also shows the major tributary systems of the Indus River, as well as smaller peninsular India rivers and their source mountains. B) Inset map shows detail of the Laxmi Basin and location of the drill sites considered in this study. Numbered red circles indicate existing scientific boreholes from Deep Sea Drilling Project (DSDP) and Ocean Drilling Program (ODP). KK = Karakoram; NP = Nanga Parbat. C) Geological map of the western Himalaya showing the major tectonic units that are eroded by the Indus River and its tributaries. Map is modified after Garzanti *et al.* [2005]. Rivers as shown in thick black lines. ISZ = Indus Suture Zone, MCT = Main Central Thrust, MBT = Main Boundary Thrust and MFT = Main Frontal Thrust. Thick black line shows the boundary of the Indus drainage, while thinner lines demark the limits of the major Himalayan tributaries. Figure is modified from Clift *et al.* [2019b].

Figure 2. Simplified lithologic logs of the two drill sites considered in this study. Black arrows show the location of the samples analyzed. Modified from Pandey *et al.* [2016c]. Pale shaded intervals show inferred lithologies based on small amounts of recovered core. Because induration is progressive and there is no sharp division, we make no attempt to distinguish between sediments and indurated rocks. Numerical ages are from Pandey *et al.* [2016a] for Site U1456 and from Pandey *et al.* [2016b] for Site U1457, with updates from Routledge *et al.* [2019].

Figure 3. Grainsize range of all samples analyzed for U-Pb zircon dating from the Laxmi Basin shown on the scheme of Folk [1974]. Samples are marked to show those published by Clift *et al.* [2019b], rather than presented new here (Table 2). Note the dominance of silty sand and sandy silt in the analyzed samples.

Figure 4. Detailed grain size spectra showing the range of sizes of the different samples considered within this study. Most of the sediment is fine sand to coarse silt in size and typically shows a coarse-skewed. A) Samples younger than 7 Ma, b) samples older than 7 Ma. Samples are marked to show those published by Clift *et al.* [2019b] (gray text labels and white ringed symbol), rather than presented new here (Table 2) (black text labels and black ringed symbol).

Figure 5. (A) Geochemical signature of the analyzed samples illustrated by a CN-A-K ternary diagram [Fedo *et al.*, 1995]. CN denotes the mole weight of Na₂O and CaO* (CaO* represent the CaO associated with silicate, excluding all the carbonate). A and K indicate the content of Al₂O₃ and K₂O respectively. Samples closer to A are rich in kaolinite, chlorite and/or gibbsite (representing by kao, chl and gib). CIA values are also calculated and shown on the left side,

with its values are correlated with the CN-A-K. Samples from the delta have the lowest values of CIA and indicates high contents of CaO and Na₂O and plagioclase. Abbreviations: sm (smectite), pl (plagioclase), ksp (K-feldspar), il (illite), m (muscovite). B) Geochemical classification of sediments from this study as well as those from the Indus delta [Clift *et al.*, 2010], Indus Canyon [Li *et al.*, 2018] and western Indian shelf [Kurian *et al.*, 2013] following the scheme of Herron [1988].

Figure 6. Cross plot of Zr concentration against median sample grain size. No strong correlation is observed.

Figure 7. Kernel density estimate (KDE) diagram showing the range of the zircon U-Pb ages for individual sand grains back to 3000 Ma. Colored strips show the range of populations with diagnostic links to critical source terrains in the headwaters of the Indus. Data from the Siwaliks, as well as the Tethyan, Greater and Lesser Himalaya are compiled from DeCelles *et al.* [2004]. Karakoram data is from Le Fort *et al.* [1983], Parrish and Tirrul [1989], Schärer *et al.* [1990], Fraser *et al.* [2001] and Ravikant *et al.* [2009]. Nanga Parbat data is from Zeitler and Chamberlain [1991] and Zeitler *et al.* [1993]. Transhimalayan data is from Honegger *et al.* [1982], Schärer *et al.* [1984], Krol *et al.* [1996], Weinberg and Dunlap [2000], Zeilinger *et al.* [2001], Dunlap and Wysoczanski [2002], Singh *et al.* [2007], and Ravikant *et al.* [2009]. Samples are marked to show those published by Clift *et al.* [2019b], and those presented new here.

Figure 8. Kernel density estimate (KDE) diagram showing the range of the zircon U-Pb ages for individual sand grains back to 200 Ma. Colored strips show the range of populations with diagnostic links to critical source terrains in the headwaters. See Figure 6 caption for data sources.

Figure 9. Upper continental crust normalized compositions of the sediments whose zircons are the focus of the study. Bulk sediment compositions are normalized according to the average of the continental crust from Taylor and McLennan [1995].

Figure 10. Plots of relative abundance of provenance sensitive zircon age populations in individual samples compared with sample median grain size. The coarsest samples show preference for the oldest U-Pb ages and a relative lack of the younger populations.

Figure 11. Multidimensional scalar (MDS) diagrams made from zircon U-Pb age data showing (A) how the different sediment samples from IODP Expedition 355 compare with one another and post-glacial sediments from the Indus delta (TH-10-8 and KB-40-4) and (B) with the major source terranes in the Indus catchment, as well as the modern rivers of the Indus catchment, i.e., the main or trunk stream of the Indus, upstream of Attock, and its major eastern tributaries. Solid lines join sediments to their most similar neighbor, while dashed lines join the next most similar. Sources of bedrock age data come from the literature, as described in Figure 6. River data is from Alizai *et al.* [2011]. Note that sediments older than 5 Ma plot towards the right in Figure 10B, in the direction of Karakoram bedrock sources, whereas there is a progressive migration towards the left, towards Himalayan sources after that time. Diagram was constructed using the statistical package of Vermeesch *et al.* [2016].

Figure 12. Pie diagrams showing the predicted source compositions of the zircon populations in sands from the Laxmi Basin as unmixed using the software of Sundell and Saylor [2017]. Note the significant reduction in flux from the Karakoram starting ~5.72 and again at 3.02 Ma. Samples are marked to show those published by Clift *et al.* [2019b], and those presented new here.

Figure 13. Comparison of climate, erosion and exhumation proxies in the Himalaya. (a) Smoothed Nd isotope history for the Indus River with grey background showing effective uncertainties from Clift *et al.* [2018]. (b) Breakdown of the sources of detrital zircons based on the unmixing procedure of Sundell and Saylor [2017]. (c) Carbon isotope character of pedogenic carbonate in Pakistan as an indicator of dominant vegetation in the Potwar Plateau of Pakistan [Quade *et al.*, 1989], and NW India [Singh *et al.*, 2011]. (d) Relative exhumation rates of the Greater Himalaya tracked by bedrock Ar-Ar dating [Clift *et al.*, 2008b] and zircon fission track from foreland basin sediment [Chirouze *et al.*, 2015]. (e) Rates of sediment supply to the Arabian Sea calculated from regional seismic [Clift, 2006].

Table Captions

Table 1. Major elements major elements geochemical analysis of the samples considered in this study.

Table 2. Analytical results from the laser particle size analyzer for all bulk samples considered in this study.

1229 **Table 3.** Analytical data for the zircon U-Pb dating of grains presented in this work.

1230

1231 **Table 4.** Results of the mixing modelling performed by the DZMix software of Sundell and
1232 Saylor [2017] on the detrital samples from the Laxmi Basin.

Figure 1.

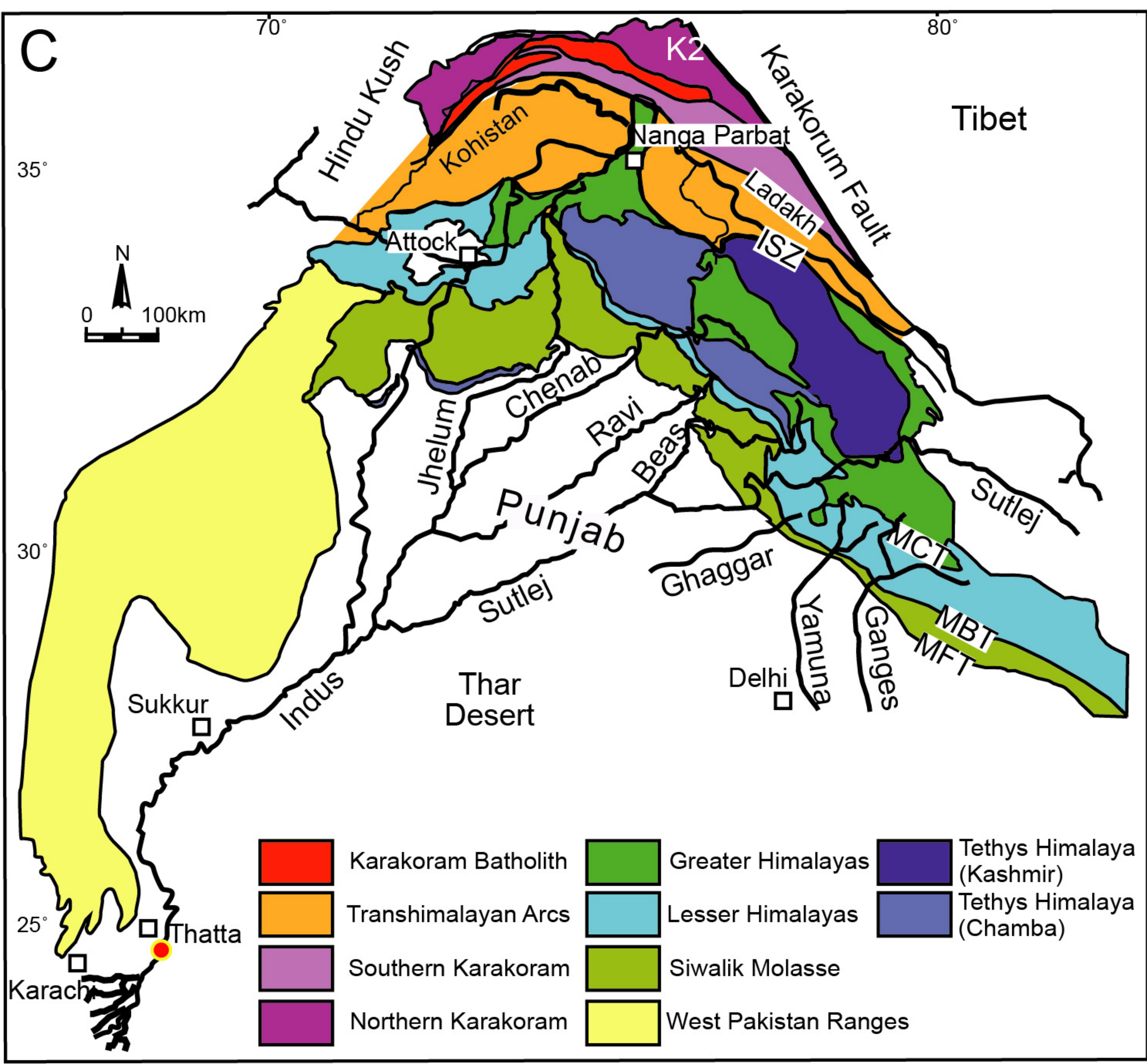
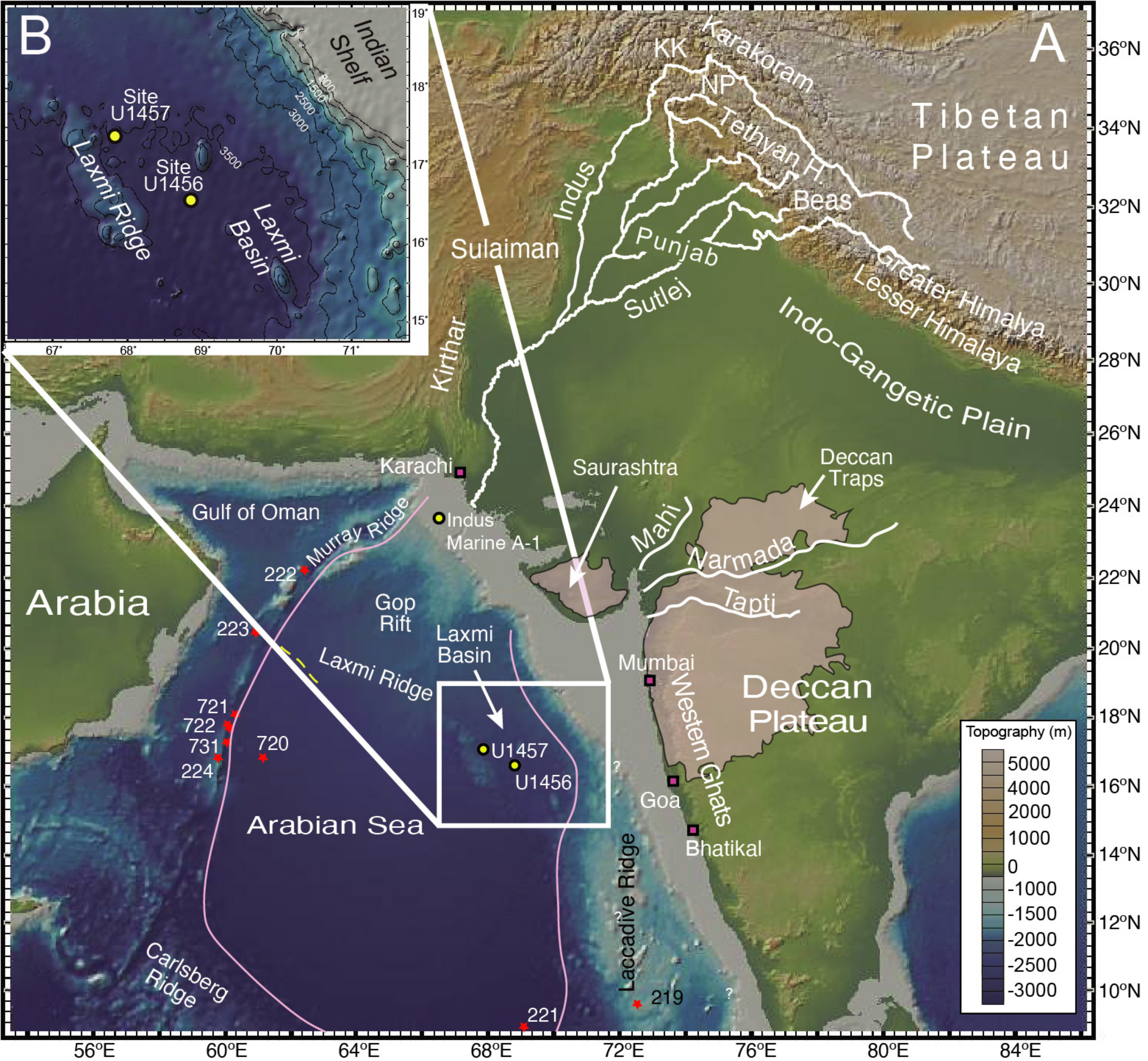


Figure 2.

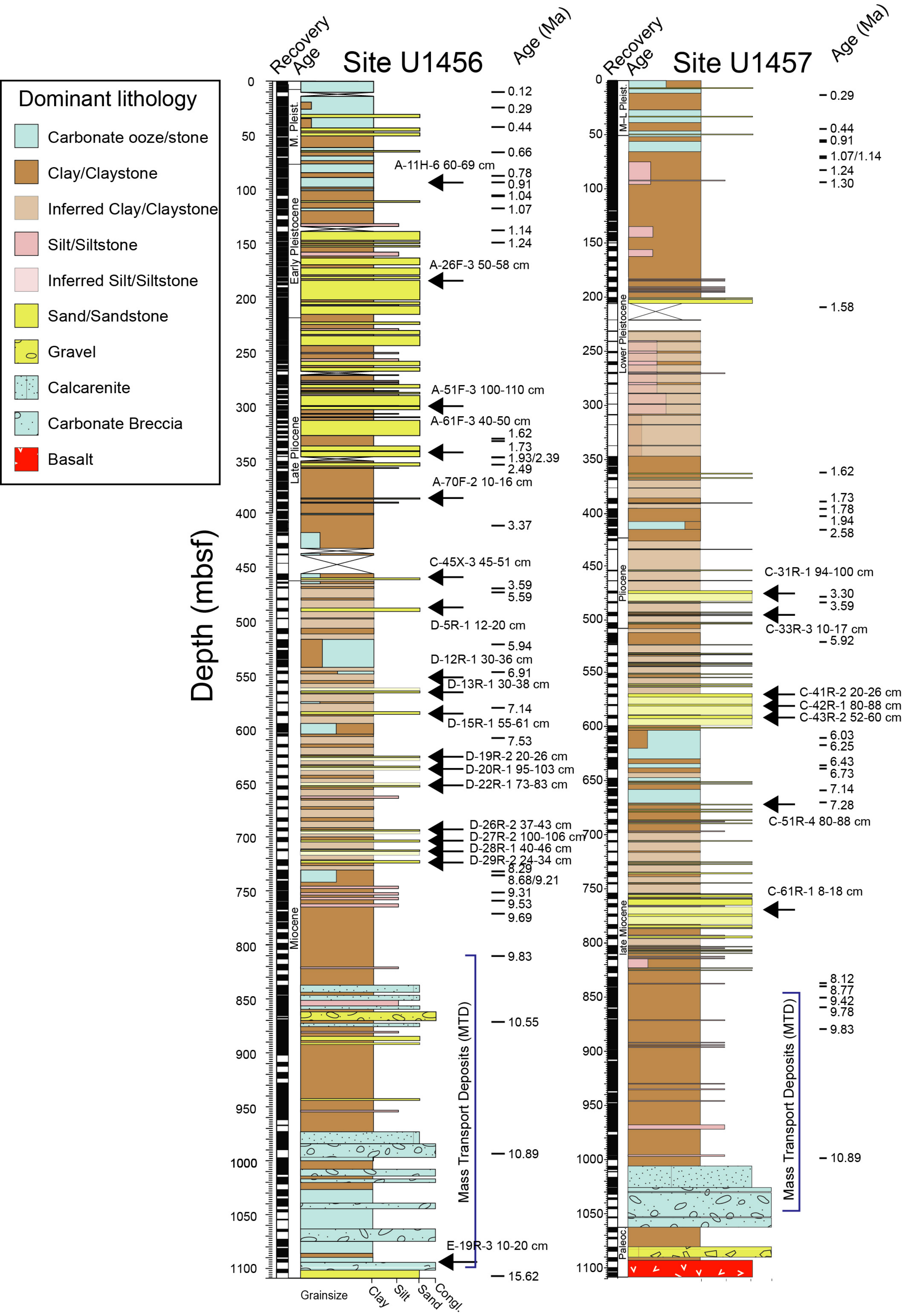


Figure 3.

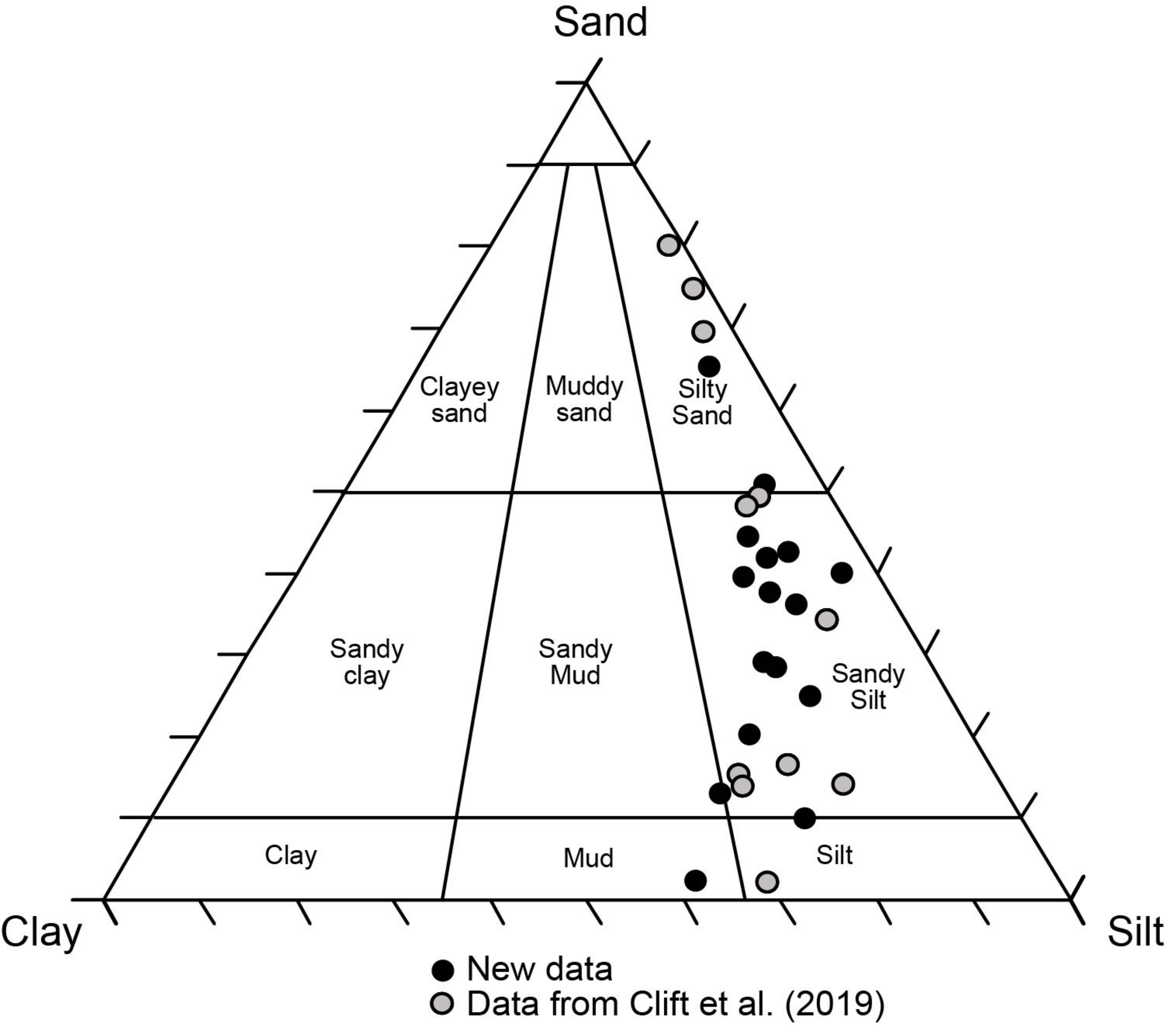
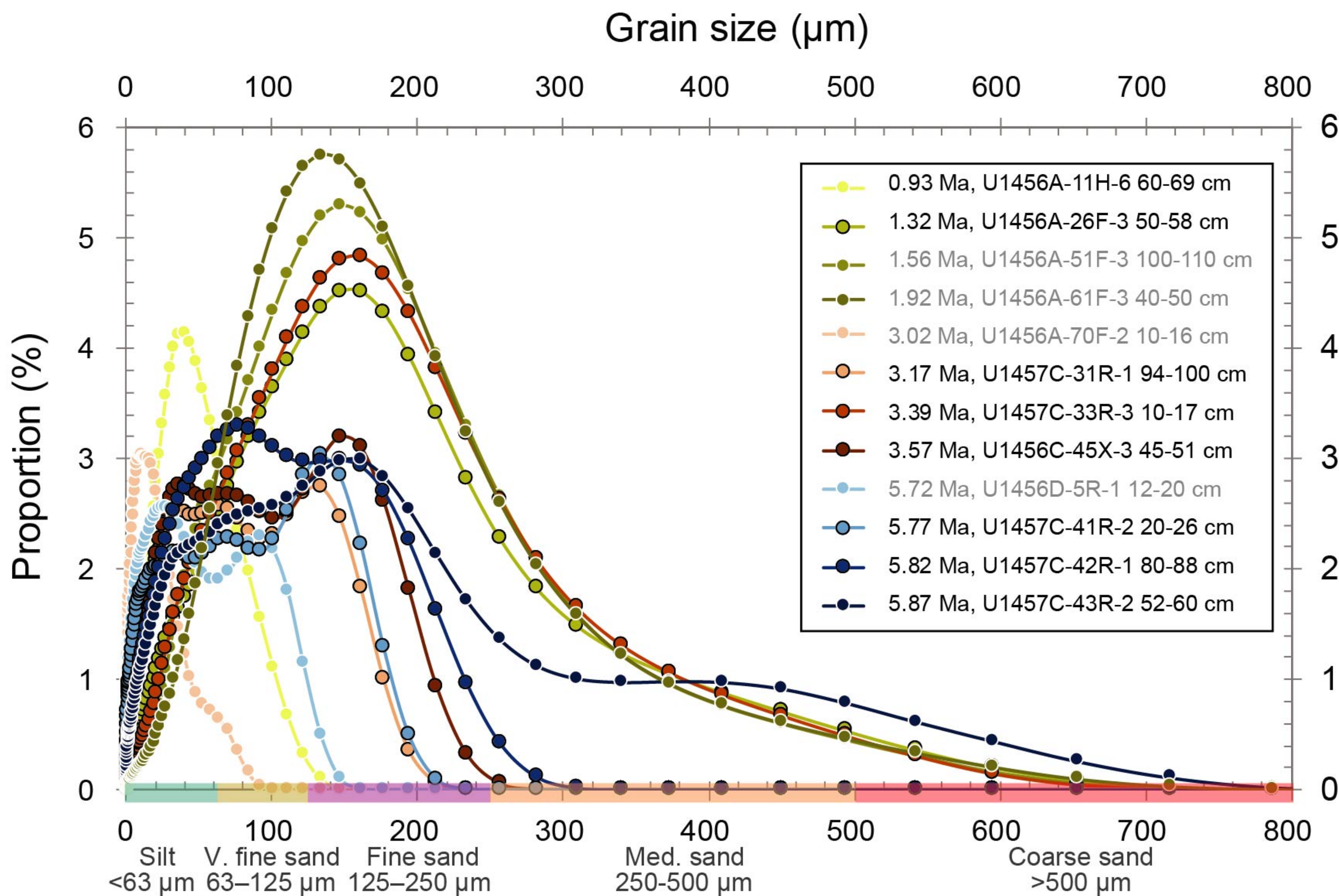


Figure 4.

A)



B)

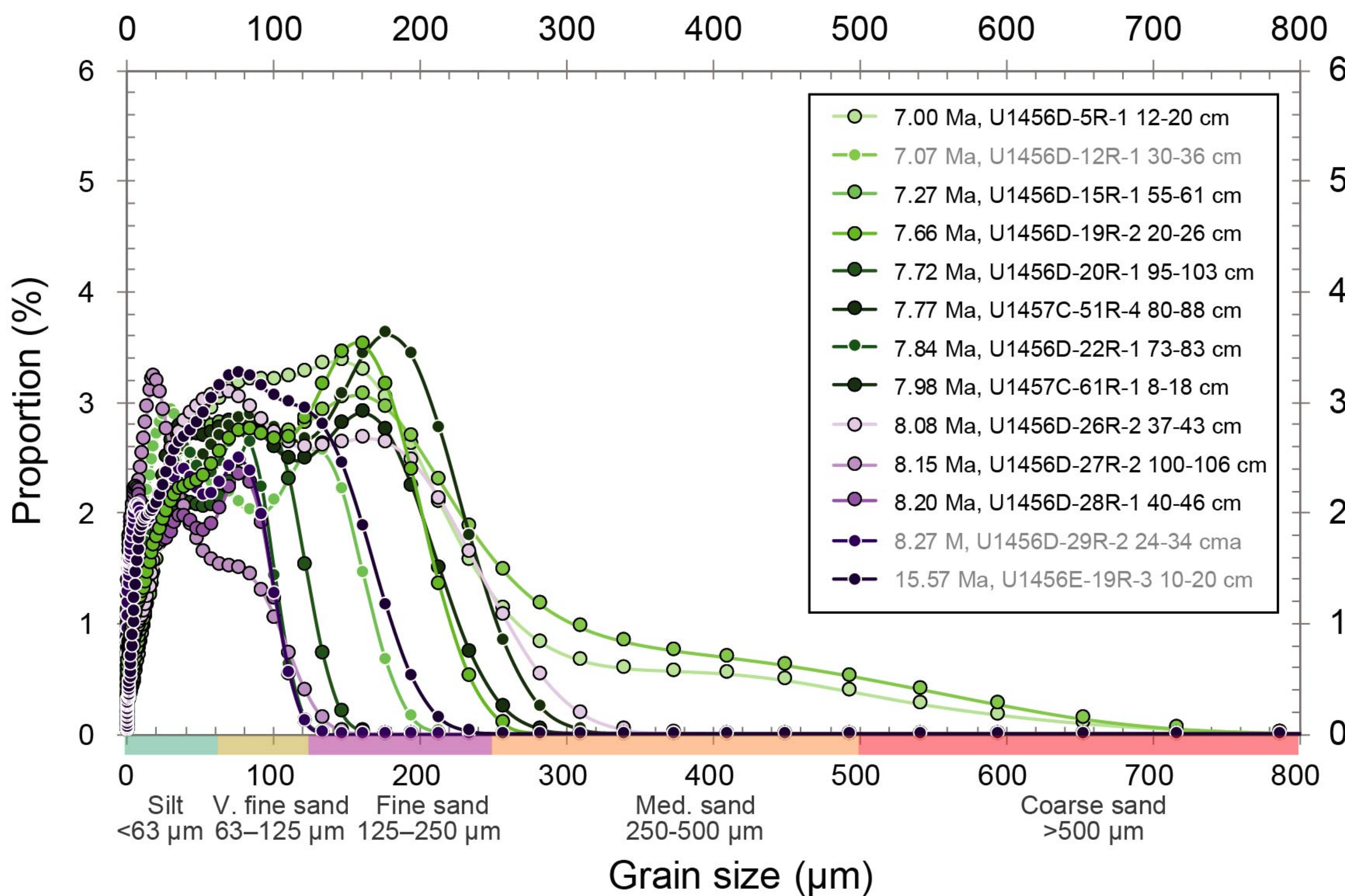


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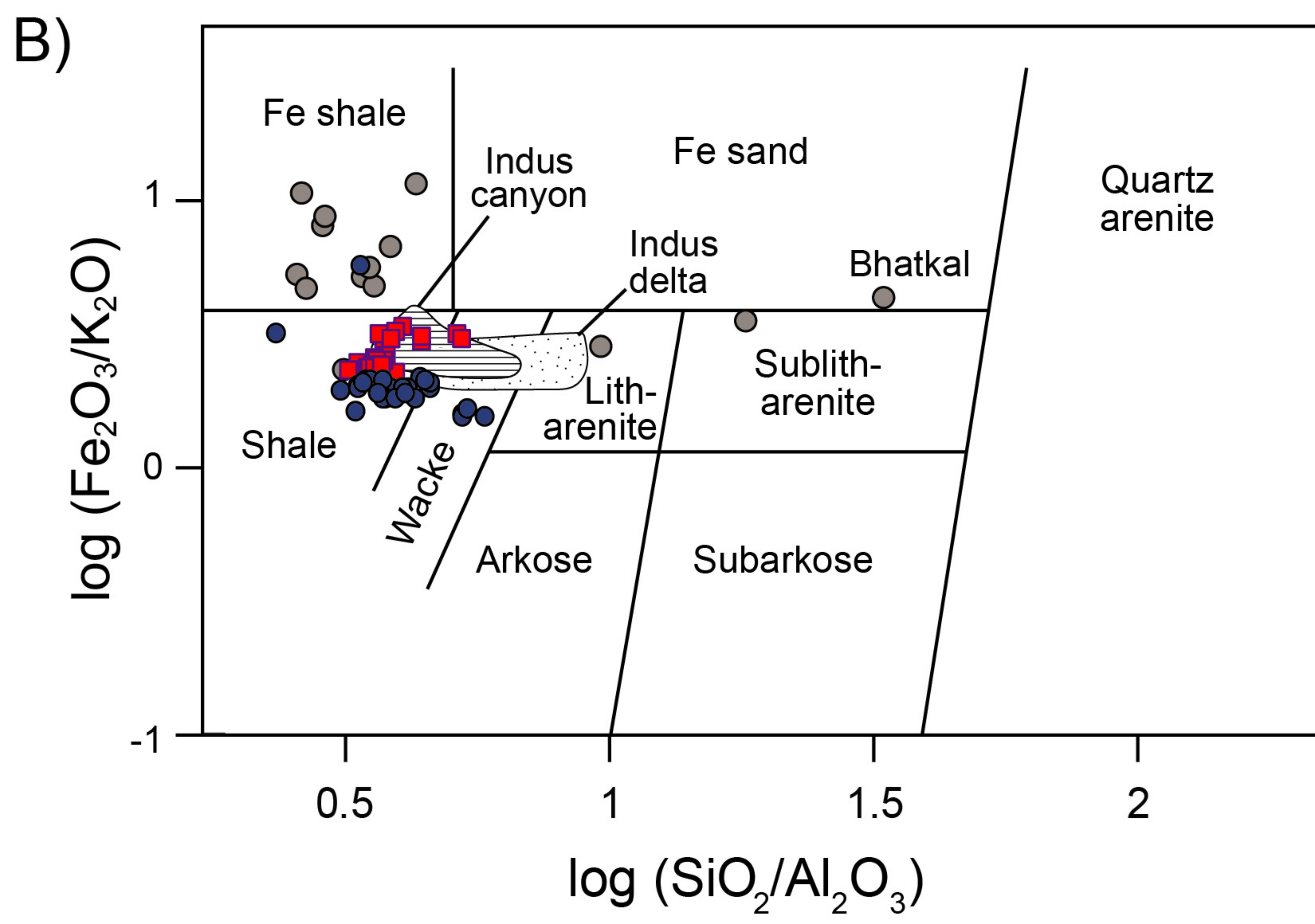
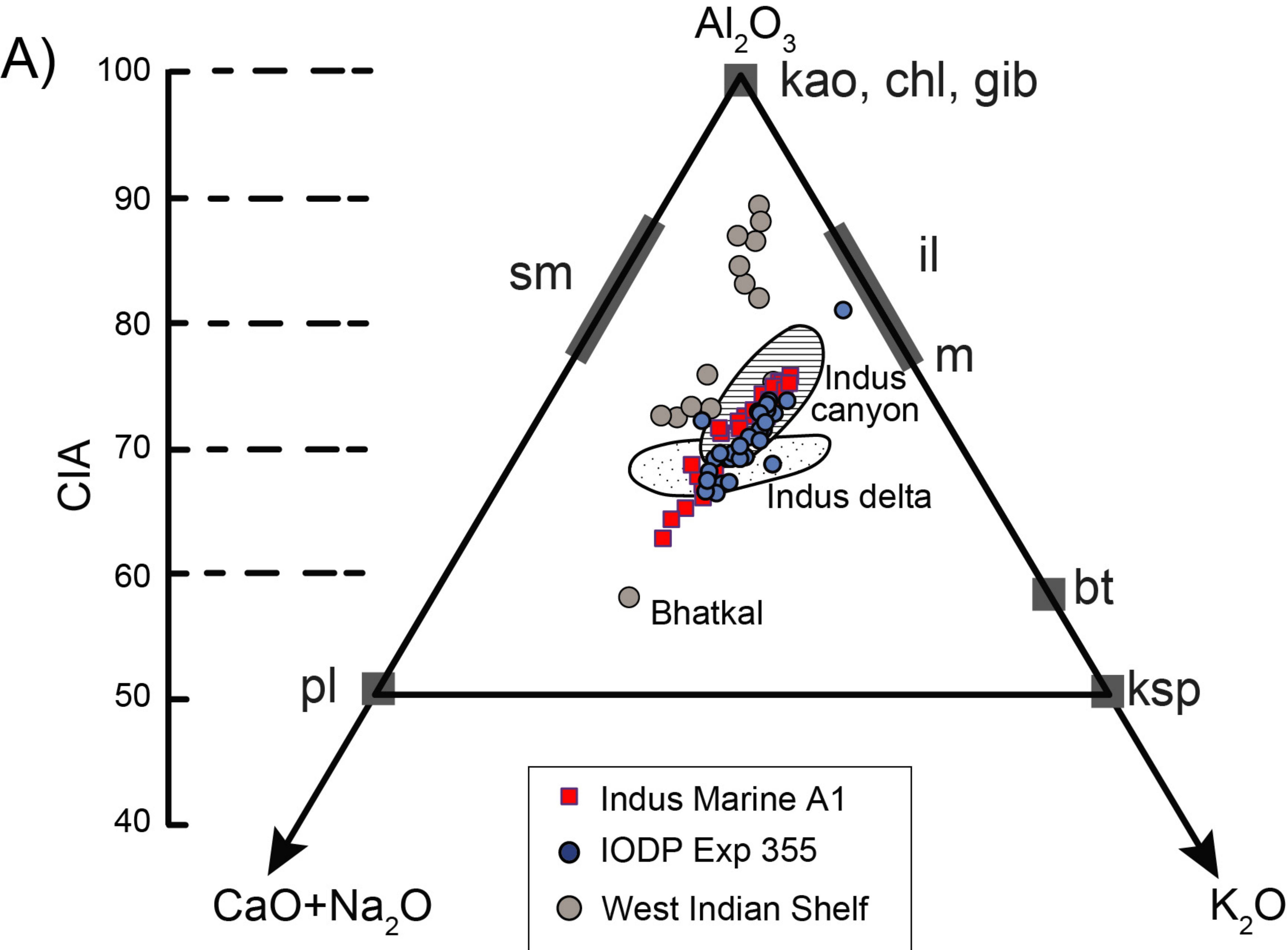


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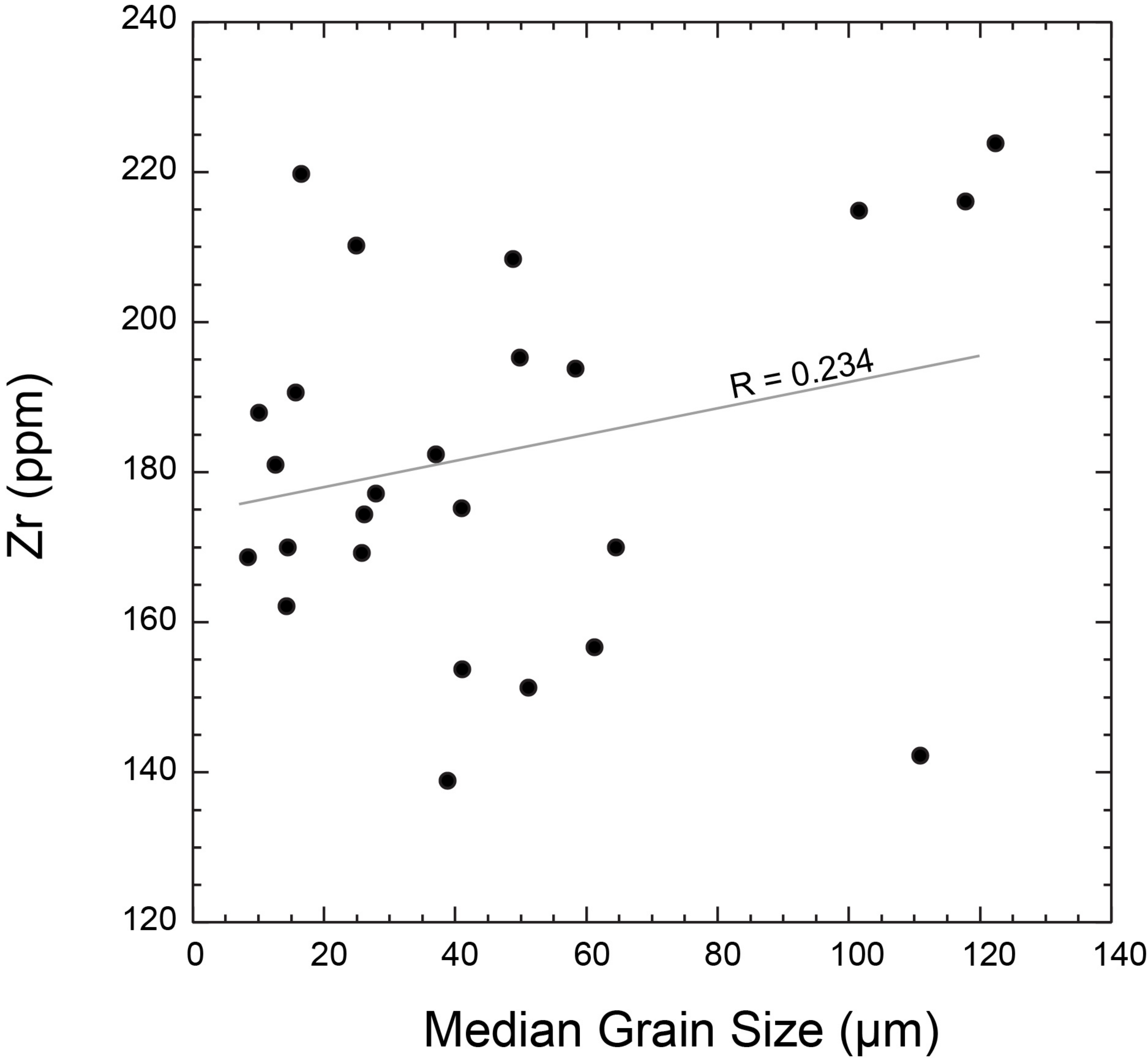


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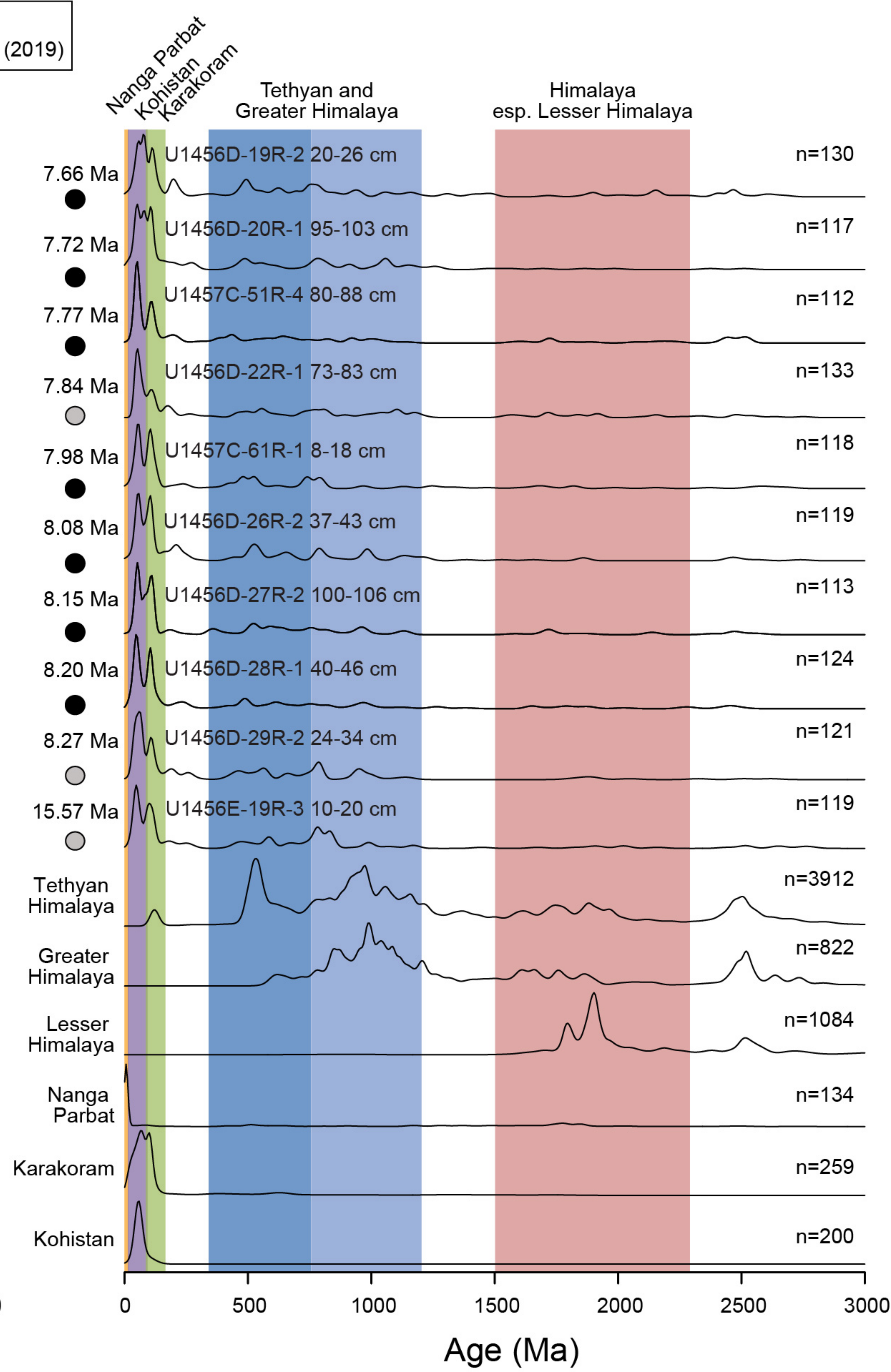
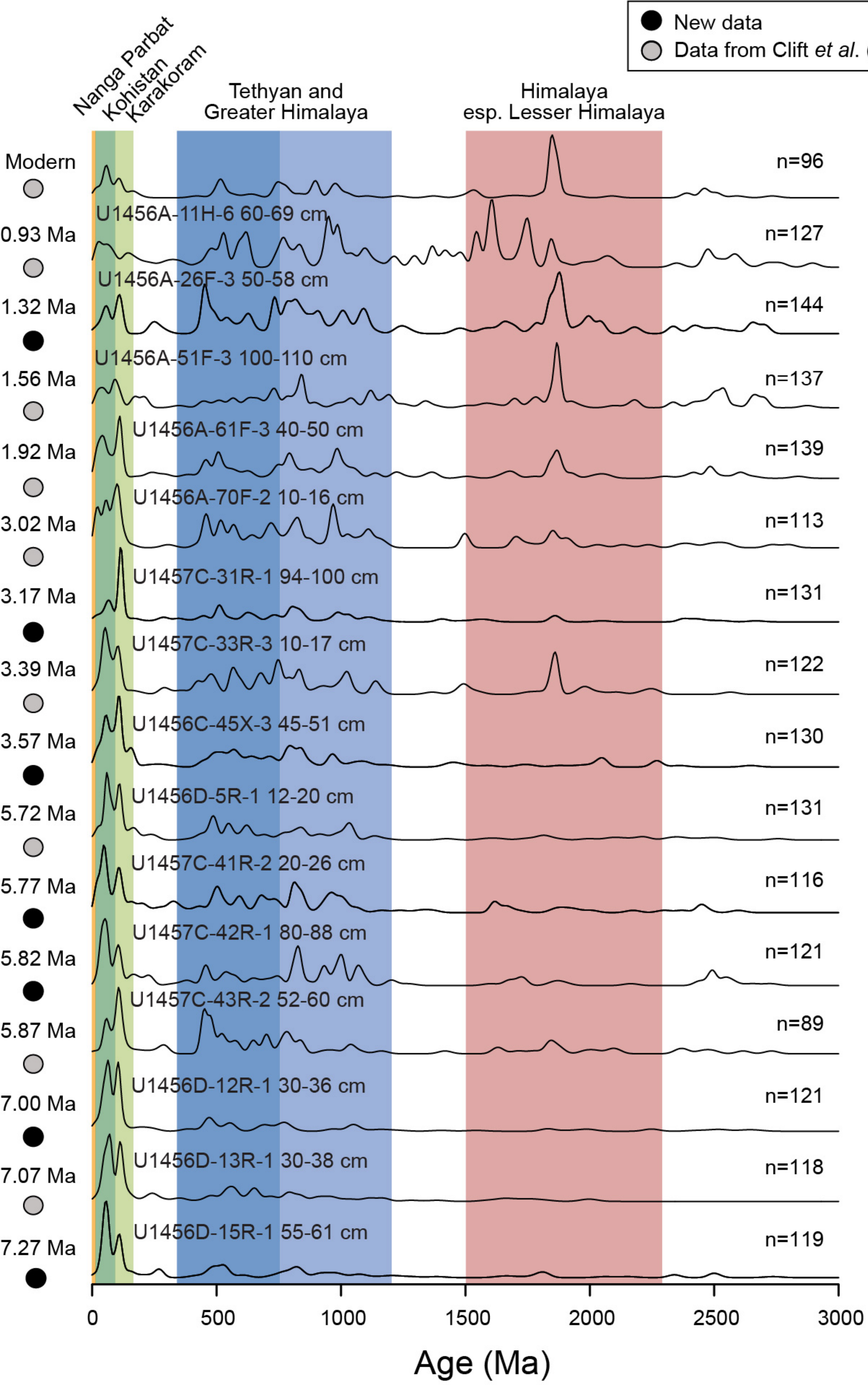


Figure 8.

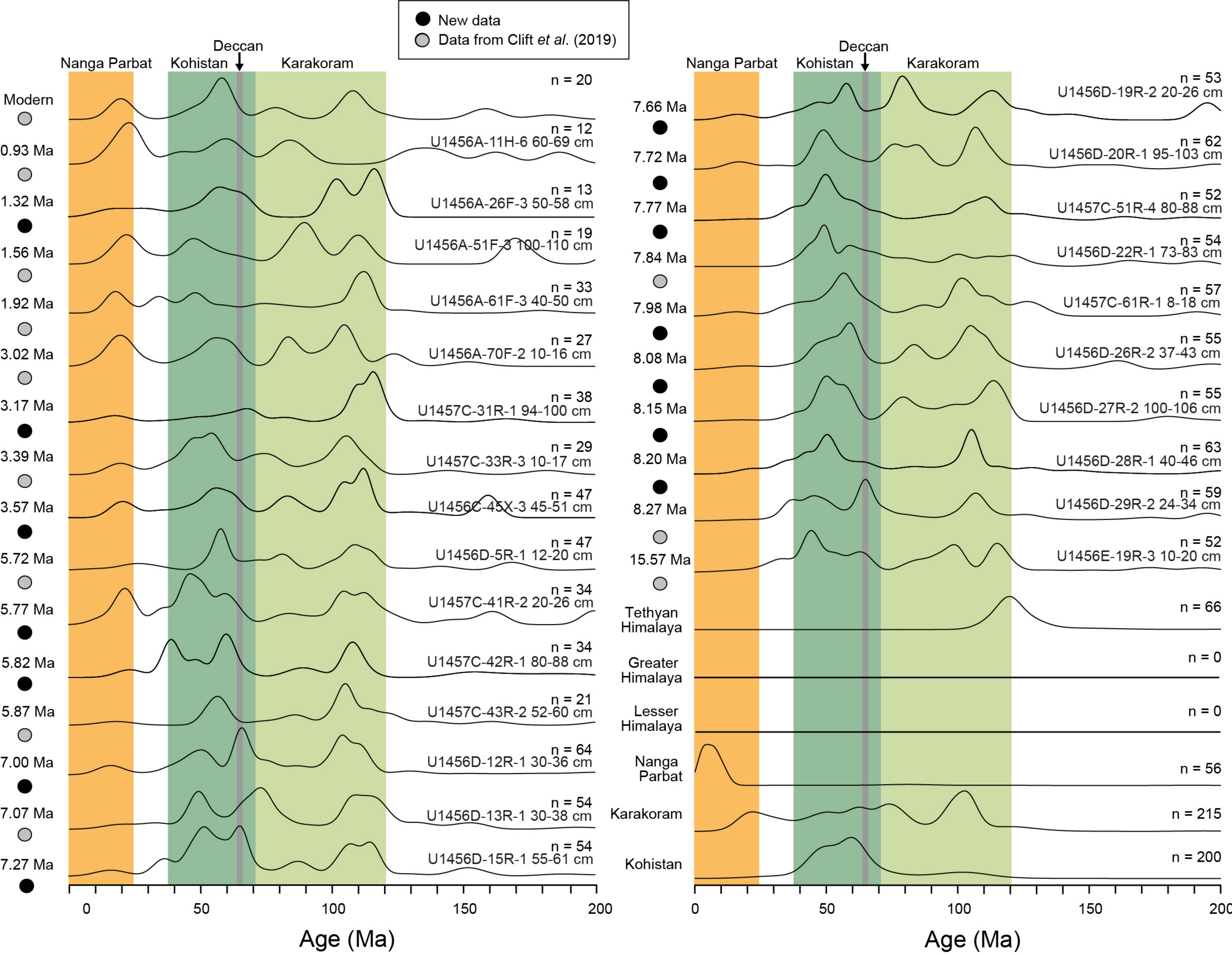
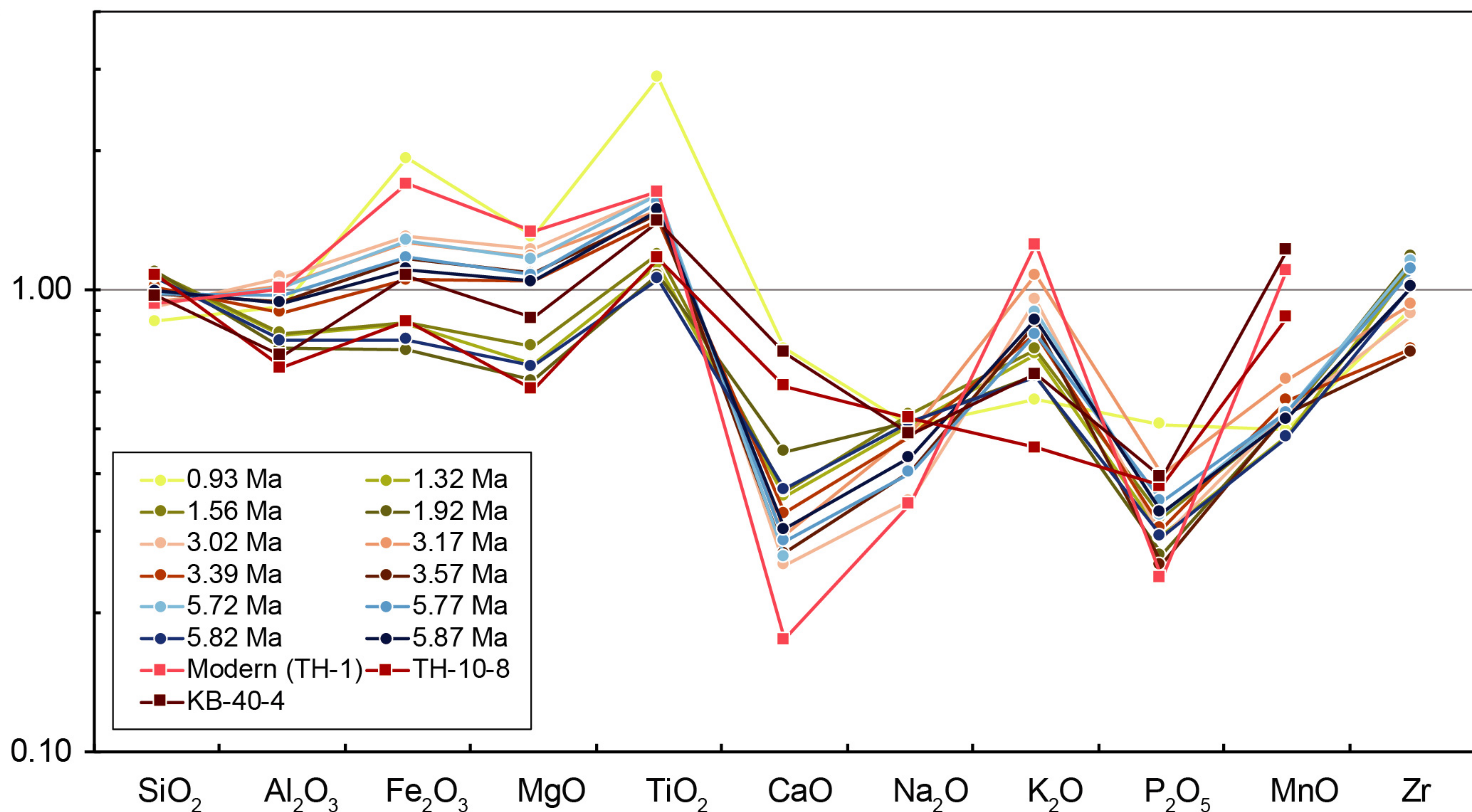


Figure 9.

A)

Elements/UCC



B)

Elements/UCC

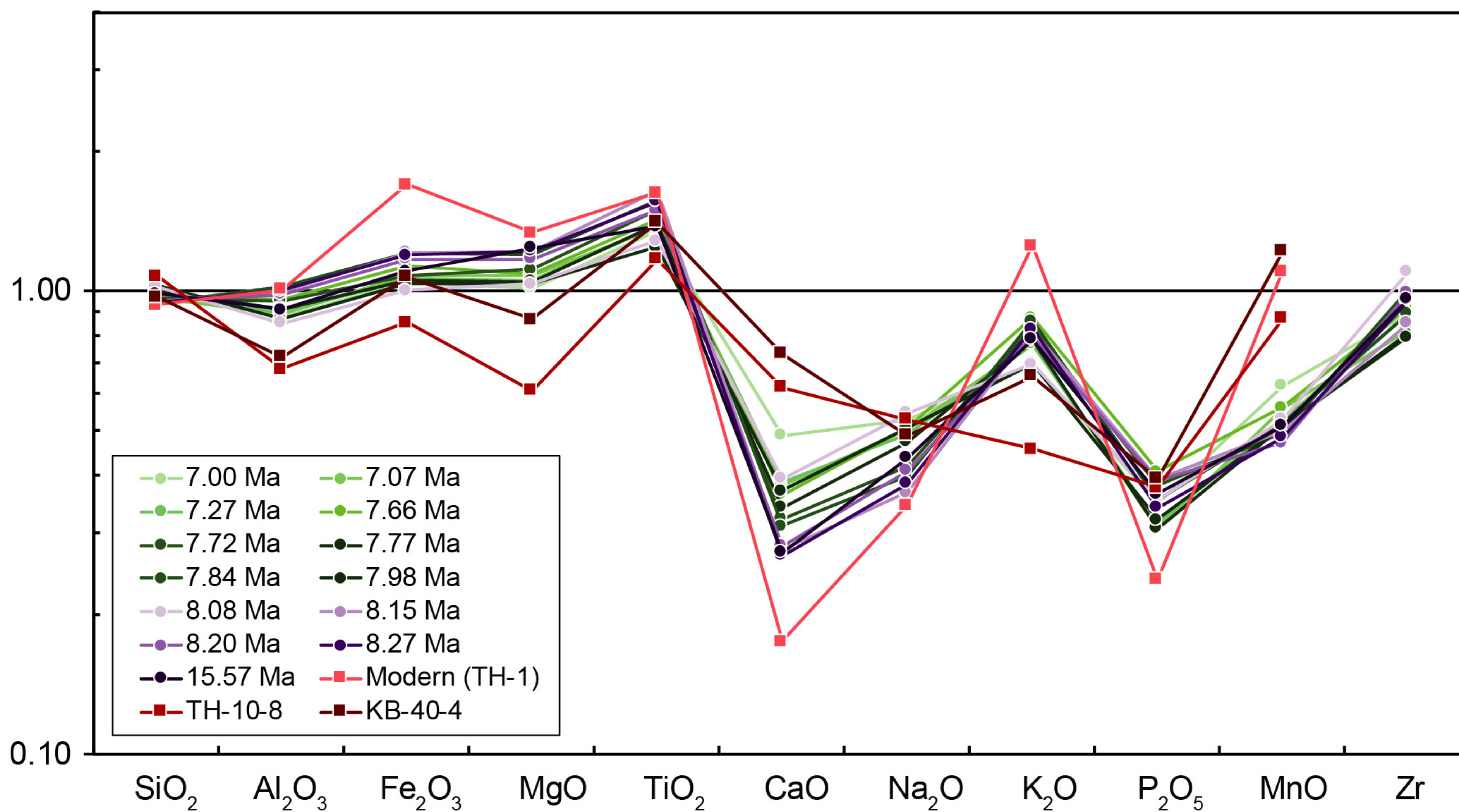


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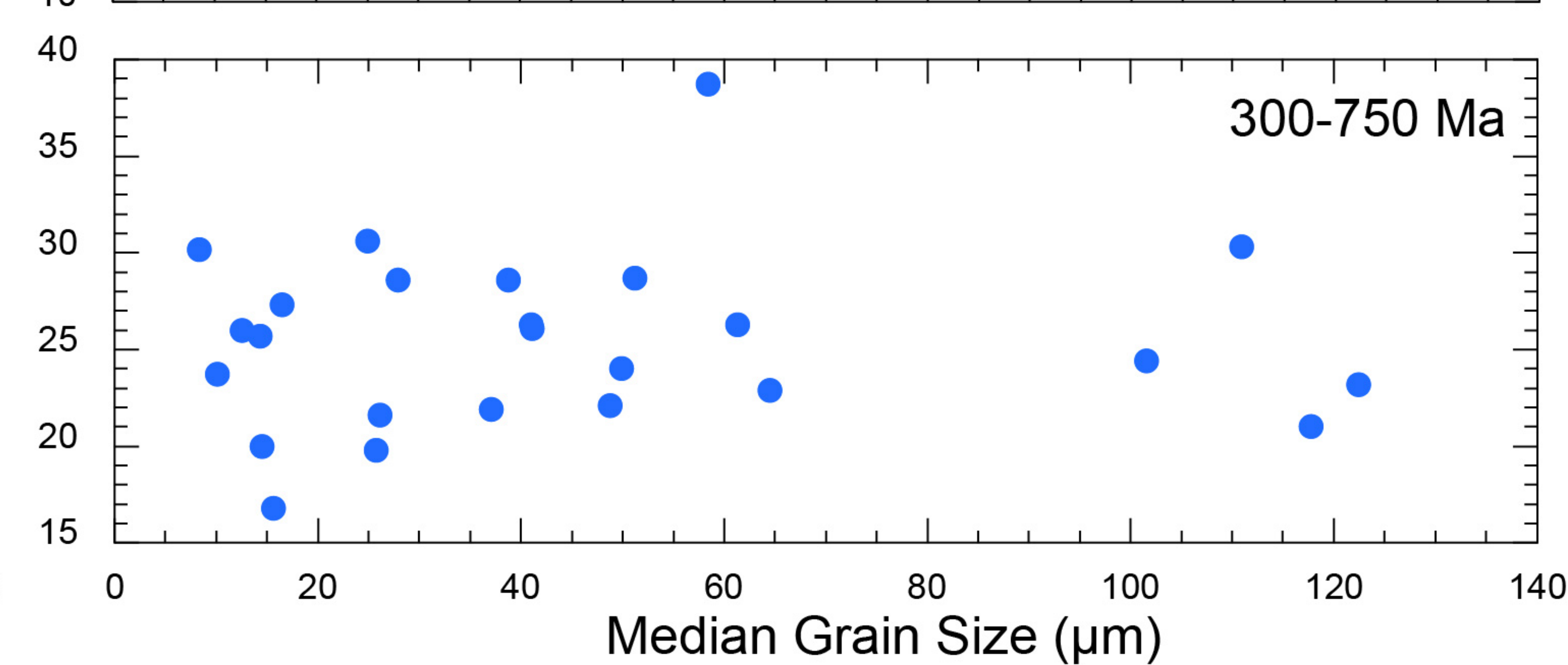
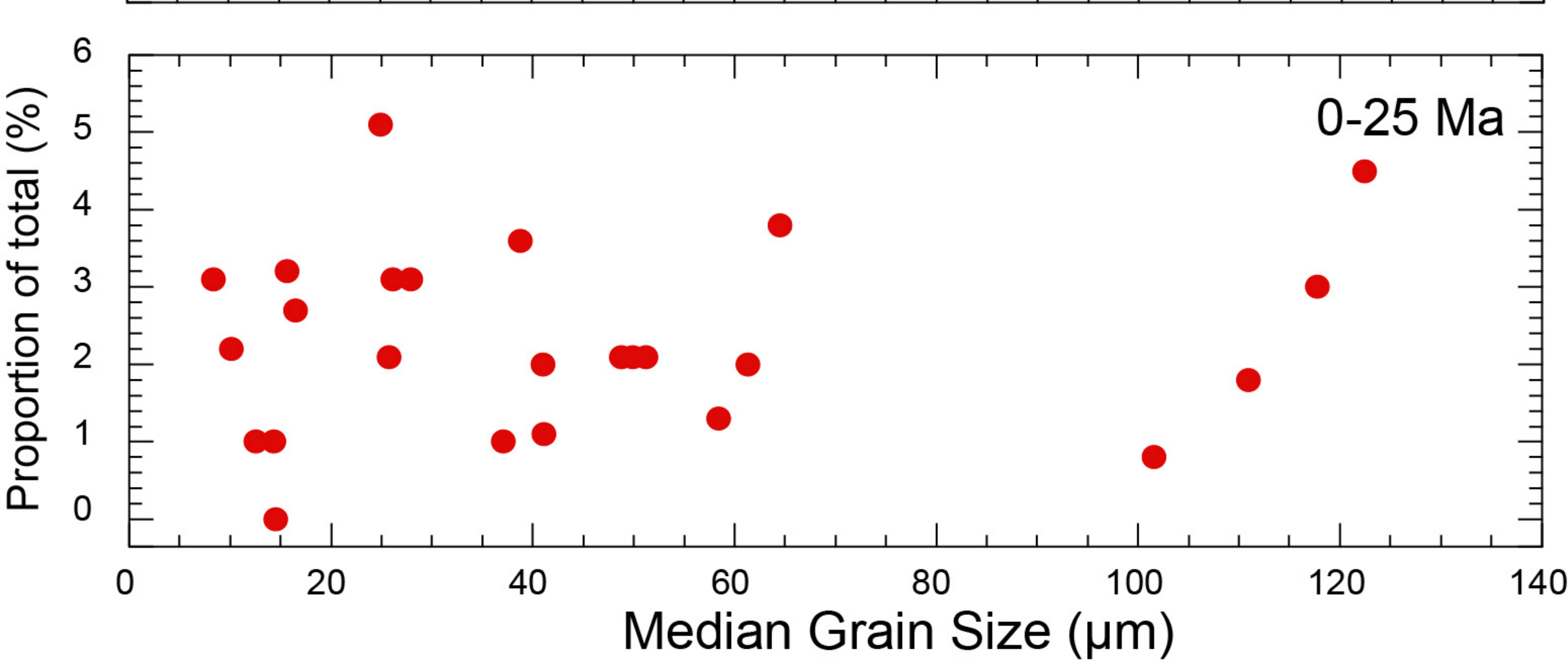
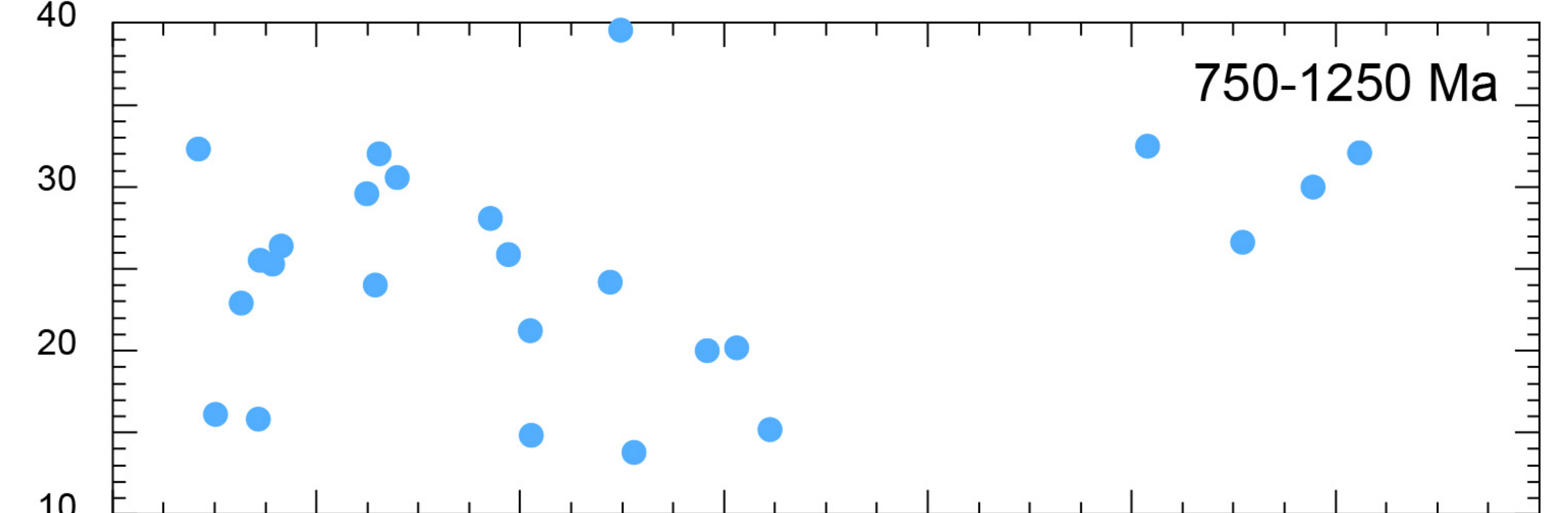
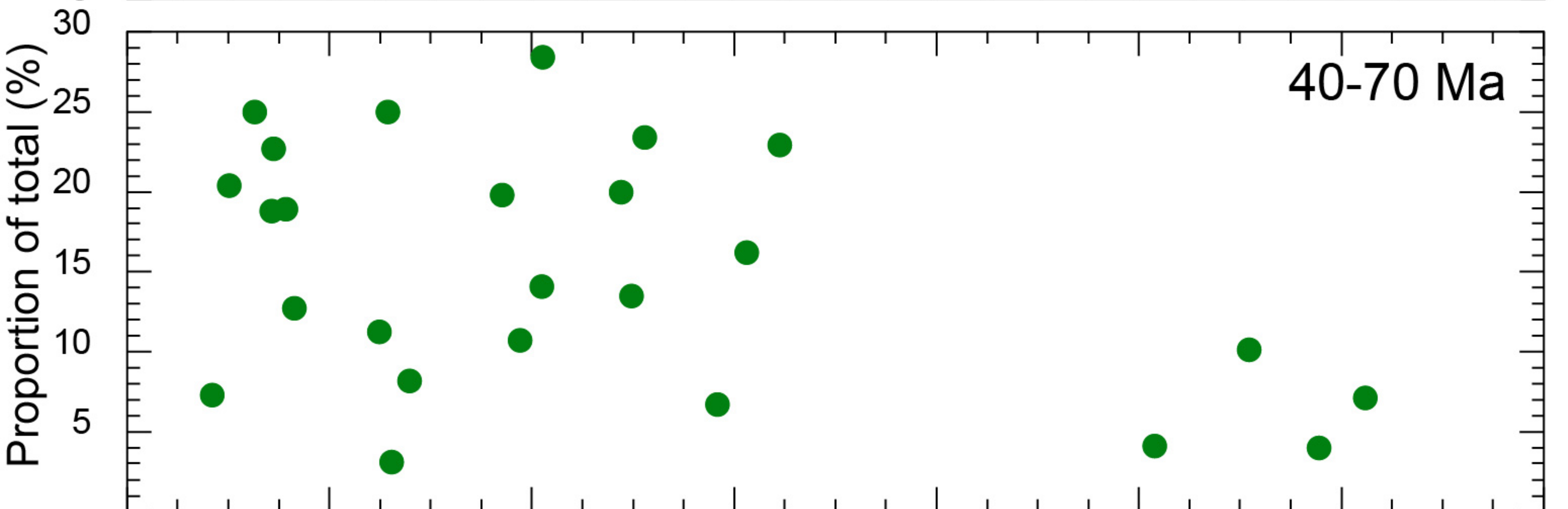
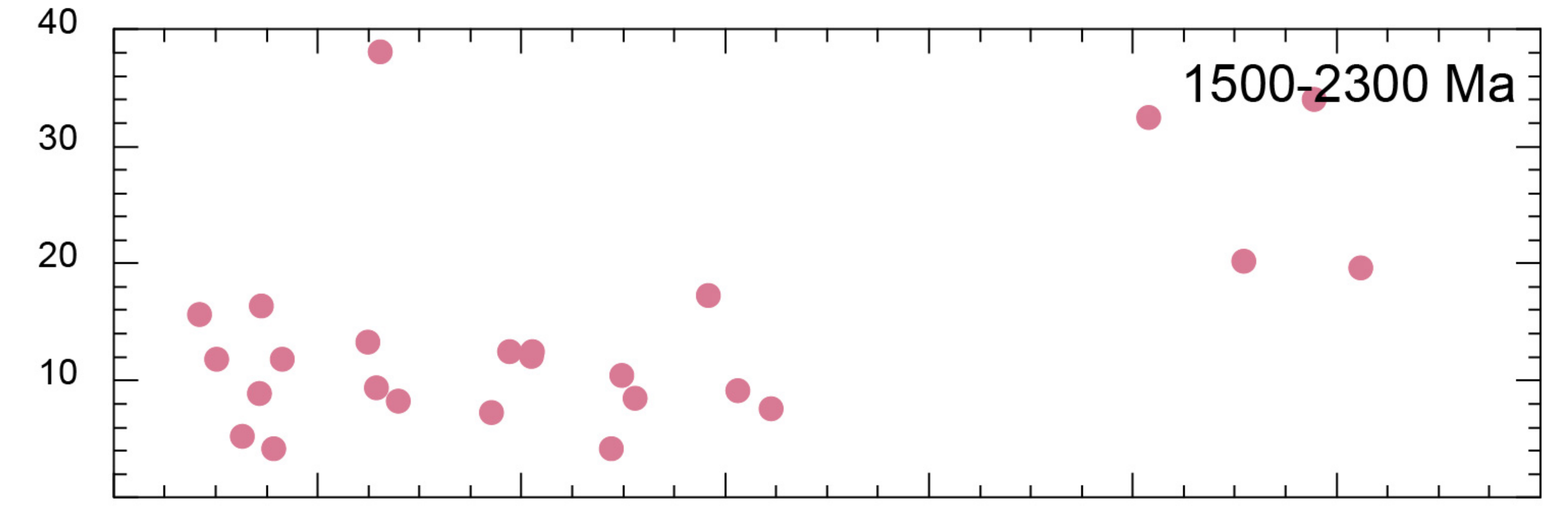
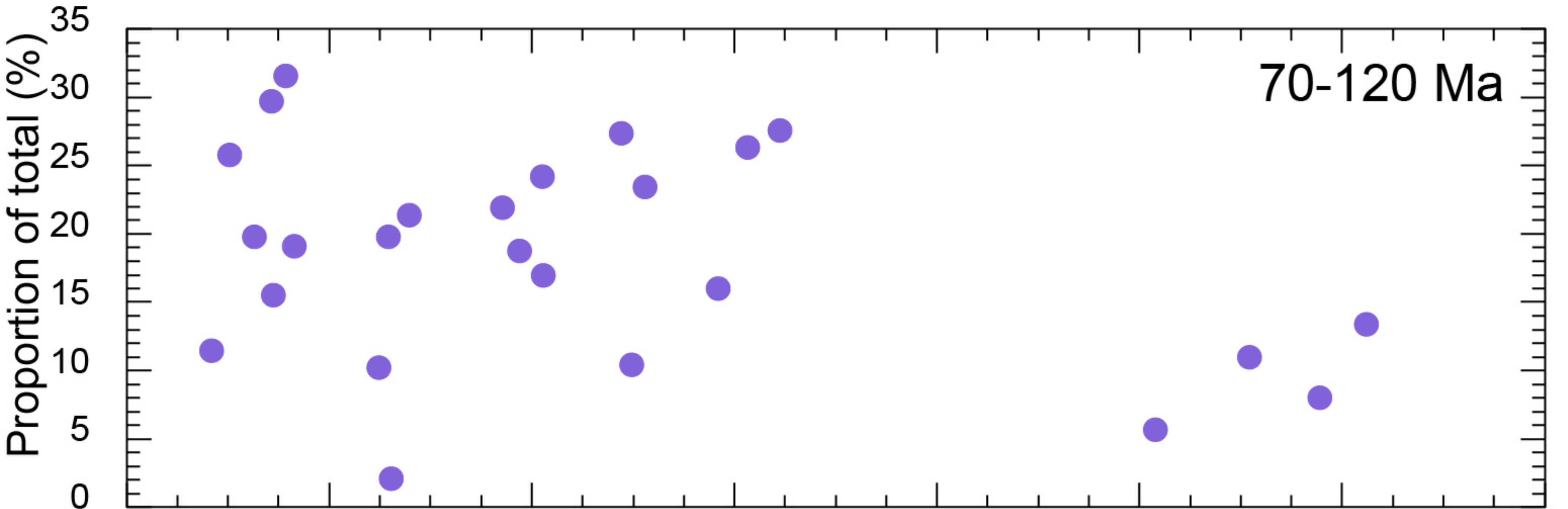


Figure 11.

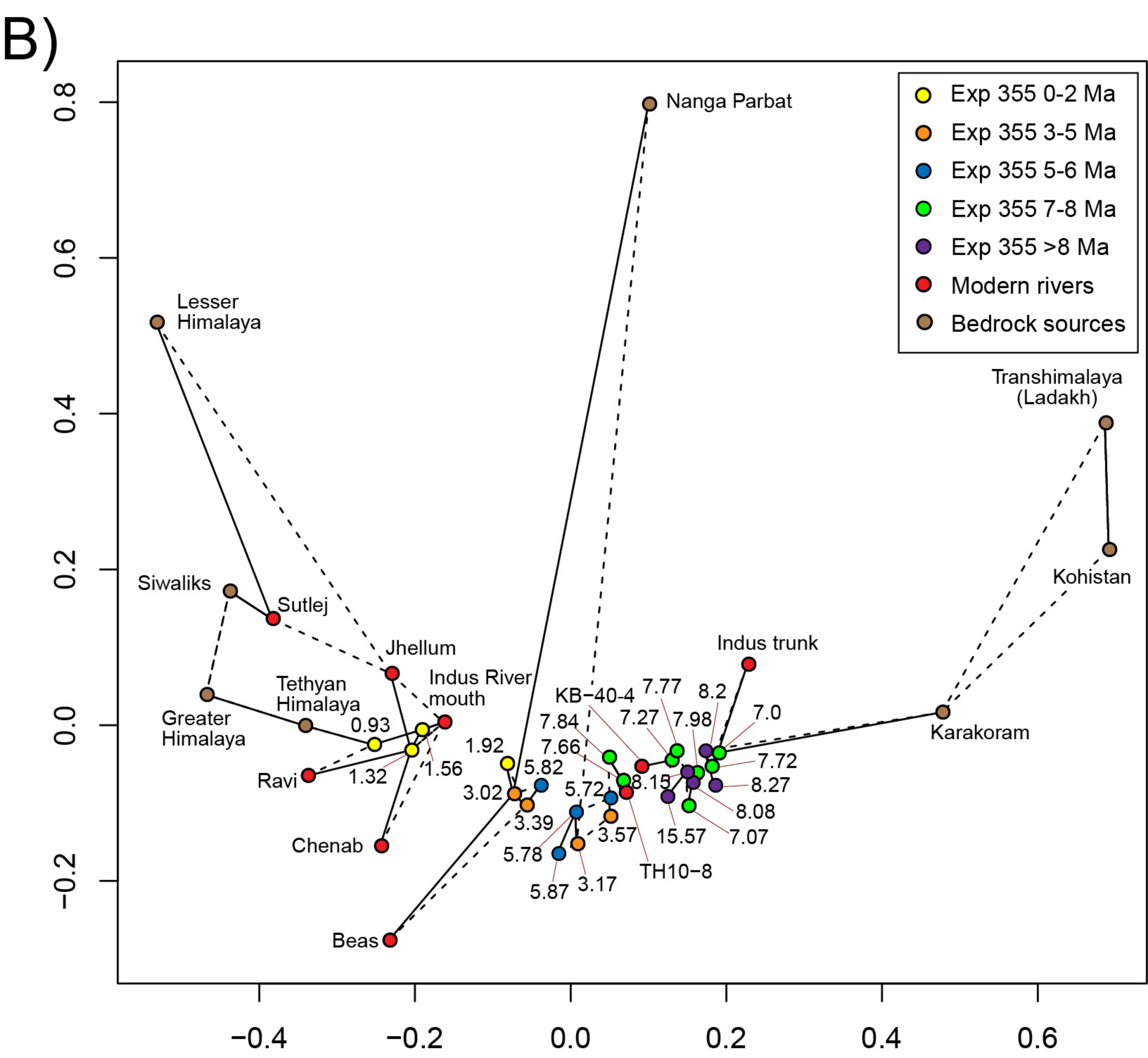
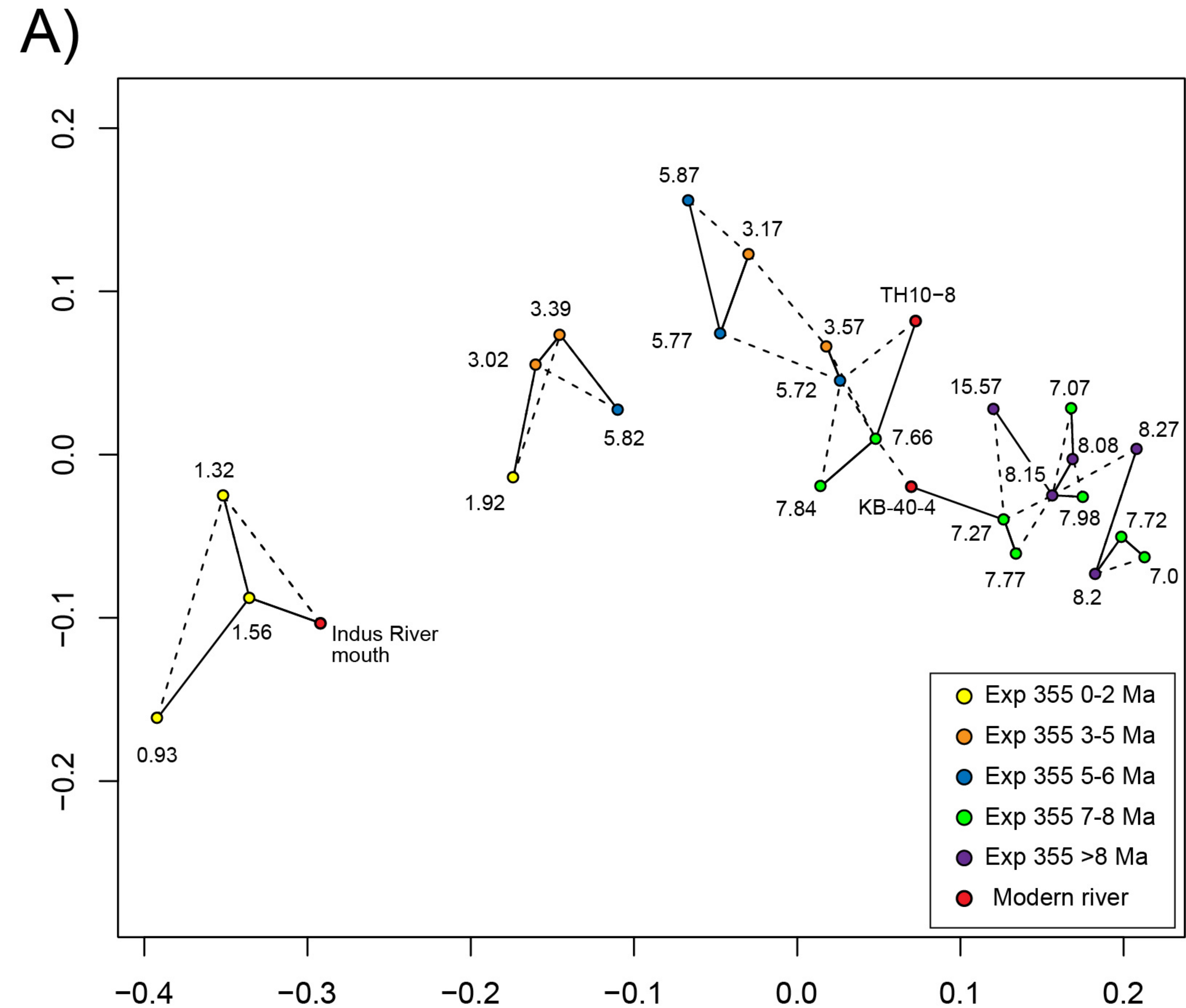
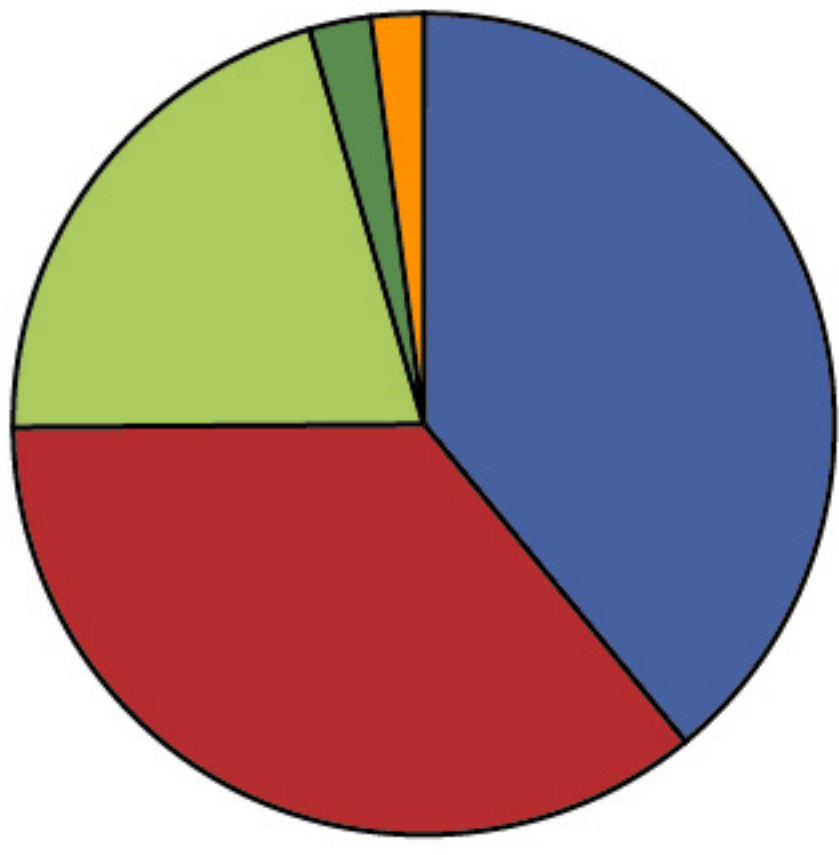


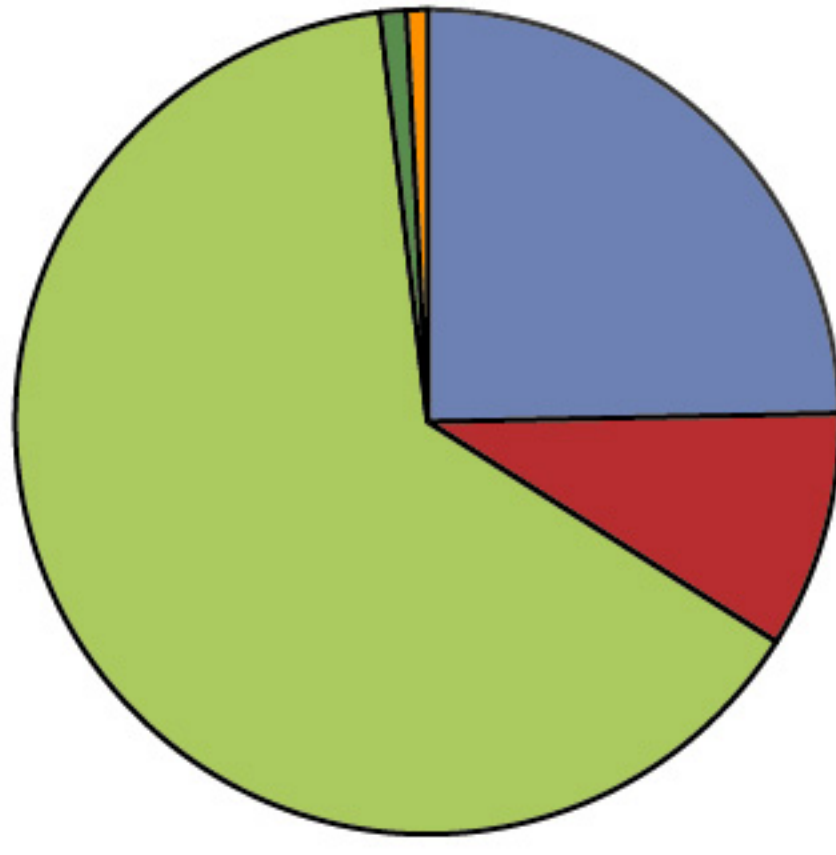
Figure 12.

● New data
○ Previously published data

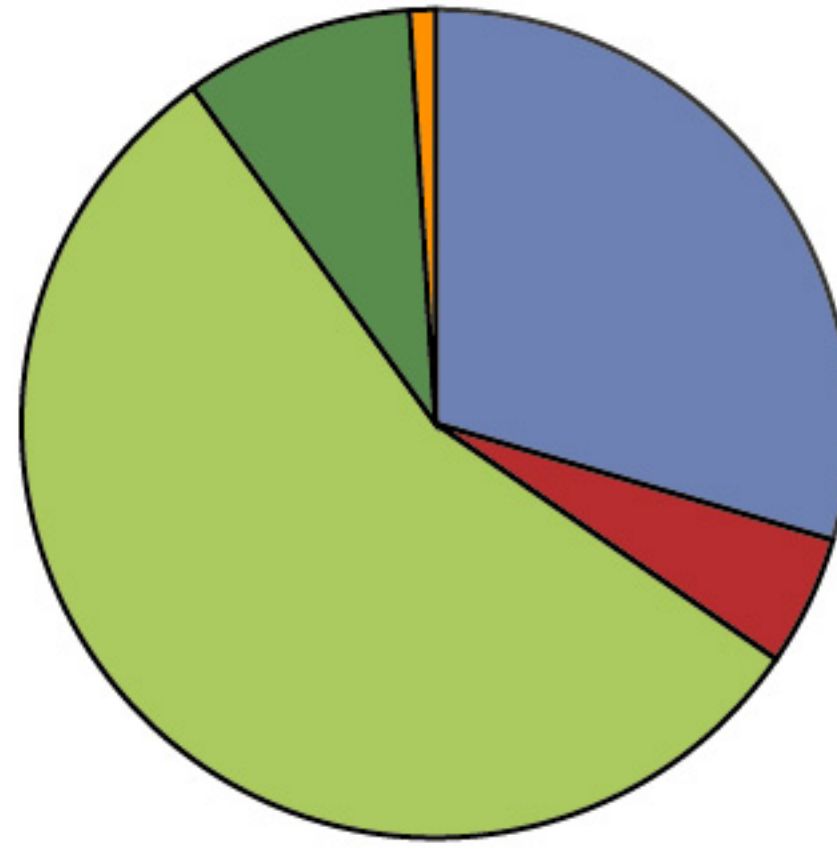
Modern River
0.0 Ma ○



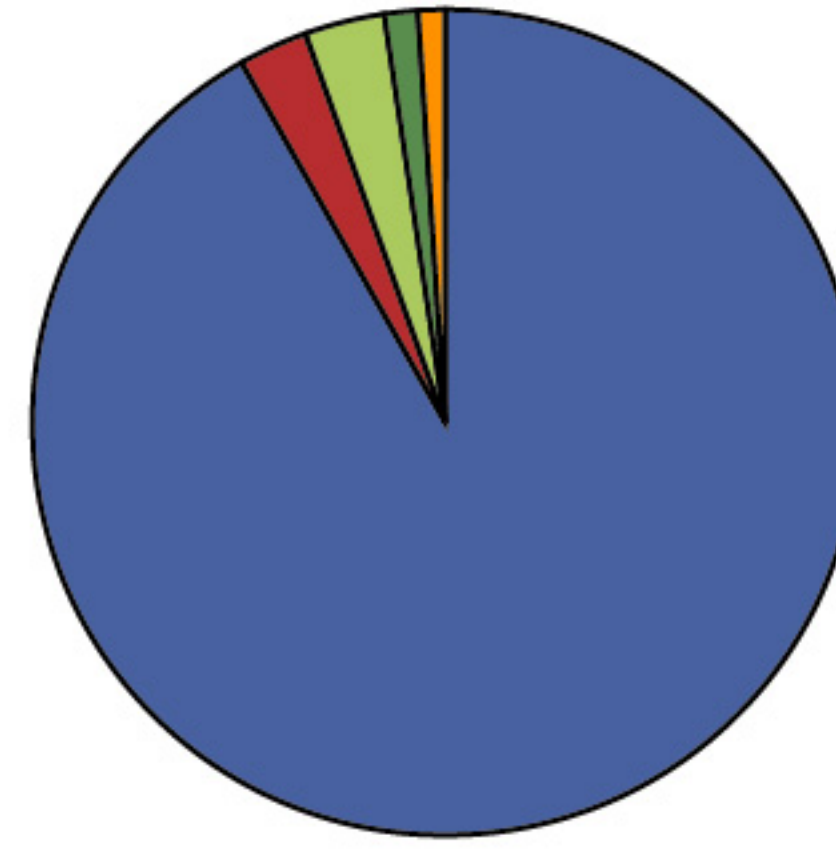
TH10-8
6.6 Ka ○



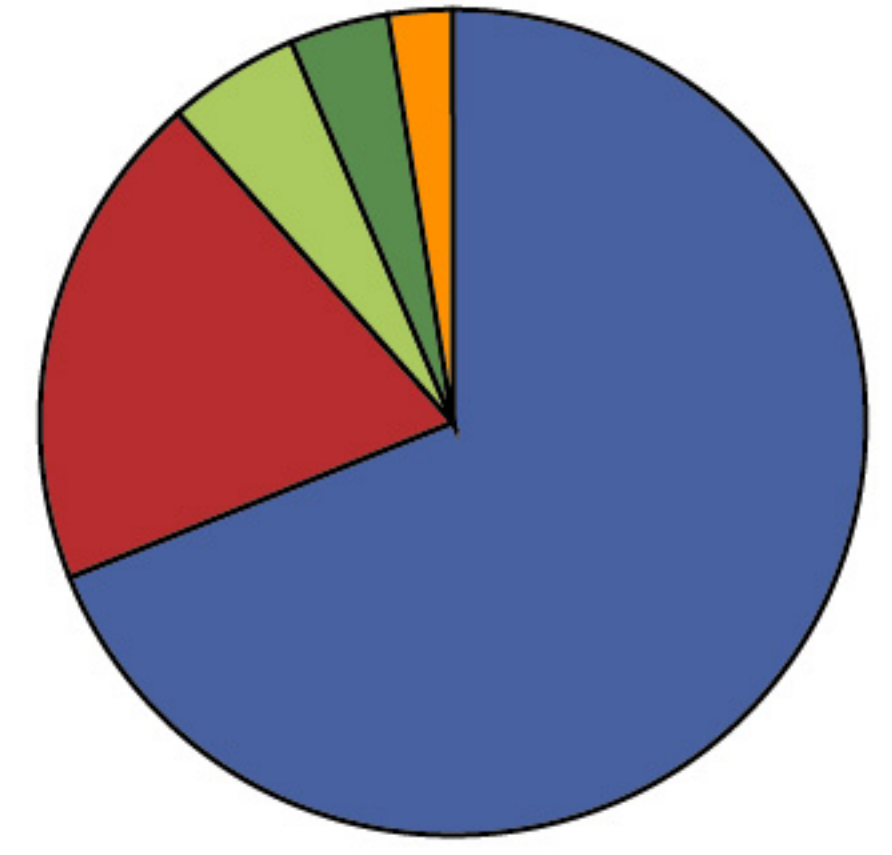
KB40
15 Ka ○



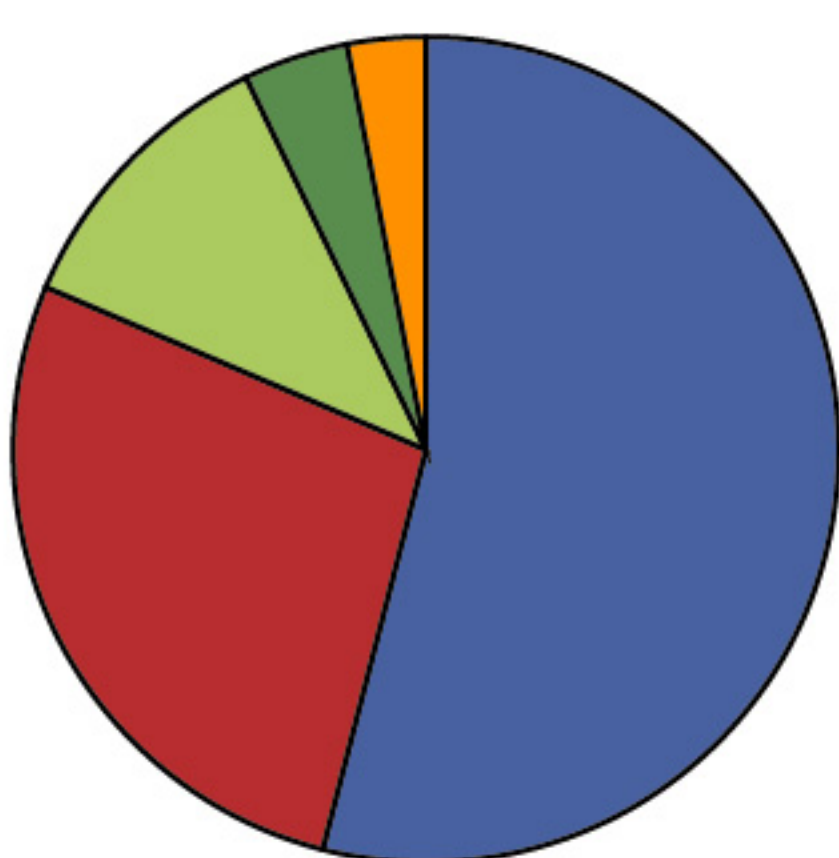
U1456A-11H-6 60-69cm
0.93 Ma ○



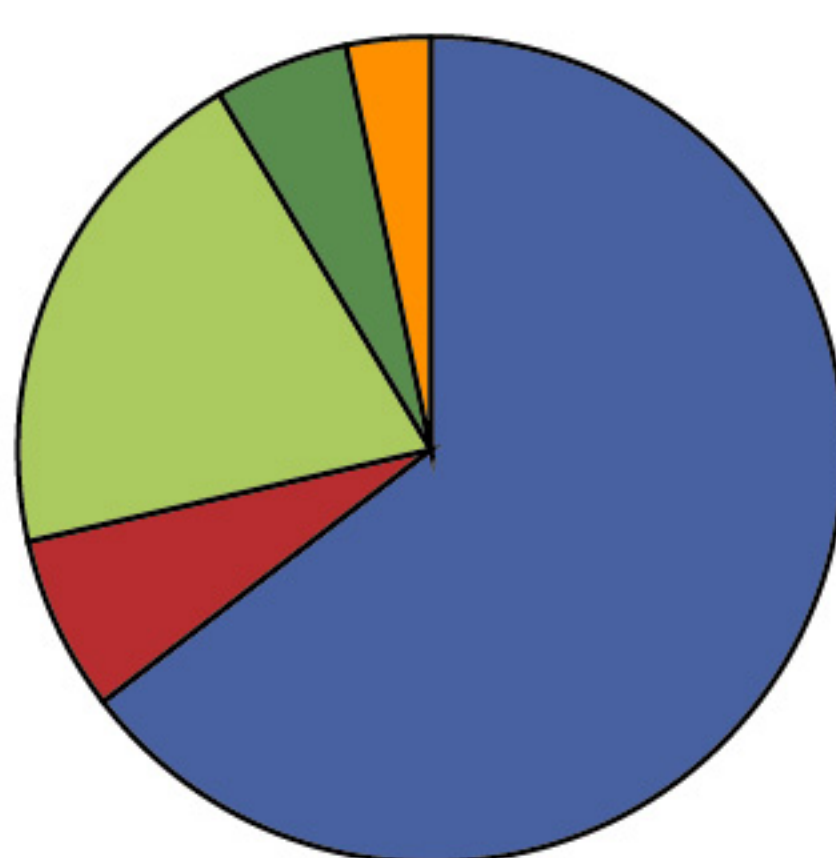
U1456A-26F-3 50-58 cm
1.32 Ma ●



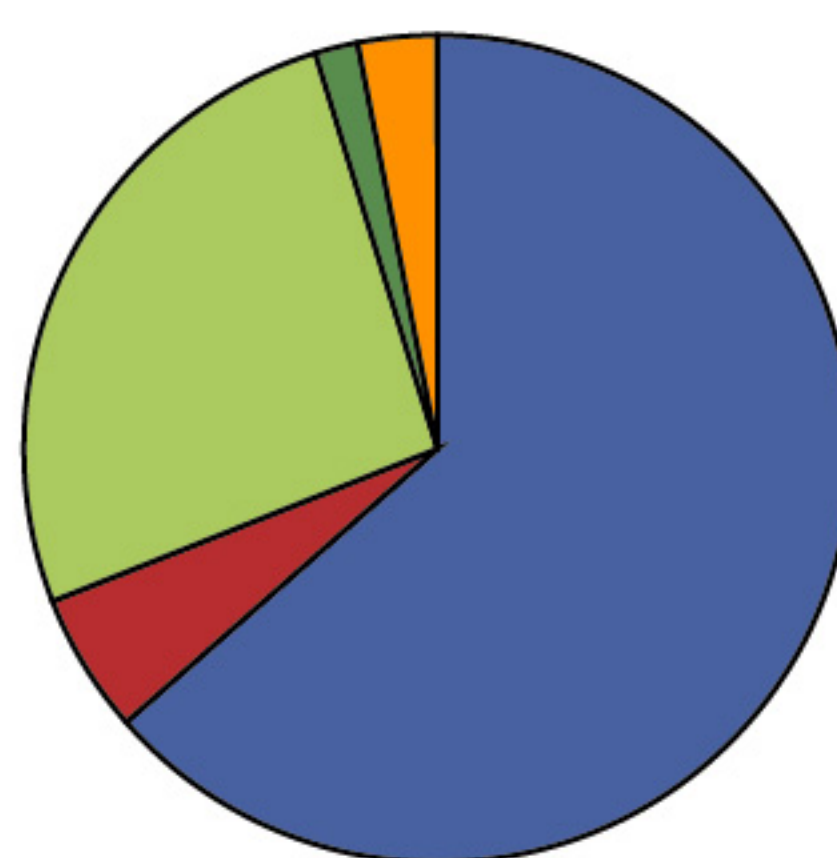
U1456A-51F-3 100-110 cm
1.56 Ma ○



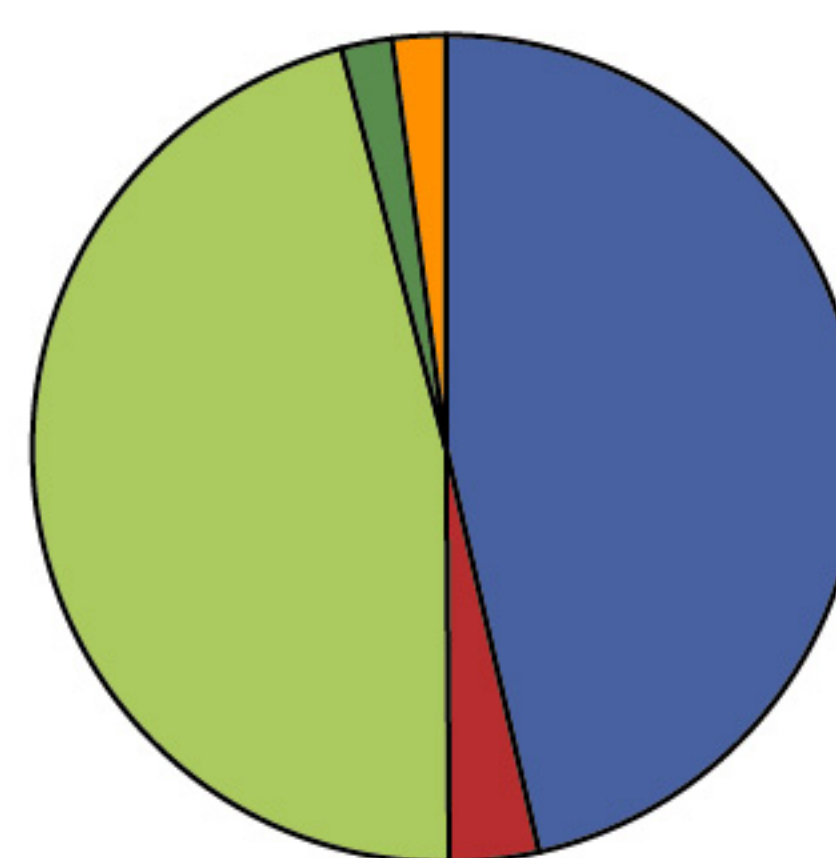
U1456A-61F-3 40-50 cm
1.92 Ma ○



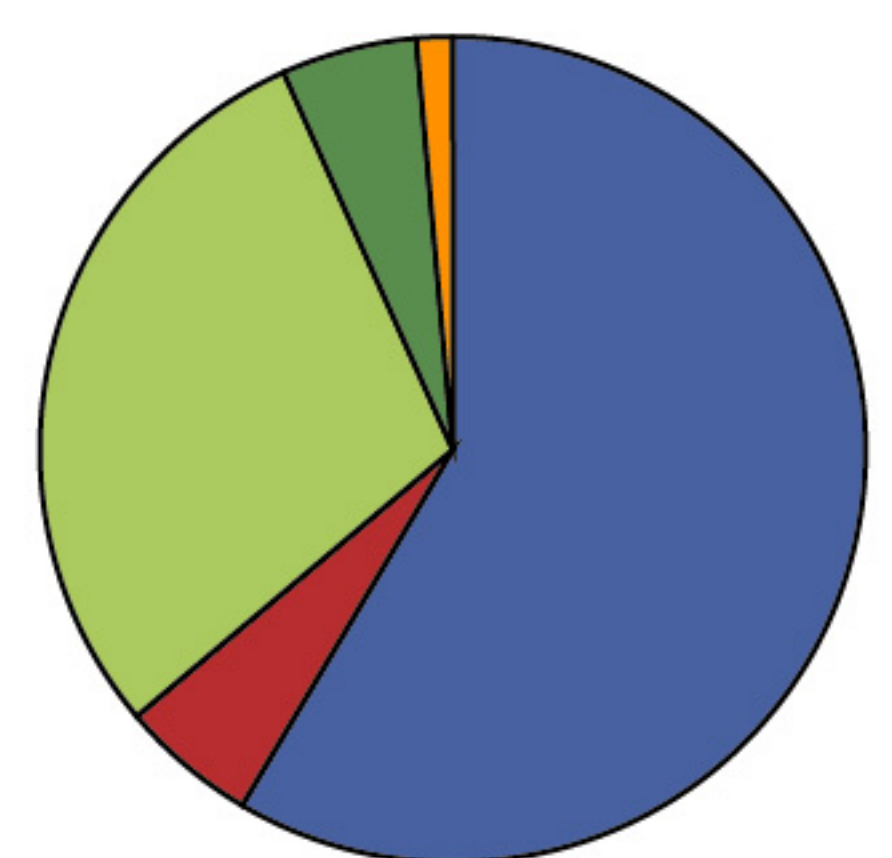
U1456A-70F-2 10-16 cm
3.02 Ma ○



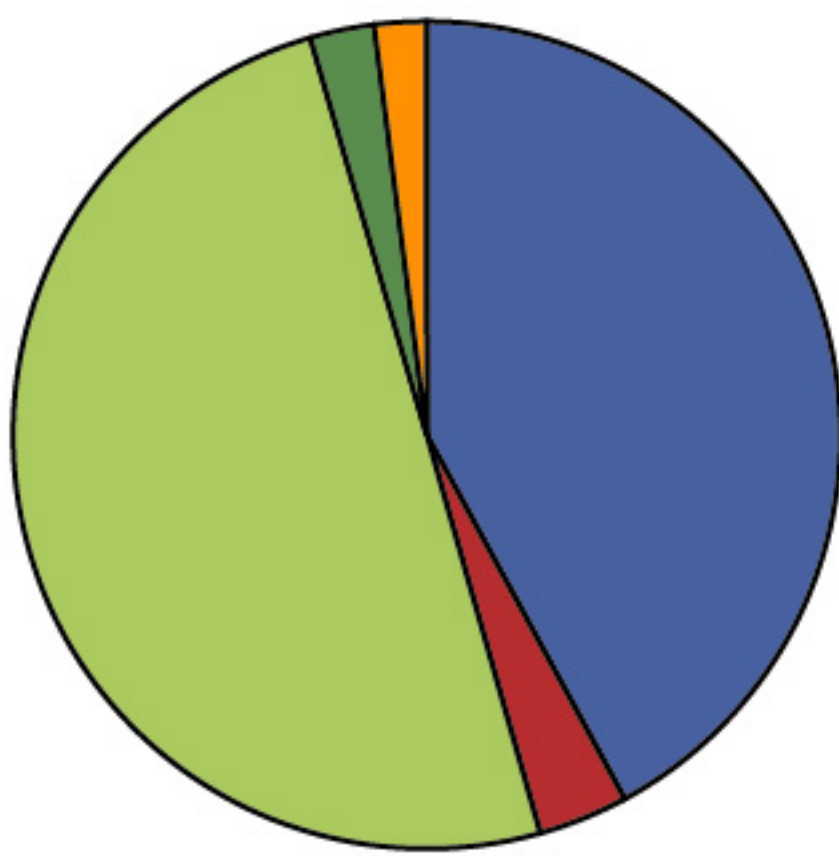
U1457C-31R-1 94-100 cm
3.17 Ma ●



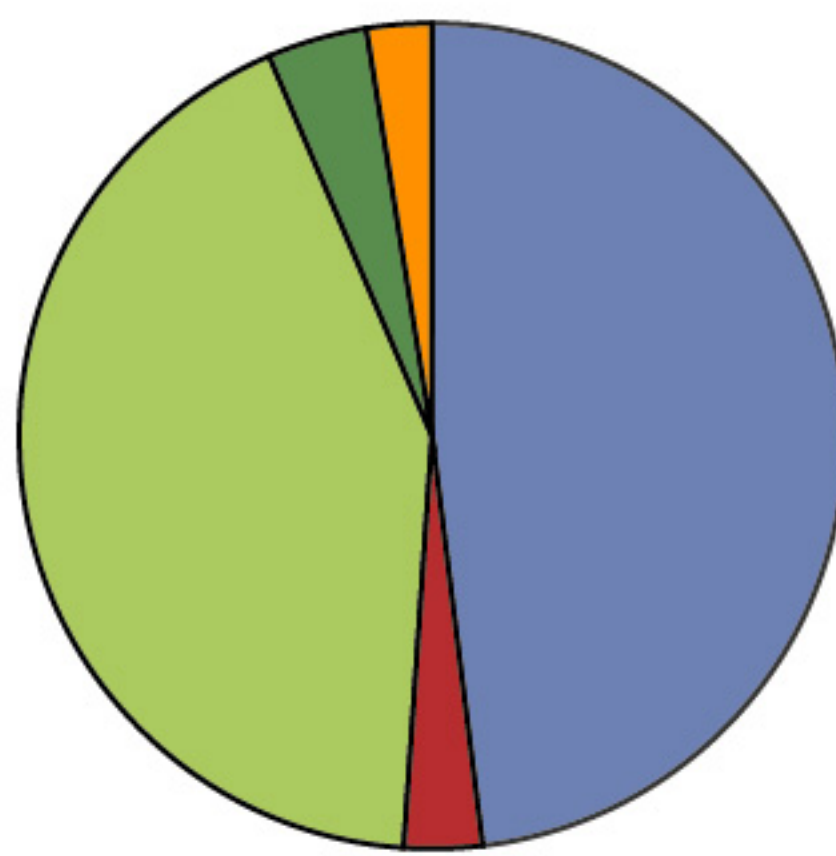
U1457C-33R-3 10-17 cm
3.39 Ma ○



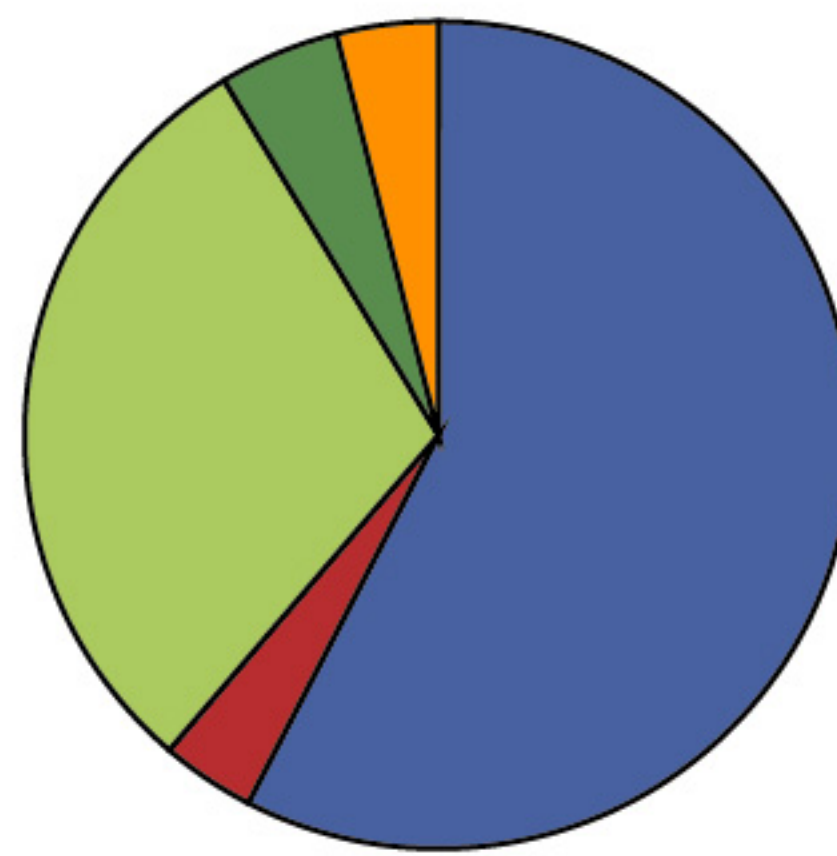
U1456C-45X-3 45-51 cm
3.57 Ma ●



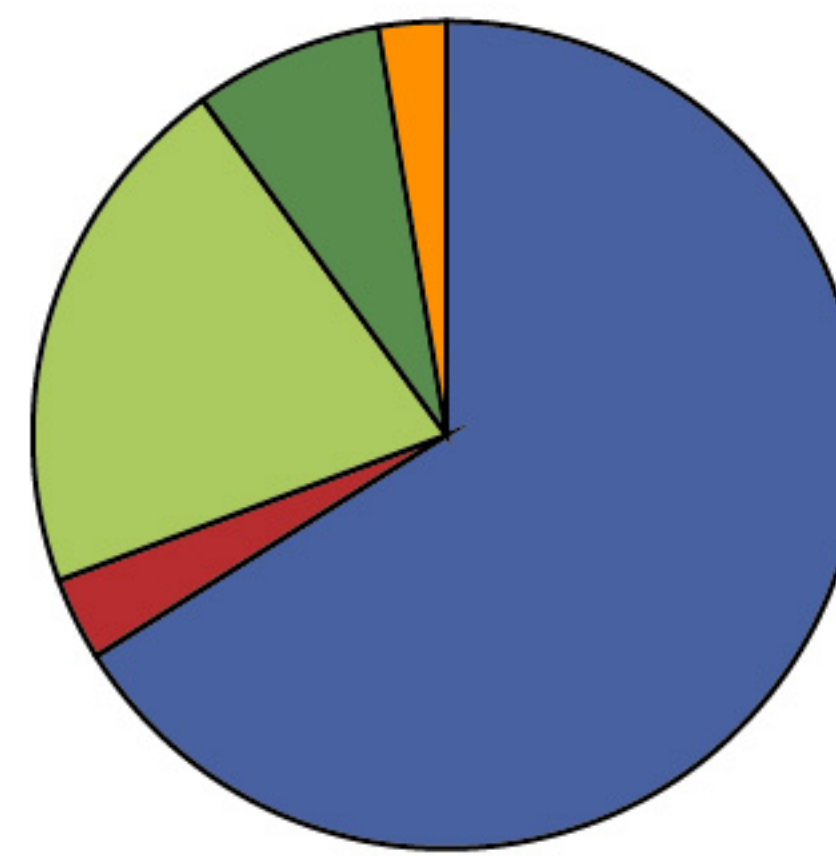
U1456D-5R-1 12-20 cm
5.72 Ma ○



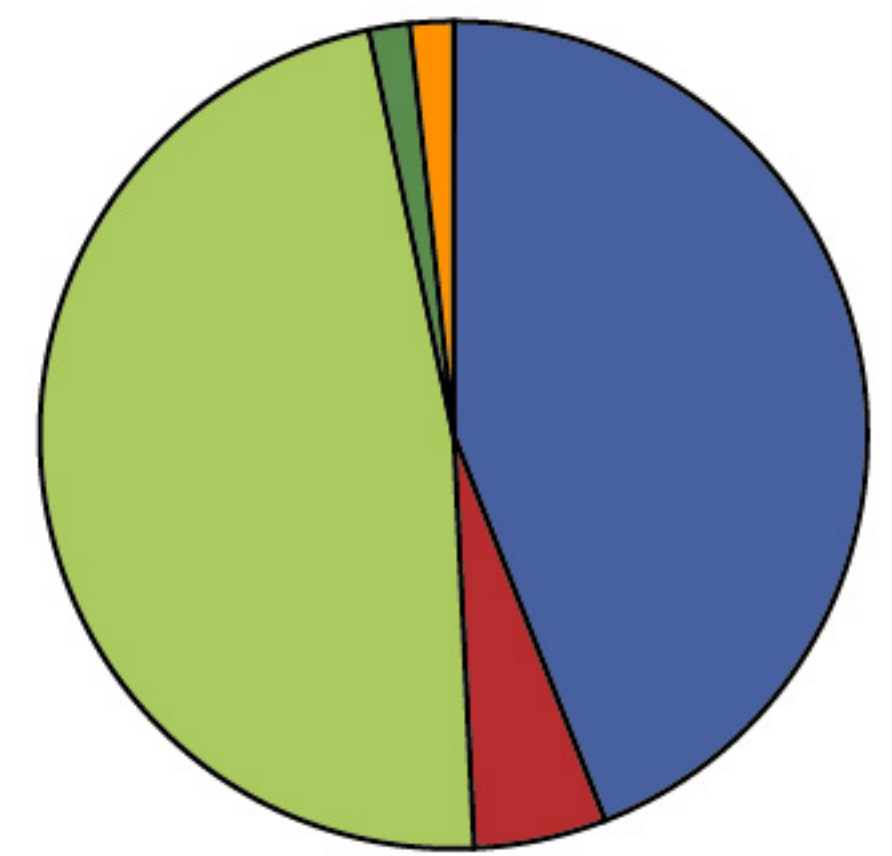
U1457C-41R-2 20-26 cm
5.77 Ma ●



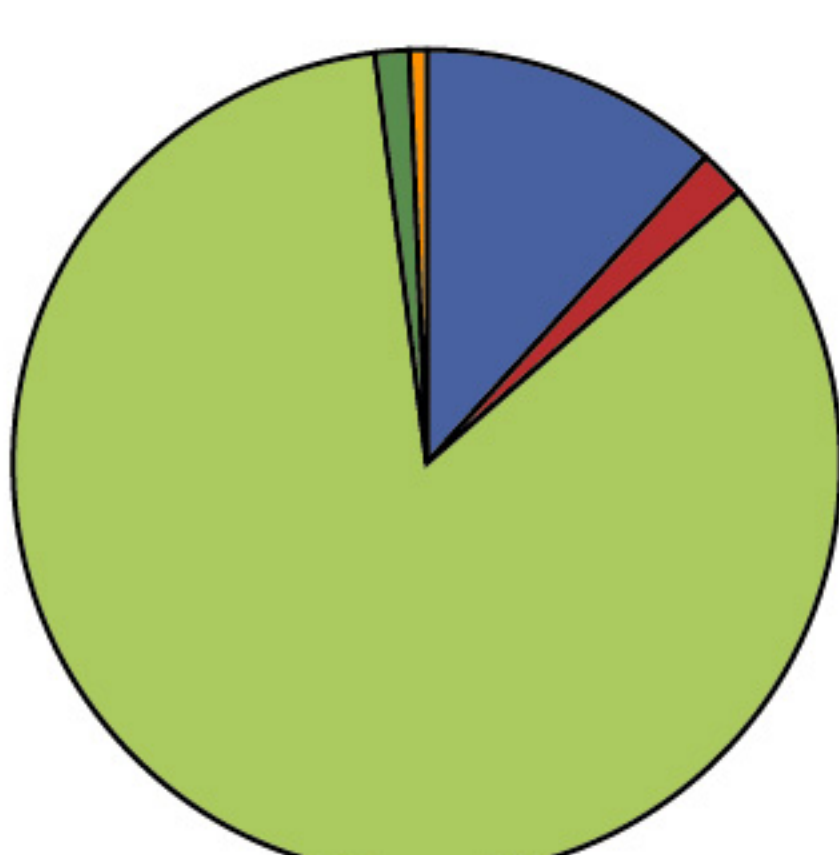
U1457C-42R-1 80-88 cm
5.82 Ma ●



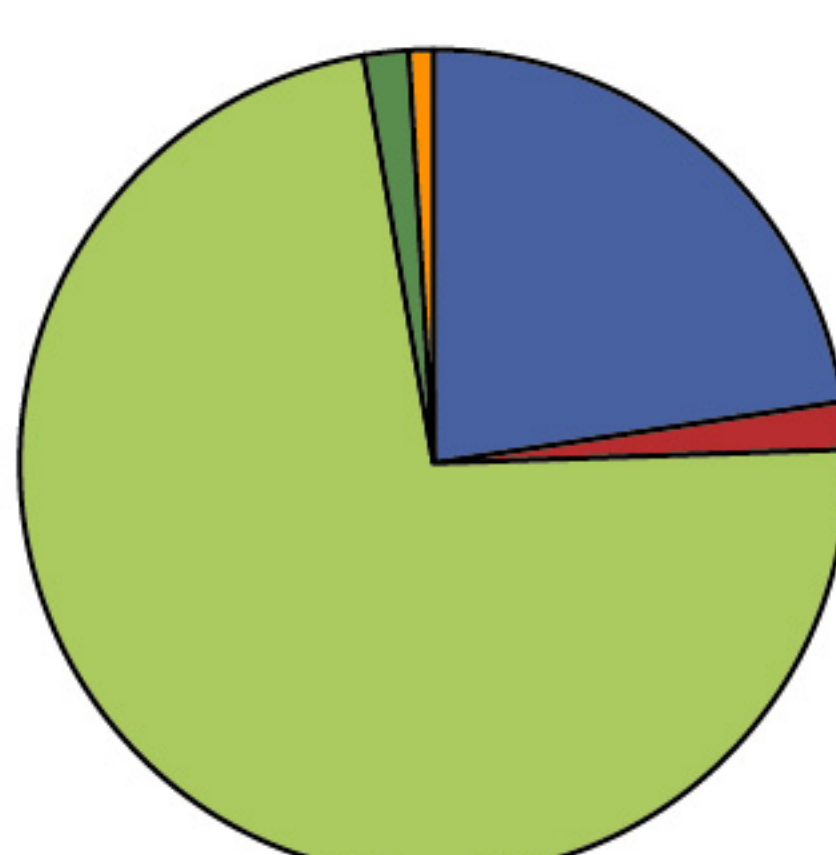
U1457C-43R-2 55-63 cm
5.87 Ma ○



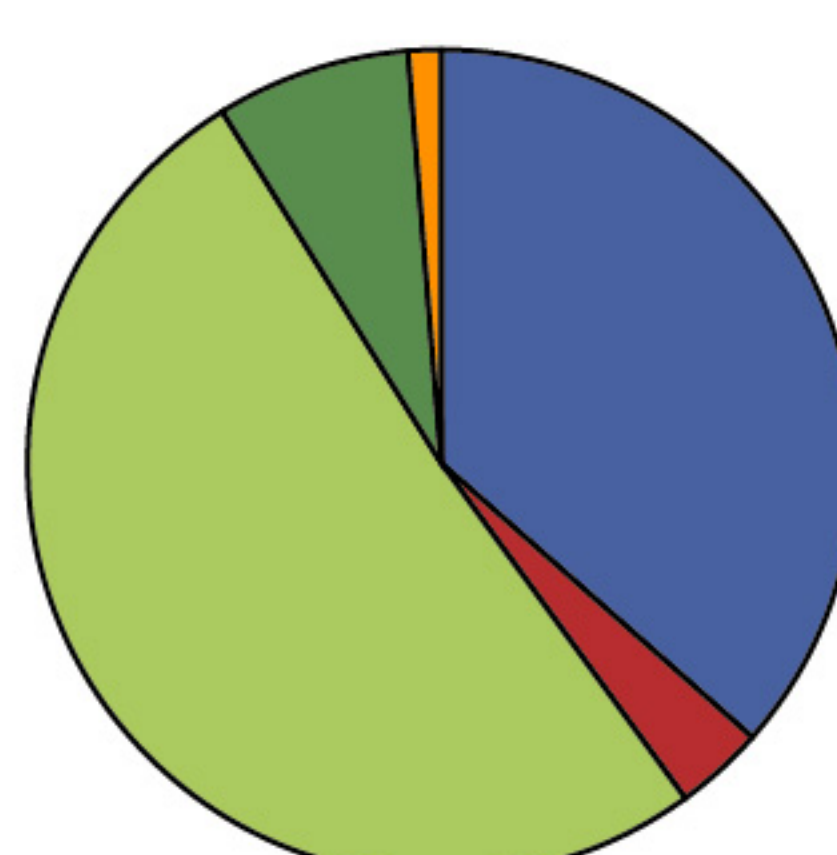
U1456D-12R-1 30-36 cm
7.0 Ma ●



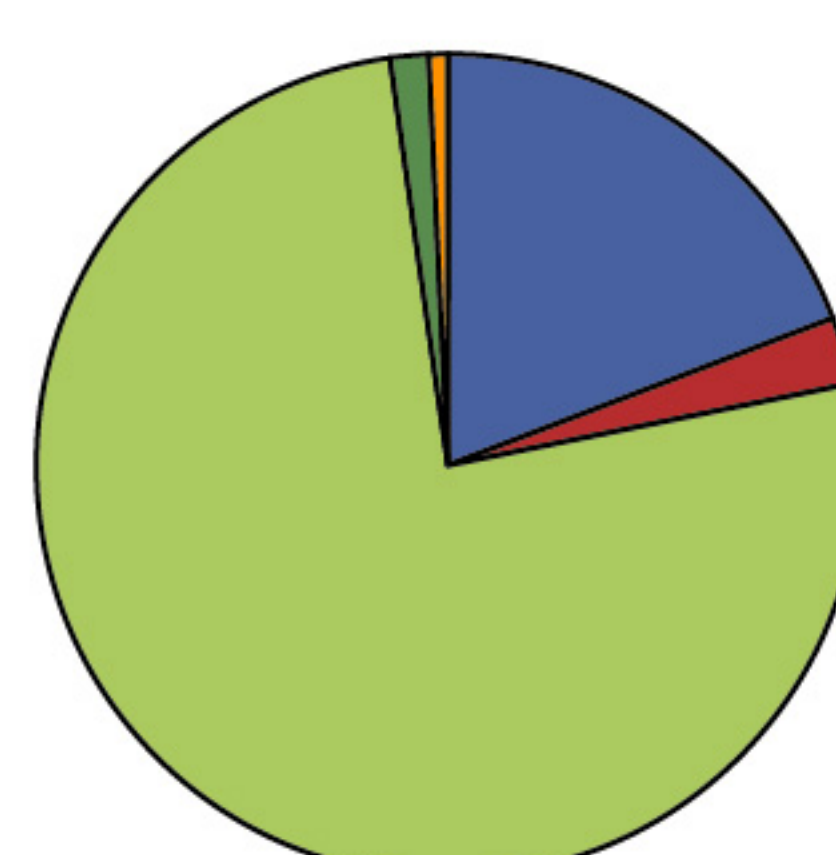
U1456D-13R-1 30-38 cm
7.07 Ma ○



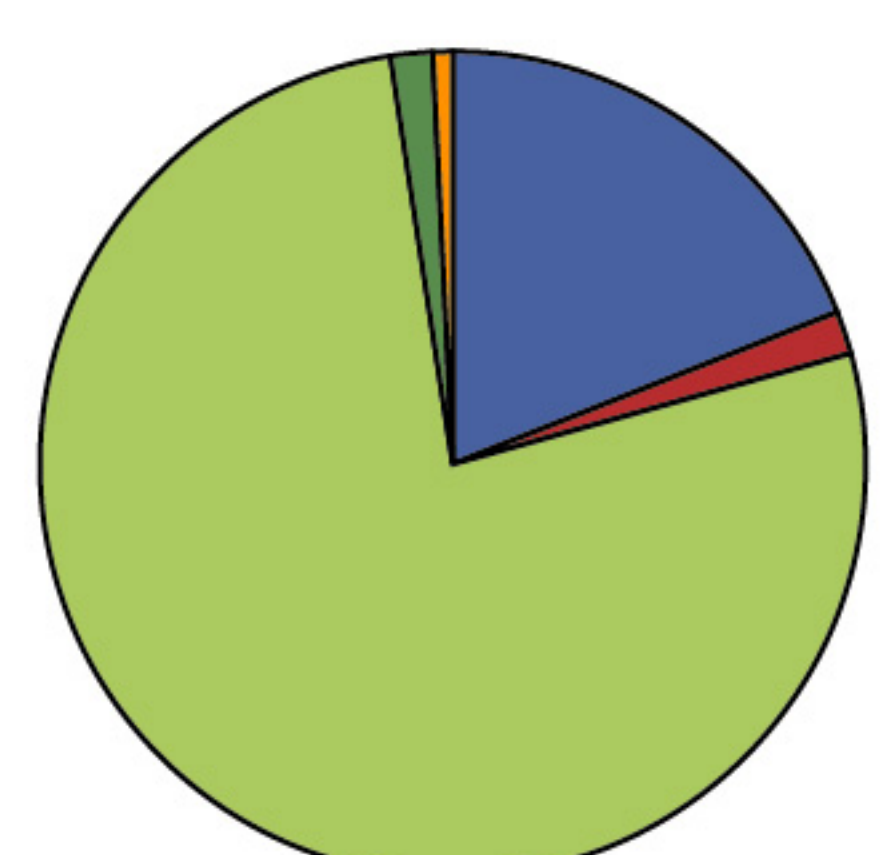
U1456D-15R-1 55-61 cm
7.27 Ma ●



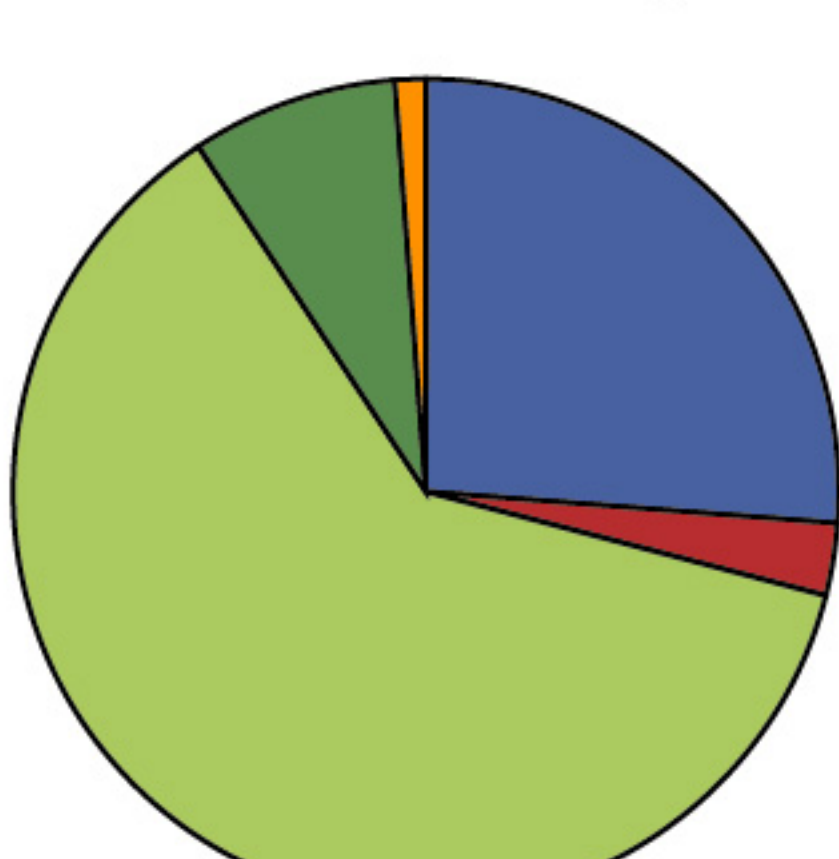
U1456D-19R-2 20-26 cm
7.66 Ma ●



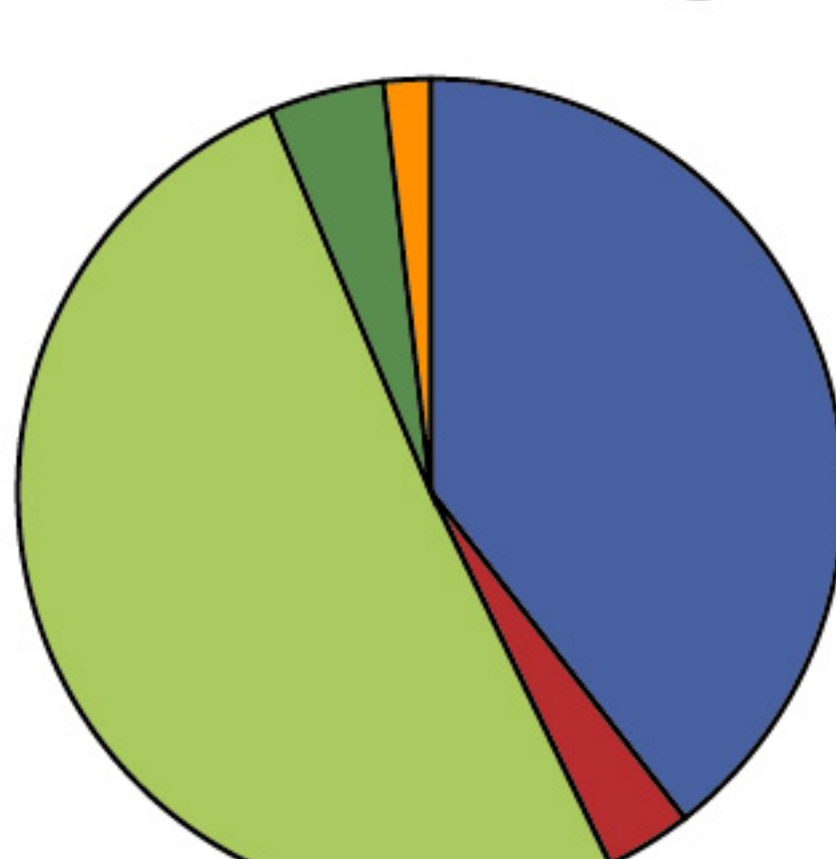
U1456D-20R-1 95-103 cm
7.72 Ma ●



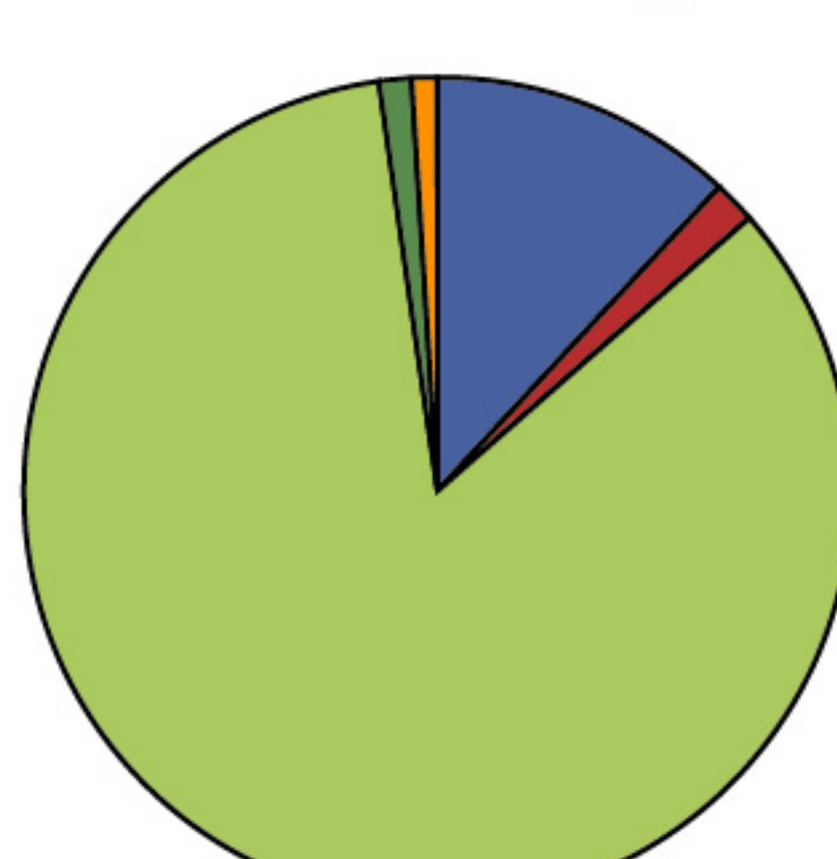
U1457C-51R-4 80-88 cm
7.77 Ma ●



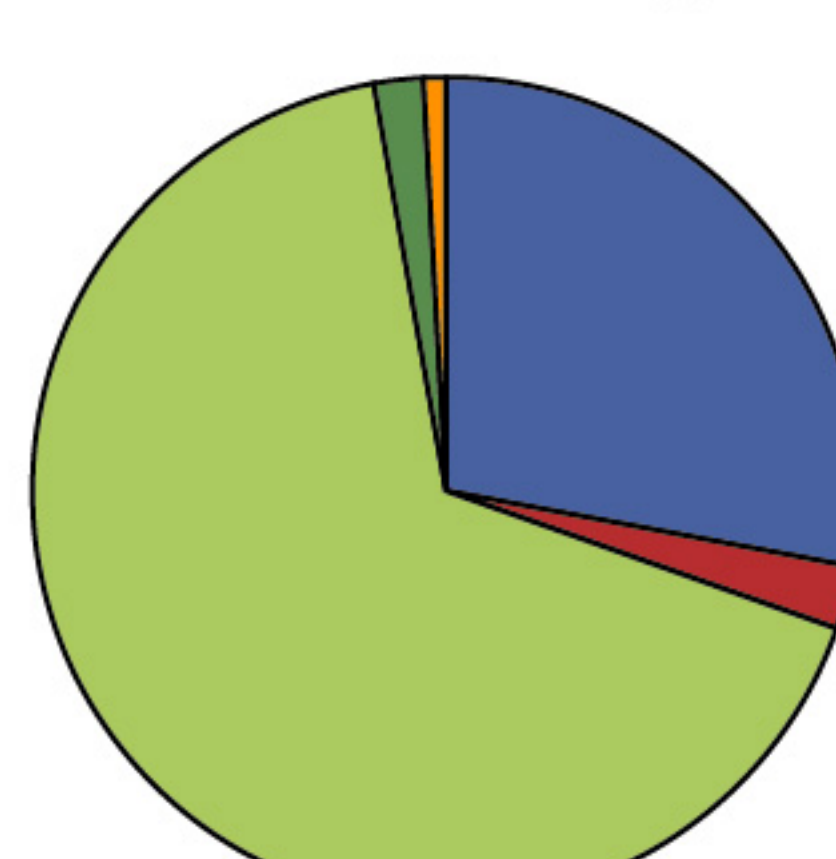
U1456D-22R-1 73-83 cm
7.84 Ma ○



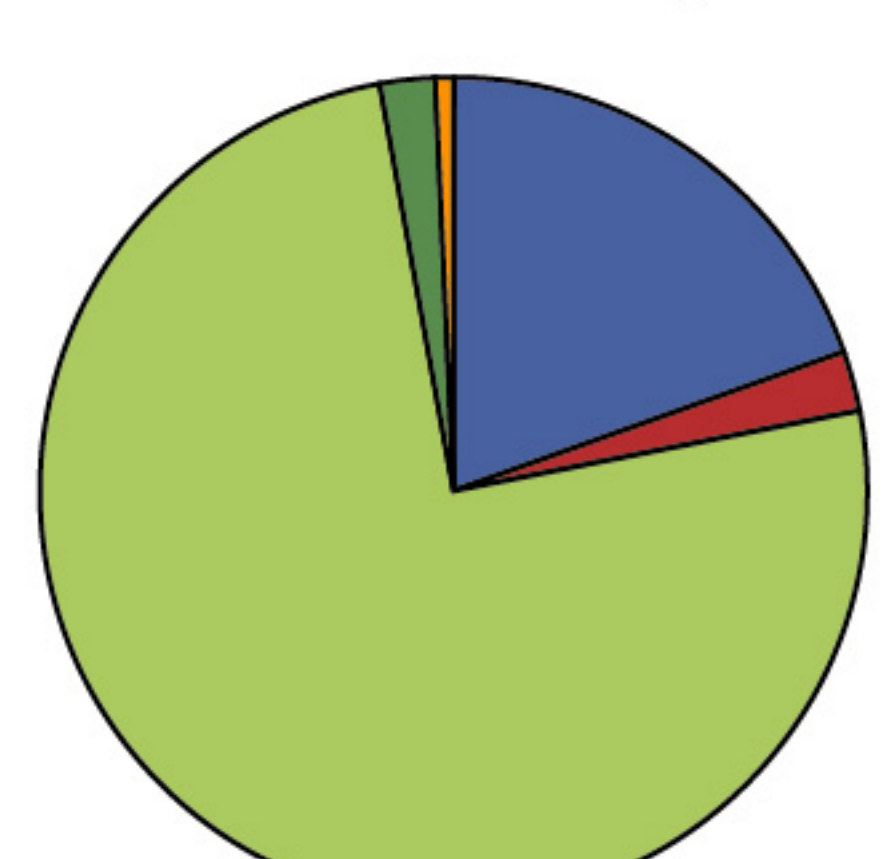
U1457C-61R-1 8-18 cm
7.98 Ma ●



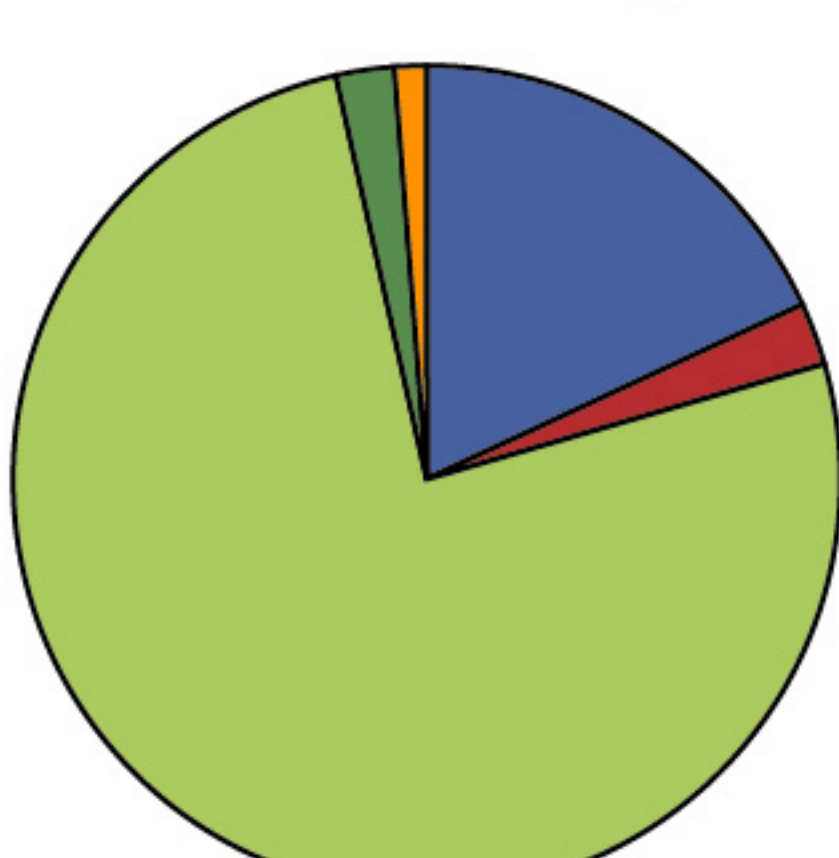
U1456D-26R-2 37-43 cm
8.08 Ma ●



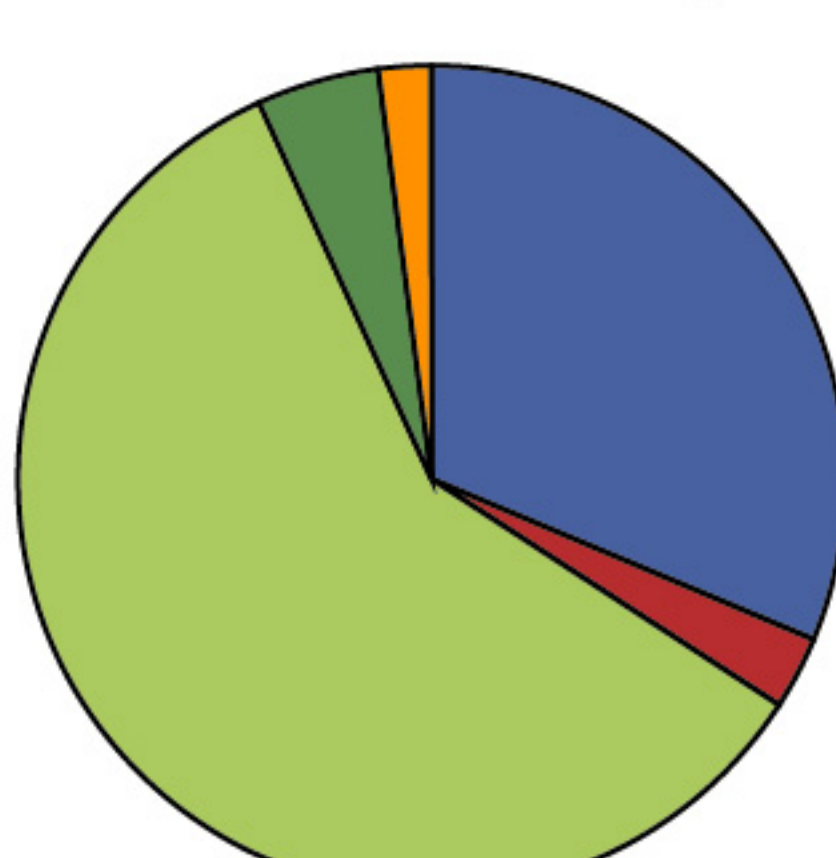
U1456D-27R-2 100-106 cm
8.15 Ma ●



U1456D-28R-1 40-46 cm
8.2 Ma ●



U1456D-29R-2 24-34 cm
8.27 Ma ○



U1456E-19R-3 10-20 cm
15.57 Ma ○

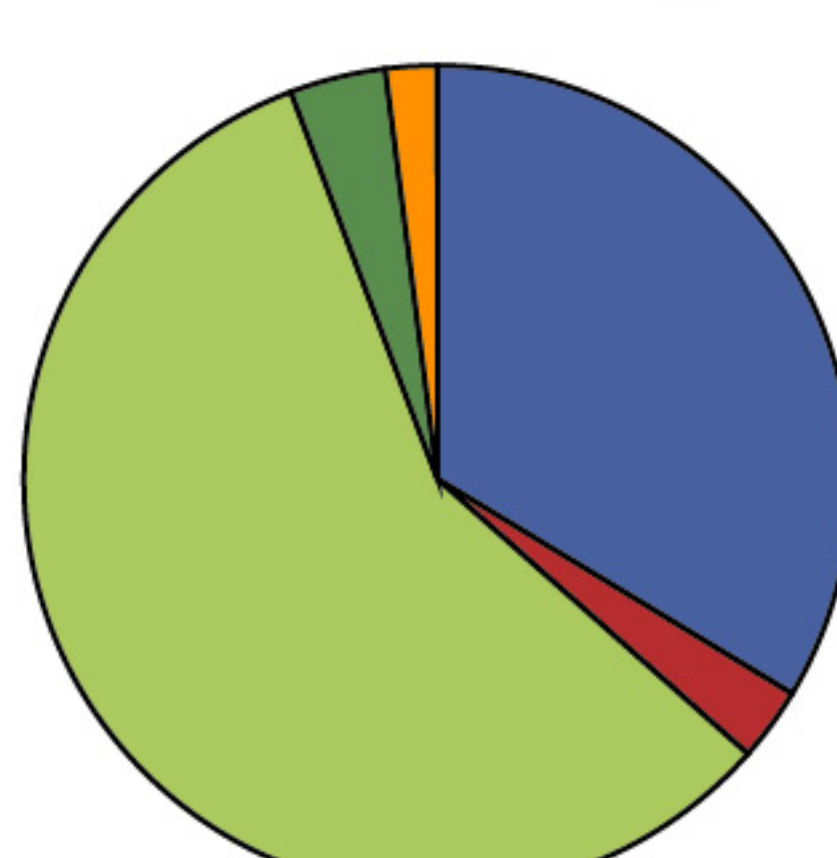


Figure 13.

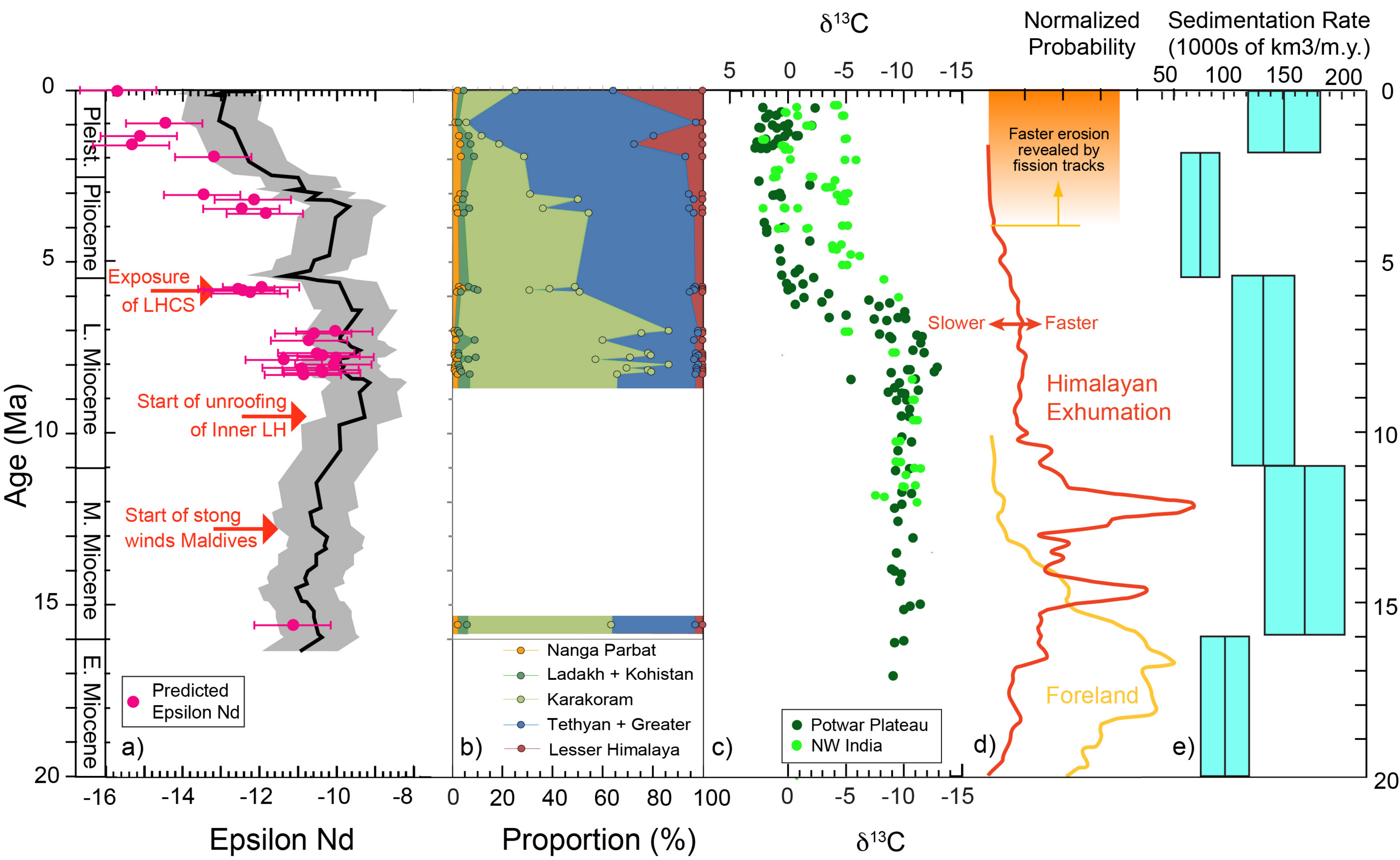


Table 1

Sample	Age (Ma)	SiO ₂ (%)	Al ₂ O ₃ (%)	CaO (%)	Fe ₂ O ₃ (%)	MgO (%)	Na ₂ O (%)	K ₂ O (%)	P ₂ O ₅ (%)	MnO (%)	TiO ₂ (%)	Ba (ppm)	Zr (ppm)	Sc (ppm)	Mean Grain Size (μm)	In Clift et al. [2019]
U1456A-11H-6 60-69 cm	0.93	56.53	14.00	3.14	8.68	2.86	1.98	1.96	0.21	0.04	1.44	323.5	174.4	244.1	31.9	Yes
U1456A-26F-3 50-58 cm	1.32	71.08	12.15	1.50	3.80	1.52	1.99	2.47	0.12	0.04	0.57	345.1	214.9	141.3	125.1	
U1456A-51F-3 100-110 cm	1.56	71.69	12.23	1.54	3.81	1.66	2.10	2.52	0.13	0.04	0.60	399.7	216.1	151.4	137.4	Yes
U1456A-61F-3 40-50 cm	1.92	72.28	11.36	1.87	3.33	1.40	2.03	2.22	0.11	0.04	0.54	321.7	223.8	158.3	142.2	Yes
U1456A-70F-2 10-16 cm	3.02	60.92	16.16	1.06	5.87	2.69	1.37	3.23	0.12	0.04	0.80	491.7	168.7	130.5	13.5	Yes
U1457C-31R-1 94-100 cm	3.17	62.19	15.57	1.24	5.70	2.59	1.91	3.67	0.16	0.05	0.74	541.3	177.2	151.7	46.5	
U1457C-33R-3 10-17 cm	3.39	66.93	13.55	1.38	4.72	2.31	1.89	2.74	0.12	0.05	0.71	409.6	142.2	147.2	132.1	Yes
U1456C-45X-3 45-51 cm	3.57	64.81	14.33	1.13	5.25	2.39	1.59	2.87	0.10	0.04	0.73	423.6	138.9	132.1	60.3	
U1456D-5R-1 12-20 cm	5.72	61.90	15.40	1.11	5.75	2.57	1.50	3.05	0.13	0.04	0.80	473.8	219.7	132.5	29.8	Yes
U1457C-41R-2 20-26 cm	5.77	64.85	14.74	1.20	5.28	2.37	1.57	2.73	0.14	0.04	0.77	413.8	210.2	135.0	47.1	
U1457C-42R-1 80-88 cm	5.82	70.30	11.81	1.56	3.51	1.51	2.02	2.21	0.12	0.04	0.53	393.4	195.3	168.4	69.1	
U1457C-43R-2 52-60 cm	5.87	65.58	14.25	1.27	4.99	2.30	1.69	2.93	0.13	0.04	0.74	395.4	193.8	141.4	103.5	Yes
U1456D-12R-1 30-36 cm	7.00	67.20	13.36	2.05	4.70	2.24	2.06	2.37	0.14	0.05	0.67	318.5	170.0	187.9	94.6	
U1456D-13R-1 30-38 cm	7.07	63.84	13.55	1.60	4.84	2.37	1.95	2.62	0.12	0.04	0.68	336.2	156.7	163.8	99.1	Yes
U1456D-15R-1 55-61 cm	7.27	65.51	13.66	1.62	4.79	2.33	1.92	2.61	0.13	0.04	0.69	331.1	169.2	165.6	43.3	
U1456D-19R-2 20-26 cm	7.66	64.67	14.54	1.53	5.09	2.39	1.97	2.97	0.16	0.04	0.71	398.3	175.2	169.4	64.0	
U1456D-20R-1 95-103 cm	7.72	63.54	14.45	1.36	4.86	2.45	1.64	2.85	0.15	0.04	0.75	304.9	190.6	145.2	32.3	
U1457C-51R-4 80-88 cm	7.77	66.13	13.89	1.43	4.75	2.31	1.85	2.66	0.12	0.04	0.70	311.3	153.7	154.2	63.0	
U1456D-22R-1 73-83 cm	7.84	62.40	15.48	1.31	5.42	2.63	1.55	2.94	0.14	0.04	0.78	338.4	170.0	146.3	27.2	Yes
U1457C-61R-1 8-18 cm	7.98	67.73	13.23	1.56	4.65	2.27	1.97	2.37	0.13	0.04	0.62	309.6	151.3	160.6	75.3	
U1456D-26R-2 37-43 cm	8.08	67.41	12.96	1.66	4.51	2.28	2.12	2.37	0.14	0.04	0.64	348.4	208.4	166.1	71.8	
U1456D-27R-2 100-106 cm	8.15	62.63	15.15	1.16	5.43	2.69	1.44	2.79	0.16	0.04	0.82	325.5	162.1	135.6	23.4	
U1456D-28R-1 40-46 cm	8.20	62.57	14.94	1.18	5.28	2.58	1.59	2.72	0.16	0.04	0.75	362.7	187.9	141.2	23.5	
U1456D-29R-2 24-34 cm	8.27	62.11	15.26	1.13	5.38	2.68	1.50	2.81	0.14	0.04	0.78	352.3	181.0	133.2	25.5	Yes
U1456E-19R-3 10-20 cm	15.57	65.14	13.85	1.15	4.97	2.72	1.70	2.68	0.15	0.04	0.69	315.8	182.4	141.7	53.1	Yes
Indus Marine A1-1620	3.60	58.33	15.42	1.58	6.89	3.21	1.36	3.09	0.20	0.06	0.80	4954.7	193.6	15.1	17.2	
Indus Marine A1-2200	5.16	56.88	13.97	2.90	8.90	2.59	1.35	2.68	0.20	0.09	0.70	1368.1	229.2	13.6	14.0	
Indus Marine A1-3180	6.93	53.46	14.16	1.96	7.23	2.52	1.13	2.68	0.19	0.05	0.74	32834.9	192.8	13.2	13.7	
Indus Marine A1-3960	8.29	57.99	14.60	2.10	8.99	2.69	1.65	2.84	0.19	0.06	0.76	715.1	228.2	13.5	16.2	
Indus Marine A1-4180	8.68	57.30	14.68	1.91	8.27	2.72	1.53	2.75	0.18	0.06	0.75	1145.3	224.7	13.1	15.3	
Indus Marine A1-4840	9.83	59.23	15.59	1.22	7.63	2.70	1.54	2.95	0.18	0.05	0.77	671.3	202.5	14.3	14.1	
Indus Marine A1-4940	10.00	60.71	15.24	0.88	6.46	2.60	1.59	2.87	0.17	0.05	0.77	7977.0	222.6	13.5	13.9	
Indus Marine A1-5360	10.72	57.44	15.63	1.46	8.77	3.11	1.31	2.80	0.21	0.06	0.83	686.6	203.3	14.6	12.8	
Indus Marine A1-5920	11.67	56.44	16.72	0.62	7.96	2.96	1.18	3.28	0.16	0.05	0.85	532.3	185.7	15.5	10.4	
Indus Marine A1-6360	12.35	57.18	16.77	0.71	7.15	3.08	1.16	3.12	0.16	0.04	0.86	534.6	191.3	15.7	12.0	
Indus Marine A1-6460	12.51	60.96	16.20	0.72	7.15	2.96	1.23	2.87	0.17	0.04	0.81	498.5	177.5	14.2	9.9	
Indus Marine A1-6680	12.86	58.50	18.08	3.68	6.92	3.42	1.19	3.05	0.18	0.04	0.84	420.1	178.5	15.1	10.3	
Indus Marine A1-6890	13.19	58.98	16.90	0.84	7.04	3.11	1.06	3.04	0.17	0.04	0.87	488.8	192.4	15.3	10.7	
Indus Marine A1-7090	13.50	58.76	16.27	0.62	7.05	3.13	0.79	2.96	0.16	0.04	0.88	420.8	206.2	14.6	12.0	
Indus Marine A1-7190	13.66	59.46	15.38	0.66	8.12	2.88	0.90	2.72	0.16	0.05	0.83	763.8	223.4	13.9	11.9	
Indus Marine A1-7400	13.99	58.12	16.08	0.64	7.82	3.06	0.93	3.08	0.15	0.04	0.84	520.6	197.6	15.6	11.7	
Indus Marine A1-7500	14.14	59.07	16.23	0.58	7.58	3.06	0.69	3.04	0.15	0.04	0.88	518.3	225.1	15.6	10.4	
Indus Marine A1-7620	14.33	58.48	16.12	0.57	7.17	3.05	0.82	2.99	0.16	0.04	0.86	483.7	224.5	15.7	12.0	
Indus Marine A1-7720	14.49	58.75	16.42	0.74	7.06	3.20	0.87	3.15	0.15	0.04	0.87	454.1	216.7	14.9	11.7	
Indus Marine A1-7820	14.64	57.76	16.12	0.59	7.00	3.07	0.88	2.91	0.15	0.04	0.86	530.2	215.8	14.8	10.8	
Indus Marine A1-8040	14.99	58.43	16.32	0.58	7.07	3.12	0.83	3.14	0.15	0.04	0.87	465.6	206.4	15.4	10.7	
Indus Marine A1-8140	15.15	58.48	16.47	0.53	7.34	3.20	0.84	3.15	0.16	0.04	0.87	359.5	214.8	14.6	11.4	
Indus Marine A1-8240	15.30	57.92	16.05	0.79	7.01	3.34	0.81	2.99	0.17	0.04	0.88	366.9	224.7	16.4	12.5	
Indus Marine A1-8340	15.46	57.50	15.41	0.72	6.88	3.23	0.80	2.88	0.15	0.04	0.84	15154.2	226.9	15.2	13.6	
Indus Marine A1-8450	15.63	53.35	11.98	0.77	6.18	2.37	0.72	2.10	0.12	0.03	0.67	67660.3	207.5	11.8	17.5	
Indus Marine A1-8650	15.94	39.71	7.64	0.55	3.87	1.29	0.53	1.25	0.10	0.02	0.44	94222.9	225.8	8.5	16.9	
Indus Marine A1-8950	16.42	48.08	9.12	0.72	4.51	1.64	0.87	1.51	0.11	0.03	0.55	95848.9	278.7	7.4	14.5	
Indus Marine A1-9170	16.76	52.48	11.88	0.70	6.54	2.42	0.83	2.15	0.14	0.04	0.66	74337.3	187.9	10.4	20.9	

Table 2

Sample Name	in CMT et al. (2019)	Top depth CSF-A	Age (Ma)	Mean Grain Size (μm)	Median Grain Size	D(0,0)	Mean/ Media n ratio	Mode (μm)	S.D.
U1456A-11H-6, 60-69 cm	Yes	97.60	0.93	31.9	26.1	0.748775	1.2211	41.7	27.4
U1456A-26F-3, 50-58 cm		185.10	1.32	125.1	101.6	0.726618	1.2319	168.9	110.3
U1456A-51F-3 100-110 cm	Yes	298.88	1.56	137.4	117.8	0.697362	1.1661	153.8	101.6
U1456A-61F-3 40-50 cm	Yes	345.32	1.92	142.2	122.4	0.703043	1.1618	140.1	100.8
U1456A-70F-2 10-16 cm	Yes	386.40	3.02	13.5	8.4	0.747176	1.6077	10.3	14.6
U1457C-31R-1 94-100 cm		473.80	3.17	46.5	27.9	0.745233	1.6623	140.1	48.5
U1457C-33R-3 10-17 cm		495.20	3.39	132.1	110.9	0.714413	1.1904	168.9	106.5
U1456C-45X-3 45-51 cm		458.96	3.57	60.3	38.8	0.735115	1.5549	153.8	58.4
U1456D-5R-1 12-20 cm	Yes	487.98	5.72	29.8	16.5	0.74227	1.8052	28.7	33.0
U1457C-41R-2 20-26 cm		571.50	5.77	47.1	24.9	0.745785	1.8956	140.1	51.2
U1457C-42R-1 80-88 cm		580.40	5.82	69.1	49.9	0.738038	1.3828	80.1	62.5
U1457C-43R-2 52-60 cm	Yes	591.21	5.87	103.5	58.4	0.738705	1.7721	168.9	123.9
U1456D-12R-1 30-36 cm		556.10	7.00	94.6	64.5	0.718672	1.4673	153.8	98.5
U1456D-13R-1 30-38 cm	Yes	565.80	7.07	99.1	61.3	0.726906	1.6166	168.9	109.4
U1456D-15R-1 55-61 cm		585.45	7.27	43.3	25.8	0.738324	1.6743	31.5	45.4
U1456D-19R-2 20-26 cm		625.40	7.66	64.0	41.0	0.754242	1.5614	168.9	62.9
U1456D-20R-1 95-103 cm		634.35	7.72	32.3	15.7	0.759177	2.0601	96.5	36.1
U1457C-51R-4 80-88 cm		672.20	7.77	63.0	41.1	0.743426	1.5341	168.9	61.7
U1456D-22R-1 73-83 cm	Yes	653.50	7.84	27.2	14.5	0.764352	1.8784	80.1	29.4
U1457C-61R-1 8-18 cm		763.98	7.98	75.3	51.2	0.75421	1.4717	185.4	71.3
U1456D-26R-2 37-43 cm		693.45	8.08	71.8	48.8	0.738158	1.4704	66.4	69.5
U1456D-27R-2 100-106 cm		703.80	8.15	23.4	14.3	0.748952	1.6411	19.8	26.2
U1456D-28R-1 40-46 cm		711.40	8.20	23.5	10.1	0.777716	2.3172	80.1	28.1
U1456D-29R-2 24-34 cm	Yes	722.60	8.27	25.5	12.6	0.756036	2.0301	80.1	28.5
U1456E-19R-3 10-20 cm	Yes	1102.53	15.57	53.1	37.1	0.71942	1.4311	80.1	48.8

Table 2

Variance	C.V.	Skewness	Kurtosis	Sample Name	Folk and Ward Statistics					
					d10 (μm)	d50 (μm)	d90 (μm)	Specific Surf. Area:	Mean (ϕ)	Median (ϕ)
752.3	85.9	1.014	0.626	U1456A-11H-6, 60-69 cm	2.3	26.1	71.6	3314.62	5.755	5.257
12155.6	88.1	1.492	2.960	U1456A-26F-3, 50-58 cm	11.2	101.6	264.4	1148.7	3.673	3.299
10316.3	73.9	1.451	3.090	U1456A-51F-3 100-110 cm	31.6	117.8	265.2	560.325	3.247	3.086
10158.4	70.9	1.594	3.970	U1456A-61F-3 40-50 cm	37.8	122.4	266.0	499.418	3.132	3.030
214.5	108.5	2.054	4.920	U1456A-70F-2 10-16 cm	1.5	8.4	32.2	5718.56	7.031	6.896
2356.9	104.5	1.199	0.510	U1457C-31R-1 94-100 cm	2.5	27.9	127.0	3243.92	5.459	5.161
11334.6	80.6	1.354	2.435	U1457C-33R-3 10-17 cm	18.9	110.9	269.1	879.111	3.427	3.172
3412.7	96.9	1.081	0.200	U1456C-45X-3 45-51 cm	4.1	38.8	156.0	2286.99	4.912	4.688
1086.1	110.4	1.424	1.197	U1456D-5R-1 12-20 cm	1.9	16.5	84.8	4154.76	6.083	5.918
2623.7	108.7	1.190	0.350	U1457C-41R-2 20-26 cm	2.3	24.9	133.7	3437.36	5.516	5.330
3910.5	90.5	1.051	0.361	U1457C-42R-1 80-88 cm	5.6	49.9	166.8	1840	4.612	4.323
15344.9	119.7	2.094	5.028	U1457C-43R-2 52-60 cm	4.6	58.4	251.5	2034.07	4.427	4.097
9701.4	104.1	2.191	6.827	U1456D-12R-1 30-36 cm	8.2	64.5	209.2	1526.84	4.175	3.955
11958.0	110.3	2.070	5.421	U1456D-13R-1 30-38 cm	6.3	61.3	231.9	1725.3	4.264	4.027
2060.4	104.9	1.328	0.870	U1456D-15R-1 55-61 cm	2.7	25.8	120.0	3070.27	5.465	5.274
3953.2	98.3	0.958	-0.153	U1456D-19R-2 20-26 cm	2.8	41.0	165.8	2801.54	5.016	4.609
1300.5	111.8	1.254	0.523	U1456D-20R-1 95-103 cm	1.7	15.7	93.1	4406.46	6.096	5.996
3804.3	97.9	1.126	0.396	U1457C-51R-4 80-88 cm	3.2	41.1	163.4	2543.49	4.939	4.606
864.1	108.1	1.190	0.417	U1456D-22R-1 73-83 cm	1.6	14.5	75.9	4874.98	6.305	6.111
5078.1	94.6	0.939	-0.149	U1457C-61R-1 8-18 cm	3.7	51.2	190.0	2289.61	4.671	4.288
4831.0	96.9	1.197	0.749	U1456D-26R-2 37-43 cm	4.0	48.8	181.5	2218.96	4.707	4.357
686.7	111.8	1.799	3.048	U1456D-27R-2 100-106 cm	1.8	14.3	61.9	4453.23	6.372	6.129
791.7	119.7	1.471	1.198	U1456D-28R-1 40-46 cm	1.5	10.1	71.4	5327.17	6.573	6.623
811.4	111.8	1.311	0.768	U1456D-29R-2 24-34 cm	1.6	12.6	72.9	5016.22	6.412	6.316
2379.7	91.8	1.036	0.251	U1456E-19R-3 10-20 cm	5.2	37.1	129.4	2043.54	4.985	4.751

Table 2

Deviation	Skewness	Kurtosis	Channel Diameter (Lower) (μm)					Sample Name	Channel Diameter (Lower) (μm)		
			0.38	0.41	0.45	0.50	0.54		0.60	0.66	0.72
1.871	0.402	0.987	0.036	0.064	0.096	0.142	0.189	U1456A-11H-6, 60-69 cm	0.238	0.291	0.350
1.777	0.387	1.181	0.012	0.021	0.031	0.046	0.059	U1456A-26F-3, 50-58 cm	0.073	0.086	0.101
1.228	0.251	1.101	0.005	0.009	0.013	0.019	0.024	U1456A-51F-3 100-110 cm	0.029	0.033	0.038
1.129	0.218	1.242	0.004	0.007	0.011	0.015	0.020	U1456A-61F-3 40-50 cm	0.023	0.027	0.031
1.705	0.115	0.911	0.065	0.116	0.174	0.259	0.345	U1456A-70F-2 10-16 cm	0.434	0.529	0.635
2.168	0.235	0.857	0.036	0.063	0.095	0.141	0.188	U1457C-31R-1 94-100 cm	0.236	0.288	0.345
1.541	0.345	1.208	0.009	0.016	0.024	0.035	0.045	U1457C-33R-3 10-17 cm	0.054	0.064	0.074
2.022	0.238	0.956	0.024	0.043	0.065	0.095	0.125	U1456C-45X-3 45-51 cm	0.155	0.187	0.221
2.076	0.143	0.883	0.048	0.085	0.127	0.189	0.252	U1456D-5R-1 12-20 cm	0.317	0.387	0.464
2.239	0.171	0.830	0.038	0.067	0.101	0.151	0.202	U1457C-41R-2 20-26 cm	0.256	0.313	0.377
1.894	0.295	1.013	0.018	0.032	0.048	0.071	0.092	U1457C-42R-1 80-88 cm	0.115	0.138	0.163
2.248	0.252	1.014	0.022	0.039	0.059	0.087	0.115	U1457C-43R-2 52-60 cm	0.144	0.175	0.208
1.849	0.269	1.114	0.017	0.031	0.046	0.067	0.087	U1456D-12R-1 30-36 cm	0.108	0.129	0.151
2.032	0.249	1.094	0.019	0.034	0.051	0.075	0.099	U1456D-13R-1 30-38 cm	0.123	0.148	0.174
2.061	0.191	0.976	0.034	0.061	0.091	0.135	0.180	U1456D-15R-1 55-61 cm	0.225	0.274	0.328
2.249	0.309	0.871	0.029	0.052	0.078	0.118	0.159	U1456D-19R-2 20-26 cm	0.203	0.251	0.304
2.200	0.103	0.792	0.046	0.082	0.125	0.189	0.256	U1456D-20R-1 95-103 cm	0.330	0.411	0.502
2.136	0.289	1.003	0.028	0.049	0.074	0.111	0.148	U1457C-51R-4 80-88 cm	0.187	0.229	0.275
2.145	0.147	0.752	0.051	0.091	0.138	0.209	0.284	U1456D-22R-1 73-83 cm	0.367	0.459	0.562
2.163	0.325	0.958	0.023	0.041	0.062	0.092	0.124	U1457C-61R-1 8-18 cm	0.157	0.194	0.234
2.092	0.307	1.052	0.024	0.043	0.065	0.096	0.127	U1456D-26R-2 37-43 cm	0.159	0.193	0.230
1.940	0.177	0.956	0.049	0.087	0.131	0.196	0.262	U1456D-27R-2 100-106 cm	0.332	0.408	0.493
2.126	-0.006	0.778	0.051	0.091	0.138	0.211	0.290	U1456D-28R-1 40-46 cm	0.379	0.478	0.591
2.126	0.089	0.775	0.055	0.098	0.149	0.224	0.303	U1456D-29R-2 24-34 cm	0.389	0.483	0.588
1.820	0.240	0.881	0.021	0.037	0.055	0.080	0.104	U1456E-19R-3 10-20 cm	0.126	0.148	0.171

Table 2

0.79	0.87	0.95	1.05	1.15	1.26	1.38	1.52	1.67	1.83	2.01	2.21	2.42	2.66
0.414	0.481	0.550	0.619	0.688	0.754	0.814	0.867	0.911	0.946	0.972	0.989	0.999	1.004
0.117	0.132	0.147	0.162	0.177	0.192	0.205	0.218	0.231	0.243	0.255	0.267	0.279	0.293
0.042	0.047	0.051	0.054	0.058	0.062	0.065	0.068	0.071	0.075	0.078	0.082	0.086	0.091
0.035	0.039	0.042	0.045	0.049	0.052	0.055	0.058	0.062	0.065	0.069	0.073	0.078	0.083
0.748	0.864	0.981	1.097	1.210	1.315	1.410	1.493	1.567	1.631	1.690	1.746	1.803	1.869
0.406	0.468	0.531	0.593	0.653	0.708	0.758	0.802	0.840	0.873	0.902	0.931	0.960	0.993
0.085	0.095	0.105	0.115	0.124	0.134	0.142	0.151	0.159	0.167	0.175	0.183	0.191	0.200
0.257	0.293	0.329	0.365	0.399	0.432	0.462	0.489	0.514	0.537	0.559	0.581	0.605	0.632
0.546	0.630	0.714	0.795	0.873	0.945	1.007	1.059	1.102	1.137	1.167	1.193	1.220	1.252
0.445	0.515	0.585	0.653	0.718	0.777	0.828	0.870	0.904	0.931	0.953	0.972	0.992	1.017
0.189	0.215	0.242	0.269	0.295	0.320	0.344	0.366	0.388	0.408	0.428	0.449	0.471	0.496
0.244	0.281	0.317	0.353	0.387	0.418	0.446	0.470	0.490	0.507	0.521	0.534	0.547	0.562
0.174	0.197	0.219	0.240	0.261	0.279	0.295	0.309	0.320	0.329	0.337	0.344	0.350	0.358
0.202	0.230	0.258	0.285	0.311	0.334	0.355	0.372	0.386	0.399	0.409	0.418	0.427	0.437
0.384	0.442	0.500	0.556	0.609	0.658	0.700	0.735	0.763	0.786	0.804	0.818	0.833	0.849
0.362	0.423	0.484	0.544	0.601	0.653	0.698	0.735	0.763	0.784	0.800	0.811	0.820	0.831
0.601	0.704	0.808	0.910	1.006	1.093	1.165	1.223	1.266	1.294	1.312	1.324	1.333	1.347
0.324	0.375	0.426	0.476	0.524	0.568	0.606	0.637	0.662	0.681	0.695	0.705	0.713	0.721
0.676	0.795	0.916	1.036	1.151	1.256	1.346	1.420	1.477	1.518	1.546	1.566	1.580	1.596
0.278	0.324	0.371	0.417	0.463	0.505	0.542	0.574	0.600	0.622	0.638	0.651	0.662	0.673
0.270	0.310	0.350	0.390	0.428	0.464	0.496	0.523	0.547	0.567	0.584	0.599	0.614	0.630
0.584	0.678	0.773	0.866	0.956	1.038	1.109	1.169	1.216	1.253	1.280	1.300	1.318	1.337
0.715	0.848	0.985	1.121	1.253	1.374	1.481	1.570	1.641	1.695	1.736	1.766	1.793	1.821
0.702	0.821	0.941	1.058	1.169	1.269	1.354	1.423	1.474	1.511	1.536	1.553	1.568	1.588
0.194	0.216	0.237	0.257	0.276	0.294	0.311	0.328	0.346	0.366	0.390	0.418	0.454	0.499

Table 2

Channel Diameter (Lower) (μm)

Sample Name	2.92	3.21	3.52	3.86	4.24	4.66	5.11	5.61	6.16	6.76	7.42	8.15
U1456A-11H-6, 60-69 cm	1.005	1.007	1.011	1.018	1.031	1.050	1.076	1.110	1.150	1.197	1.254	1.319
U1456A-26F-3, 50-58 cm	0.308	0.324	0.342	0.362	0.384	0.407	0.432	0.457	0.484	0.512	0.540	0.570
U1456A-51F-3 100-110 cm	0.096	0.102	0.108	0.116	0.124	0.133	0.143	0.153	0.165	0.177	0.190	0.205
U1456A-61F-3 40-50 cm	0.088	0.094	0.101	0.108	0.116	0.124	0.133	0.143	0.153	0.164	0.175	0.188
U1456A-70F-2 10-16 cm	1.945	2.033	2.134	2.244	2.361	2.479	2.594	2.698	2.791	2.872	2.940	2.994
U1457C-31R-1 94-100 cm	1.032	1.078	1.130	1.186	1.246	1.306	1.363	1.415	1.459	1.498	1.531	1.557
U1457C-33R-3 10-17 cm	0.209	0.220	0.231	0.244	0.257	0.272	0.288	0.305	0.323	0.342	0.361	0.382
U1456C-45X-3 45-51 cm	0.664	0.701	0.744	0.792	0.844	0.901	0.961	1.022	1.084	1.145	1.207	1.269
U1456D-5R-1 12-20 cm	1.292	1.342	1.401	1.470	1.546	1.627	1.708	1.787	1.861	1.930	1.995	2.052
U1457C-41R-2 20-26 cm	1.050	1.091	1.142	1.202	1.269	1.340	1.412	1.481	1.546	1.607	1.663	1.713
U1457C-42R-1 80-88 cm	0.524	0.557	0.593	0.634	0.679	0.727	0.778	0.831	0.886	0.941	0.998	1.056
U1457C-43R-2 52-60 cm	0.581	0.604	0.631	0.662	0.697	0.736	0.776	0.817	0.858	0.899	0.941	0.983
U1456D-12R-1 30-36 cm	0.367	0.379	0.394	0.413	0.435	0.462	0.493	0.528	0.566	0.608	0.655	0.706
U1456D-13R-1 30-38 cm	0.450	0.467	0.486	0.510	0.539	0.571	0.606	0.644	0.685	0.728	0.773	0.821
U1456D-15R-1 55-61 cm	0.871	0.899	0.935	0.980	1.032	1.092	1.158	1.228	1.303	1.381	1.464	1.551
U1456D-19R-2 20-26 cm	0.845	0.865	0.890	0.920	0.954	0.990	1.027	1.061	1.094	1.124	1.154	1.183
U1456D-20R-1 95-103 cm	1.370	1.404	1.452	1.512	1.582	1.657	1.733	1.806	1.872	1.933	1.988	2.032
U1457C-51R-4 80-88 cm	0.732	0.747	0.765	0.788	0.815	0.846	0.877	0.910	0.943	0.976	1.010	1.046
U1456D-22R-1 73-83 cm	1.618	1.647	1.682	1.723	1.765	1.803	1.832	1.848	1.850	1.841	1.823	1.798
U1457C-61R-1 8-18 cm	0.686	0.701	0.720	0.742	0.768	0.797	0.828	0.860	0.893	0.927	0.962	1.000
U1456D-26R-2 37-43 cm	0.649	0.670	0.695	0.723	0.754	0.786	0.819	0.852	0.883	0.914	0.944	0.973
U1456D-27R-2 100-106 cm	1.362	1.395	1.437	1.489	1.552	1.623	1.701	1.784	1.872	1.966	2.066	2.173
U1456D-28R-1 40-46 cm	1.856	1.899	1.951	2.008	2.068	2.124	2.170	2.201	2.217	2.220	2.212	2.190
U1456D-29R-2 24-34 cm	1.617	1.657	1.707	1.767	1.831	1.895	1.952	1.996	2.028	2.047	2.056	2.052
U1456E-19R-3 10-20 cm	0.554	0.621	0.698	0.787	0.885	0.992	1.105	1.220	1.336	1.450	1.559	1.660

Table 2

Channel Diameter (Lower) (μm)													
8.94	9.82	10.78	11.83	12.99	Sample Name	14.26	15.65	17.18	18.86	20.71	22.73	24.95	
1.393	1.475	1.568	1.677	1.806	U1456A-11H-6, 60-69 cm	1.961	2.141	2.341	2.557	2.789	3.037	3.299	
0.602	0.635	0.671	0.712	0.758	U1456A-26F-3, 50-58 cm	0.810	0.870	0.937	1.010	1.090	1.176	1.268	
0.221	0.239	0.261	0.286	0.317	U1456A-51F-3 100-110 cm	0.355	0.404	0.466	0.545	0.644	0.766	0.914	
0.201	0.216	0.234	0.253	0.277	U1456A-61F-3 40-50 cm	0.305	0.339	0.381	0.431	0.492	0.564	0.649	
3.026	3.034	3.024	3.008	3.000	U1456A-70F-2 10-16 cm	2.998	2.987	2.939	2.840	2.691	2.511	2.322	
1.576	1.586	1.594	1.612	1.650	U1457C-31R-1 94-100 cm	1.713	1.795	1.886	1.978	2.071	2.168	2.272	
0.405	0.430	0.458	0.489	0.527	U1457C-33R-3 10-17 cm	0.572	0.627	0.695	0.778	0.876	0.993	1.127	
1.330	1.390	1.450	1.515	1.589	U1456C-45X-3 45-51 cm	1.678	1.779	1.891	2.009	2.133	2.263	2.398	
2.100	2.136	2.165	2.195	2.236	U1456D-5R-1 12-20 cm	2.290	2.354	2.417	2.470	2.510	2.538	2.555	
1.754	1.783	1.805	1.828	1.861	U1457C-41R-2 20-26 cm	1.904	1.949	1.984	2.003	2.011	2.021	2.045	
1.115	1.175	1.236	1.302	1.376	U1457C-42R-1 80-88 cm	1.460	1.553	1.655	1.763	1.879	2.002	2.133	
1.026	1.069	1.114	1.166	1.229	U1457C-43R-2 52-60 cm	1.304	1.389	1.479	1.567	1.655	1.743	1.834	
0.763	0.826	0.896	0.974	1.064	U1456D-12R-1 30-36 cm	1.166	1.279	1.405	1.541	1.688	1.845	2.009	
0.870	0.920	0.973	1.030	1.094	U1456D-13R-1 30-38 cm	1.167	1.250	1.343	1.448	1.571	1.716	1.885	
1.642	1.735	1.833	1.940	2.061	U1456D-15R-1 55-61 cm	2.193	2.331	2.466	2.591	2.703	2.800	2.878	
1.211	1.239	1.269	1.310	1.368	U1456D-19R-2 20-26 cm	1.444	1.531	1.620	1.702	1.777	1.849	1.925	
2.061	2.071	2.066	2.053	2.039	U1456D-20R-1 95-103 cm	2.026	2.008	1.980	1.944	1.912	1.899	1.916	
1.083	1.122	1.167	1.224	1.300	U1457C-51R-4 80-88 cm	1.400	1.522	1.662	1.815	1.980	2.154	2.331	
1.762	1.717	1.672	1.649	1.666	U1456D-22R-1 73-83 cm	1.731	1.828	1.925	1.994	2.027	2.048	2.093	
1.038	1.077	1.120	1.171	1.233	U1457C-61R-1 8-18 cm	1.308	1.395	1.487	1.581	1.678	1.779	1.887	
1.002	1.031	1.063	1.103	1.157	U1456D-26R-2 37-43 cm	1.230	1.322	1.432	1.556	1.696	1.852	2.026	
2.286	2.404	2.527	2.660	2.806	U1456D-27R-2 100-106 cm	2.958	3.097	3.196	3.228	3.186	3.077	2.923	
2.150	2.091	2.023	1.967	1.940	U1456D-28R-1 40-46 cm	1.946	1.966	1.968	1.931	1.858	1.782	1.741	
2.030	1.989	1.939	1.898	1.885	U1456D-29R-2 24-34 cm	1.907	1.949	1.986	1.996	1.983	1.971	1.995	
1.750	1.824	1.881	1.920	1.947	U1456E-19R-3 10-20 cm	1.967	1.984	2.004	2.033	2.079	2.149	2.242	

Table 2

Channel Diameter (Lower) (μm)												
27.39	30.07	33.01	36.24	39.78	43.67	47.94	52.62	57.77	63.41	Sample Name	69.61	76.42
3.566	3.811	4.006	4.121	4.137	4.051	3.873	3.625	3.334	3.019	U1456A-11H-6, 60-69 cm	2.690	2.345
1.363	1.457	1.550	1.642	1.737	1.844	1.972	2.128	2.311	2.517	U1456A-26F-3, 50-58 cm	2.736	2.960
1.087	1.282	1.494	1.713	1.933	2.146	2.350	2.548	2.743	2.946	U1456A-51F-3 100-110 cm	3.166	3.413
0.748	0.864	0.999	1.159	1.350	1.579	1.851	2.171	2.537	2.942	U1456A-61F-3 40-50 cm	3.376	3.823
2.130	1.928	1.706	1.466	1.227	1.019	0.868	0.774	0.712	0.647	U1456A-70F-2 10-16 cm	0.539	0.350
2.375	2.461	2.513	2.525	2.507	2.484	2.479	2.502	2.538	2.561	U1457C-31R-1 94-100 cm	2.536	2.449
1.275	1.433	1.593	1.751	1.902	2.048	2.192	2.341	2.500	2.672	U1457C-33R-3 10-17 cm	2.860	3.066
2.528	2.641	2.719	2.752	2.743	2.708	2.669	2.647	2.648	2.664	U1456C-45X-3 45-51 cm	2.674	2.653
2.556	2.534	2.479	2.392	2.282	2.162	2.048	1.955	1.900	1.902	U1456D-5R-1 12-20 cm	1.967	2.089
2.084	2.124	2.148	2.143	2.118	2.094	2.094	2.133	2.197	2.258	U1457C-41R-2 20-26 cm	2.281	2.245
2.268	2.400	2.521	2.628	2.721	2.807	2.895	2.990	3.090	3.183	U1457C-42R-1 80-88 cm	3.254	3.285
1.926	2.013	2.086	2.139	2.176	2.203	2.233	2.273	2.326	2.387	U1457C-43R-2 52-60 cm	2.444	2.487
2.172	2.324	2.453	2.555	2.633	2.698	2.764	2.841	2.931	3.028	U1456D-12R-1 30-36 cm	3.114	3.175
2.070	2.256	2.424	2.557	2.648	2.702	2.734	2.758	2.782	2.806	U1456D-13R-1 30-38 cm	2.821	2.816
2.925	2.927	2.874	2.770	2.635	2.499	2.388	2.317	2.273	2.237	U1456D-15R-1 55-61 cm	2.180	2.093
2.008	2.089	2.157	2.204	2.229	2.246	2.275	2.332	2.423	2.539	U1456D-19R-2 20-26 cm	2.654	2.732
1.960	2.017	2.067	2.095	2.099	2.083	2.060	2.045	2.061	2.132	U1456D-20R-1 95-103 cm	2.270	2.473
2.499	2.639	2.735	2.776	2.770	2.736	2.702	2.691	2.714	2.763	U1457C-51R-4 80-88 cm	2.815	2.839
2.184	2.318	2.461	2.562	2.584	2.522	2.419	2.343	2.349	2.459	U1456D-22R-1 73-83 cm	2.628	2.733
2.002	2.115	2.216	2.299	2.361	2.411	2.458	2.518	2.596	2.687	U1457C-61R-1 8-18 cm	2.779	2.850
2.212	2.399	2.570	2.711	2.820	2.899	2.959	3.009	3.053	3.082	U1456D-26R-2 37-43 cm	3.082	3.039
2.748	2.568	2.390	2.217	2.049	1.892	1.753	1.642	1.567	1.527	U1456D-27R-2 100-106 cm	1.510	1.490
1.755	1.820	1.903	1.960	1.964	1.913	1.849	1.825	1.882	2.028	U1456D-28R-1 40-46 cm	2.216	2.335
2.069	2.184	2.304	2.380	2.382	2.313	2.215	2.152	2.165	2.267	U1456D-29R-2 24-34 cm	2.413	2.489
2.351	2.459	2.553	2.624	2.679	2.733	2.803	2.900	3.019	3.139	U1456E-19R-3 10-20 cm	3.230	3.262

Table 2

83.89	92.09	101.1	111.0	121.8	133.7	146.8	161.2	176.9	194.2	213.2	234.1	256.9	282.1	309.6
1.968	1.551	1.108	0.677	0.318	0.099	0.016	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.183	3.407	3.637	3.882	4.133	4.361	4.511	4.514	4.321	3.932	3.401	2.818	2.272	1.824	1.485
3.691	4.000	4.330	4.662	4.963	5.189	5.291	5.224	4.965	4.525	3.946	3.296	2.651	2.071	1.592
4.269	4.694	5.079	5.401	5.632	5.742	5.700	5.483	5.092	4.552	3.912	3.240	2.599	2.037	1.579
0.157	0.034	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.338	2.267	2.311	2.484	2.689	2.747	2.472	1.832	1.001	0.355	0.062	0.004	0.000	0.000	0.000
3.290	3.534	3.798	4.081	4.368	4.623	4.796	4.827	4.671	4.321	3.812	3.218	2.619	2.084	1.648
2.590	2.504	2.457	2.514	2.713	2.997	3.196	3.106	2.616	1.815	0.938	0.321	0.055	0.004	0.000
2.228	2.289	2.173	1.804	1.143	0.497	0.104	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.181	2.160	2.263	2.521	2.844	3.028	2.848	2.226	1.289	0.494	0.093	0.007	0.000	0.000	0.000
3.265	3.197	3.103	3.014	2.968	2.970	2.987	2.933	2.705	2.256	1.632	0.962	0.420	0.116	0.016
2.514	2.535	2.568	2.634	2.743	2.874	2.976	2.980	2.835	2.534	2.131	1.711	1.360	1.124	1.007
3.203	3.205	3.203	3.223	3.276	3.341	3.367	3.282	3.033	2.618	2.098	1.571	1.133	0.832	0.665
2.787	2.746	2.719	2.736	2.812	2.929	3.038	3.066	2.952	2.683	2.297	1.870	1.478	1.173	0.964
2.014	1.998	2.107	2.329	2.542	2.559	2.210	1.456	0.661	0.157	0.017	0.000	0.000	0.000	0.000
2.750	2.707	2.655	2.679	2.844	3.148	3.450	3.517	3.159	2.378	1.347	0.517	0.099	0.008	0.000
2.695	2.819	2.718	2.294	1.529	0.724	0.193	0.024	0.001	0.000	0.000	0.000	0.000	0.000	0.000
2.807	2.713	2.582	2.484	2.484	2.611	2.802	2.902	2.743	2.243	1.500	0.742	0.238	0.038	0.002
2.635	2.224	1.427	0.626	0.132	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.877	2.847	2.766	2.673	2.656	2.781	3.072	3.425	3.617	3.426	2.768	1.790	0.841	0.245	0.036
2.953	2.838	2.719	2.629	2.586	2.596	2.638	2.672	2.638	2.469	2.128	1.633	1.068	0.537	0.185
1.429	1.288	1.048	0.729	0.387	0.138	0.025	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.262	1.908	1.221	0.533	0.112	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.374	1.980	1.257	0.545	0.114	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3.221	3.137	3.050	2.993	2.938	2.787	2.442	1.869	1.154	0.519	0.142	0.019	0.001	0.000	0.000

Table 2

Channel Diameter (Lower) (μm)

Sample Name	339.9	373.1	409.6	449.7	493.6	541.9	594.9	653.0	716.8	786.9	863.9	948.3
U1456A-11H-6, 60-69 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456A-26F-3, 50-58 cm	1.238	1.048	0.880	0.712	0.537	0.362	0.203	0.085	0.022	0.003	0.000	0.000
U1456A-51F-3 100-110 cm	1.225	0.958	0.761	0.603	0.457	0.311	0.166	0.061	0.011	0.001	0.000	0.000
U1456A-61F-3 40-50 cm	1.226	0.963	0.766	0.609	0.469	0.336	0.209	0.100	0.032	0.005	0.000	0.000
U1456A-70F-2 10-16 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-31R-1 94-100 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-33R-3 10-17 cm	1.314	1.063	0.860	0.676	0.492	0.310	0.150	0.048	0.008	0.000	0.000	0.000
U1456C-45X-3 45-51 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-5R-1 12-20 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-41R-2 20-26 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-42R-1 80-88 cm	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-43R-2 52-60 cm	0.975	0.981	0.974	0.916	0.790	0.619	0.444	0.261	0.113	0.024	0.002	0.000
U1456D-12R-1 30-36 cm	0.593	0.568	0.542	0.484	0.383	0.269	0.172	0.095	0.040	0.009	0.001	0.000
U1456D-13R-1 30-38 cm	0.834	0.754	0.692	0.621	0.525	0.403	0.266	0.134	0.045	0.008	0.001	0.000
U1456D-15R-1 55-61 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-19R-2 20-26 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-20R-1 95-103 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-51R-4 80-88 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-22R-1 73-83 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-61R-1 8-18 cm	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-26R-2 37-43 cm	0.033	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-27R-2 100-106 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-28R-1 40-46 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-29R-2 24-34 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456E-19R-3 10-20 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 2

1041.0	1142.8	% <30 μm
0.000	0.000	55.2
0.000	0.000	20.4
0.000	0.000	9.3
0.000	0.000	7.6
0.000	0.000	88.6
0.000	0.000	51.9
0.000	0.000	15.0
0.000	0.000	42.7
0.000	0.000	66.0
0.000	0.000	54.2
0.000	0.000	35.7
0.000	0.000	34.6
0.000	0.000	28.3
0.000	0.000	30.2
0.000	0.000	54.8
0.000	0.000	42.9
0.000	0.000	63.6
0.000	0.000	40.9
0.000	0.000	65.6
0.000	0.000	36.9
0.000	0.000	36.1
0.000	0.000	74.3
0.000	0.000	72.3
0.000	0.000	68.5
0.000	0.000	44.3

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456A-70F-2, 10-16 cm	10.968	1371	0.615	0.089	0.004	0.0130	0.0004	0.48513	86.4	3.5	83.1	2.3
U1456A-70F-2, 10-16 cm	8.234	1240	2.830	10.030	0.160	0.4491	0.0055	0.75103	2436	15	2391	24
U1456A-70F-2, 10-16 cm	24.333	1097	2.850	6.065	0.053	0.3315	0.0022	0.69287	1984	7.6	1845	11
U1456A-70F-2, 10-16 cm	27.674	369	1.296	5.047	0.064	0.3223	0.0035	0.83832	1825	11	1800	17
U1456A-70F-2, 10-16 cm	27.675	491.8	3.632	0.559	0.008	0.0721	0.0006	0.30503	450.1	5.5	448.6	3.5
U1456A-70F-2, 10-16 cm	13.701	570.1	1.606	1.435	0.023	0.1493	0.0013	0.59779	904.3	8.9	896.7	7.3
U1456A-70F-2, 10-16 cm	27.674	141.1	0.388	0.687	0.017	0.0854	0.0008	0.06321	529	10	527.9	5
U1456A-70F-2, 10-16 cm	8.841	1256	13.800	0.783	0.015	0.0949	0.0020	0.75361	587	8.7	584	12
U1456A-70F-2, 10-16 cm	15.795	57	2.000	1.476	0.050	0.1550	0.0025	0.20042	916	21	929	14
U1456A-70F-2, 10-16 cm	20.992	570	0.795	1.190	0.019	0.1271	0.0012	0.61310	794.9	8.8	771.4	6.7
U1456A-70F-2, 10-16 cm	14.309	235	1.463	0.706	0.017	0.0885	0.0011	0.35931	541	10	546.5	6.8
U1456A-70F-2, 10-16 cm	15.828	1219	1.433	0.098	0.003	0.0147	0.0003	0.31254	94.8	2.5	94.2	1.7
U1456A-70F-2, 10-16 cm	19.777	2431	35.500	2.555	0.031	0.1702	0.0018	0.81372	1287	8.9	1013	10
U1456A-70F-2, 10-16 cm	21.903	19.83	-7.800	0.135	0.026	0.0045	0.0006	0.30015	121	23	28.9	3.6
U1456A-70F-2, 10-16 cm	14.006	90	1.122	0.257	0.024	0.0129	0.0006	0.01731	229	20	82.3	3.6
U1456A-70F-2, 10-16 cm	27.674	460	1.708	0.107	0.004	0.0160	0.0002	0.04384	103	3.5	102.5	1.3
U1456A-70F-2, 10-16 cm	9.145	150.9	0.591	0.162	0.012	0.0238	0.0009	0.15317	152	11	151.7	5.4
U1456A-70F-2, 10-16 cm	22.206	190.2	1.088	4.957	0.068	0.3174	0.0034	0.70295	1810	12	1776	17
U1456A-70F-2, 10-16 cm	26.155	235.6	55.100	18.850	0.180	0.5687	0.0053	0.62521	3035	9.1	2901	22
U1456A-70F-2, 10-16 cm	27.674	414	0.989	0.109	0.004	0.0163	0.0002	0.03393	105	3.6	104	1.3
U1456A-70F-2, 10-16 cm	20.992	439.2	0.872	1.708	0.020	0.1670	0.0016	0.45167	1011	7.6	995.5	8.6
U1456A-70F-2, 10-16 cm	27.674	354	1.318	0.114	0.004	0.0170	0.0002	0.19911	109.2	3.6	108.5	1.4
U1456A-70F-2, 10-16 cm	22.206	182	1.178	0.744	0.019	0.0920	0.0013	0.36591	563	11	567	7.9
U1456A-70F-2, 10-16 cm	7.931	55.6	-5.000	0.200	0.024	0.0214	0.0010	0.04703	183	20	136.8	6.6
U1456A-70F-2, 10-16 cm	8.841	666	3.080	5.090	0.220	0.2327	0.0092	0.96407	1835	36	1346	49
U1456A-70F-2, 10-16 cm	26.459	128.9	2.640	0.888	0.026	0.0919	0.0015	0.33295	643	15	566.8	8.9
U1456A-70F-2, 10-16 cm	2.160	787	7.160	1.103	0.066	0.1191	0.0037	0.49482	753	32	726	21
U1456A-70F-2, 10-16 cm	24.940	3370	15.580	2.309	0.025	0.1611	0.0015	0.85092	1214	7.6	962.7	8.1
U1456A-70F-2, 10-16 cm	9.146	226.7	1.698	4.900	0.110	0.2811	0.0054	0.60898	1801	19	1596	27
U1456A-70F-2, 10-16 cm	12.790	56.4	0.704	0.352	0.023	0.0486	0.0015	0.09230	304	17	305.7	9
U1456A-70F-2, 10-16 cm	15.524	1578	2.060	2.623	0.048	0.2015	0.0030	0.88654	1305	14	1183	16
U1456A-70F-2, 10-16 cm	17.954	1531	3.230	2.817	0.050	0.1632	0.0019	0.80048	1358	14	974	11
U1456A-70F-2, 10-16 cm	19.169	671	0.860	0.069	0.003	0.0097	0.0002	0.14198	67.5	3.2	62.5	1.1
U1456A-70F-2, 10-16 cm	7.020	1219	5.020	0.547	0.012	0.0683	0.0013	0.44241	442.5	7.8	425.8	7.6
U1456A-70F-2, 10-16 cm	3.038	171	1.610	0.112	0.027	0.0154	0.0011	0.06240	107	25	98.2	7.3
U1456A-70F-2, 10-16 cm	14.309	196.6	1.453	0.915	0.024	0.1034	0.0016	0.39042	658	13	634.2	9.6
U1456A-70F-2, 10-16 cm	27.674	653	1.050	0.049	0.003	0.0064	0.0001	0.14859	48.3	2.5	41.02	0.73
U1456A-70F-2, 10-16 cm	7.594	266	13.500	0.323	0.016	0.0369	0.0017	0.45426	283	12	234	11
U1456A-70F-2, 10-16 cm	10.664	501	4.560	1.236	0.041	0.0889	0.0022	0.79192	814	19	549	13
U1456A-70F-2, 10-16 cm	27.675	1005	2.880	1.499	0.015	0.1531	0.0014	0.66391	929.4	6.3	917.9	7.6
U1456A-70F-2, 10-16 cm	27.674	336.8	1.308	8.782	0.096	0.4191	0.0042	0.75652	2315	9.7	2258	18

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456A-70F-2, 10-16 cm	27.674	306	0.968	0.131	0.005	0.0192	0.0004	0.13944	124.8	4.2	122.7	2.3
U1456A-70F-2, 10-16 cm	11.272	1920	2.921	0.131	0.005	0.0195	0.0005	0.64528	124.7	4.4	124.3	3.1
U1456A-70F-2, 10-16 cm	8.841	913	20.070	0.294	0.016	0.0335	0.0010	0.63080	261	13	212.6	6.5
U1456A-70F-2, 10-16 cm	7.931	347	1.420	5.760	0.150	0.2958	0.0067	0.70168	1938	24	1669	33
U1456A-70F-2, 10-16 cm	23.421	225.2	0.346	1.097	0.021	0.1169	0.0014	0.45003	750	10	712.7	7.9
U1456A-70F-2, 10-16 cm	23.725	493	2.990	1.264	0.021	0.1375	0.0018	0.61339	828.5	9.5	830	10
U1456A-70F-2, 10-16 cm	9.753	2970	3.487	0.567	0.011	0.0733	0.0015	0.77012	455.8	7.2	456.2	8.9
U1456A-70F-2, 10-16 cm	11.272	270	2.200	27.830	0.380	0.6436	0.0091	0.86088	3414	13	3201	36
U1456A-70F-2, 10-16 cm	10.056	2149	2.680	0.052	0.002	0.0077	0.0002	0.32953	51.4	2.1	49.29	0.93
U1456A-70F-2, 10-16 cm	25.549	481	0.785	1.637	0.020	0.1646	0.0017	0.62417	983.6	7.8	982.3	9.6
U1456A-70F-2, 10-16 cm	8.539	346	1.529	3.290	0.110	0.2226	0.0062	0.71339	1474	26	1295	33
U1456A-70F-2, 10-16 cm	18.258	248.4	1.459	1.504	0.035	0.1435	0.0024	0.71534	929	14	864	13
U1456A-70F-2, 10-16 cm	15.220	335	1.209	9.140	0.310	0.3897	0.0094	0.92528	2353	32	2119	43
U1456A-70F-2, 10-16 cm	18.865	126	0.988	14.510	0.190	0.5327	0.0068	0.70447	2782	13	2751	28
U1456A-70F-2, 10-16 cm	4.860	450	16.200	1.401	0.078	0.1388	0.0069	0.72968	886	33	837	39
U1456A-70F-2, 10-16 cm	21.904	552	1.457	3.340	0.080	0.2305	0.0042	0.82575	1491	19	1336	22
U1456A-70F-2, 10-16 cm	25.548	125.2	0.705	1.074	0.028	0.1229	0.0022	0.38809	738	14	747	12
U1456A-70F-2, 10-16 cm	10.057	381	5.750	4.234	0.084	0.2658	0.0048	0.70374	1679	16	1519	25
U1456A-70F-2, 10-16 cm	17.955	792	1.860	4.054	0.054	0.2818	0.0038	0.61180	1644	11	1600	19
U1456A-70F-2, 10-16 cm	17.043	547	3.510	4.213	0.067	0.2617	0.0036	0.65124	1675	13	1498	19
U1456A-70F-2, 10-16 cm	24.940	358	3.780	1.552	0.029	0.1563	0.0023	0.72432	949	12	936	13
U1456A-70F-2, 10-16 cm	27.674	156.2	2.232	0.770	0.019	0.0926	0.0013	0.38843	577	11	570.6	7.6
U1456A-70F-2, 10-16 cm	27.675	1070	5.160	0.604	0.011	0.0743	0.0010	0.49912	478.8	6.8	461.9	6.1
U1456A-70F-2, 10-16 cm	23.726	2060	4.710	0.018	0.001	0.0027	0.0001	0.57940	18.5	1	17.2	0.57
U1456A-70F-2, 10-16 cm	19.473	172.1	1.004	1.219	0.026	0.1325	0.0016	0.08938	807	12	801.8	8.8
U1456A-70F-2, 10-16 cm	27.675	279	1.629	1.275	0.019	0.1374	0.0014	0.44370	833.2	8.5	829.8	7.9
U1456A-70F-2, 10-16 cm	24.329	242.7	1.355	1.552	0.031	0.1575	0.0024	0.65466	949	12	942	14
U1456A-70F-2, 10-16 cm	29.499	955	0.575	5.690	0.170	0.2544	0.0076	0.85503	1923	27	1461	40
U1456A-70F-2, 10-16 cm	12.773	993	1.946	0.306	0.011	-0.0023	0.0001	0.64905	270.8	8.2	-14.72	0.37
U1456A-70F-2, 10-16 cm	22.504	1283	39.200	1.776	0.047	0.1719	0.0039	0.81476	1032	17	1022	21
U1456A-70F-2, 10-16 cm	23.114	1036	1.890	1.060	0.029	-0.0073	0.0005	0.01725	733	14	-47	3.2
U1456A-70F-2, 10-16 cm	27.674	552	1.201	0.023	0.001	0.0034	0.0001	0.04980	23.3	1.2	21.57	0.48
U1456A-70F-2, 10-16 cm	27.674	342	1.081	1.846	0.038	0.1746	0.0028	0.66613	1058	14	1037	15
U1456A-70F-2, 10-16 cm	3.193	670	1.324	0.058	0.008	0.0069	0.0004	0.28078	57.3	7.3	44.5	2.8
U1456A-70F-2, 10-16 cm	11.494	1720	0.933	0.018	0.001	0.0027	0.0001	0.42070	17.8	1.2	17.23	0.61
U1456A-70F-2, 10-16 cm	11.769	183	1.531	1.770	0.057	0.1680	0.0046	0.59560	1031	21	1000	25
U1456A-70F-2, 10-16 cm	13.377	109.8	3.920	0.917	0.035	0.1058	0.0025	0.67750	657	18	648	14
U1456A-70F-2, 10-16 cm	23.944	839	1.520	9.980	0.260	0.4370	0.0100	0.86163	2423	25	2330	47
U1456A-70F-2, 10-16 cm	27.674	74.1	0.542	0.693	0.026	0.0812	0.0018	0.48915	532	16	503	11
U1456A-70F-2, 10-16 cm	24.980	442	1.255	0.094	0.004	-0.0019	0.0009	0.02950	90.6	3.9	-12.4	5.7
U1456A-70F-2, 10-16 cm	12.548	405	1.518	0.093	0.007	0.0128	0.0006	0.49120	89.9	6.6	81.7	3.7

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456A-70F-2, 10-16 cm	25.395	165.4	1.513	0.088	0.005	0.0129	0.0003	0.10736	85.1	4.4	82.7	1.9
U1456A-70F-2, 10-16 cm	28.297	348	0.814	0.090	0.004	0.0137	0.0003	0.41472	87.4	3.5	87.5	2.1
U1456A-70F-2, 10-16 cm	19.178	150.8	0.404	3.112	0.074	0.2406	0.0050	0.56939	1431	18	1388	26
U1456A-70F-2, 10-16 cm	2.280	450	1.268	0.592	0.033	0.0749	0.0019	0.31529	472	21	465	12
U1456A-70F-2, 10-16 cm	9.024	665	1.010	1.488	0.069	0.1458	0.0031	0.40534	921	26	877	18
U1456A-70F-2, 10-16 cm	3.223	770	1.664	4.090	0.270	0.2610	0.0150	0.90647	1646	54	1491	78
U1456A-70F-2, 10-16 cm	27.674	280	1.142	1.878	0.031	0.1774	0.0027	0.62620	1071	11	1052	15
U1456A-70F-2, 10-16 cm	26.224	285	0.998	1.090	0.024	0.1183	0.0024	0.82728	746	12	720	14
U1456A-70F-2, 10-16 cm	27.939	362	25.800	0.065	0.004	0.0091	0.0003	0.49675	63.3	3.5	58.6	2.2
U1456A-70F-2, 10-16 cm	27.674	242	2.030	5.278	0.070	0.3232	0.0037	0.79974	1864	11	1805	18
U1456A-70F-2, 10-16 cm	14.620	169	1.007	1.510	0.040	0.1525	0.0030	0.55306	935	17	914	17
U1456A-70F-2, 10-16 cm	16.069	262	1.285	0.905	0.018	0.1001	0.0018	0.59386	655	10	615	11
U1456A-70F-2, 10-16 cm	15.862	833	1.330	1.530	0.057	0.1493	0.0042	0.71790	937	22	900	25
U1456A-70F-2, 10-16 cm	10.268	2019	0.707	0.023	0.001	0.0034	0.0001	0.28679	23.4	1.1	22.12	0.57
U1456A-70F-2, 10-16 cm	24.152	469	0.357	1.176	0.022	0.1291	0.0024	0.67633	788	10	782	14
U1456A-70F-2, 10-16 cm	23.530	330	1.012	0.675	0.013	0.0831	0.0011	0.61248	522.8	7.9	514.8	6.8
U1456A-70F-2, 10-16 cm	27.674	635	0.869	1.232	0.019	0.1343	0.0018	0.65741	813.6	8.7	812	10
U1456A-70F-2, 10-16 cm	11.511	211.5	1.075	1.589	0.045	0.1556	0.0026	0.58023	964	17	932	15
U1456A-70F-2, 10-16 cm	14.826	381	1.511	0.111	0.005	0.0164	0.0004	0.40281	107	4.4	104.7	2.8
U1456A-70F-2, 10-16 cm	27.674	4140	3.290	0.012	0.000	0.0018	0.0000	0.43234	12.24	0.42	11.69	0.24
U1456A-70F-2, 10-16 cm	12.547	164	1.890	1.490	0.069	0.1478	0.0030	0.66782	921	25	889	17
U1456A-70F-2, 10-16 cm	27.674	696	0.809	0.043	0.002	0.0068	0.0001	0.24416	43.1	1.6	43.76	0.79
U1456A-70F-2, 10-16 cm	27.261	165.5	1.200	1.188	0.025	0.1322	0.0022	0.74204	794	12	802	13
U1456A-70F-2, 10-16 cm	9.740	1150	1.644	1.158	0.028	0.1138	0.0025	0.80518	780	13	694	15
U1456A-70F-2, 10-16 cm	27.675	283	1.131	4.800	0.130	0.3115	0.0075	0.86508	1777	23	1744	37
U1456A-70F-2, 10-16 cm	2.901	1296	122.000	0.031	0.004	0.0044	0.0004	0.75855	30.9	3.5	28	2.4
U1456A-70F-2, 10-16 cm	26.017	689	1.624	0.055	0.002	0.0085	0.0002	0.36930	54.4	2	54.4	1
U1456A-70F-2, 10-16 cm	27.674	1616	10.110	0.598	0.011	0.0764	0.0013	0.73859	475.3	6.7	474.5	7.5
U1456A-70F-2, 10-16 cm	14.826	545	2.621	0.932	0.025	0.1084	0.0022	0.72601	667	13	663	13
U1456A-70F-2, 10-16 cm	16.691	769	9.120	2.902	0.090	0.2263	0.0066	0.85559	1376	23	1313	34
U1456A-70F-2, 10-16 cm	17.935	534	0.831	12.130	0.290	0.4690	0.0110	0.61356	2609	22	2473	47
U1456A-70F-2, 10-16 cm	7.159	470	1.937	3.730	0.110	0.2503	0.0079	0.72986	1576	24	1439	41
U1456A-70F-2, 10-16 cm	26.638	323	1.280	0.577	0.015	0.0728	0.0017	0.59916	460.8	9.5	453	10
U1456A-70F-2, 10-16 cm	25.187	170.7	1.090	2.172	0.039	0.1982	0.0028	0.61801	1169	12	1165	15
U1456A-70F-2, 10-16 cm	27.674	224	20.300	0.698	0.019	0.0835	0.0018	0.51293	536	11	517	10
U1456A-70F-2, 10-16 cm	27.674	1313	1.469	2.047	0.048	0.1880	0.0035	0.78397	1130	17	1109	19
U1456A-70F-2, 10-16 cm	13.169	986	5.510	1.084	0.030	0.1149	0.0033	0.79448	744	14	701	19
U1456A-70F-2, 10-16 cm	25.809	509	1.510	0.065	0.004	0.0097	0.0005	0.60790	63.2	3.8	62	2.9
U1456A-70F-2, 10-16 cm	22.080	116.5	2.424	1.096	0.028	0.1214	0.0024	0.37923	752	15	738	14
U1456A-70F-2, 10-16 cm	22.908	1019	2.045	0.369	0.007	-0.0029	0.0002	0.02356	318.7	5.3	-18.8	1.1
U1456A-70F-2, 10-16 cm	27.674	129.9	0.659	0.059	0.004	0.0084	0.0002	0.28099	58.1	4.2	54	1.4

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456A-70F-2, 10-16 cm	27.674	1044	2.796	1.348	0.023	0.1414	0.0019	0.64595	866	10	852	11
U1456A-70F-2, 10-16 cm	20.007	525	2.066	8.960	0.230	0.4150	0.0093	0.74575	2330	23	2234	42
U1456A-70F-2, 10-16 cm	4.766	215	1.795	0.712	0.058	0.0835	0.0053	0.73030	542	33	516	31
U1456A-70F-2, 10-16 cm	20.007	179.8	2.725	1.482	0.035	0.1490	0.0028	0.69129	925	14	895	16
U1456A-70F-2, 10-16 cm	27.675	385	1.457	0.113	0.004	0.0168	0.0004	0.24742	108	3.6	107.2	2.3
U1456A-70F-2, 10-16 cm	15.448	374	1.065	2.114	0.061	0.1953	0.0045	0.74440	1153	19	1149	25
U1456A-70F-2, 10-16 cm	27.674	2520	0.767	1.288	0.023	0.1365	0.0020	0.82166	839	10	825	12
U1457C-31R-1, 94-100 cm	27.674	354	0.984	5.475	0.049	0.3430	0.0031	0.81701	1896	7.7	1900	15
U1457C-31R-1, 94-100 cm	8.874	371.6	3.840	0.836	0.023	0.0982	0.0020	0.61468	616	13	604	12
U1457C-31R-1, 94-100 cm	7.984	340	1.340	1.690	0.038	0.1682	0.0029	0.82446	1003	14	1002	16
U1457C-31R-1, 94-100 cm	26.565	6940	7.076	0.013	0.000	0.0019	0.0000	0.24127	12.82	0.25	12.15	0.13
U1457C-31R-1, 94-100 cm	15.472	746	0.979	1.165	0.023	0.1052	0.0015	0.36862	783	11	644.8	8.5
U1457C-31R-1, 94-100 cm	27.675	1119	0.832	0.049	0.001	0.0075	0.0001	0.11565	48.6	1.2	48.19	0.53
U1457C-31R-1, 94-100 cm	12.699	34.1	0.510	0.150	0.019	0.0212	0.0009	0.05884	140	17	135.3	5.5
U1457C-31R-1, 94-100 cm	4.437	355	15.600	0.585	0.039	0.0683	0.0046	0.66295	466	25	426	27
U1457C-31R-1, 94-100 cm	22.682	150.4	2.410	0.891	0.021	0.1012	0.0016	0.52574	645	11	621.4	9.2
U1457C-31R-1, 94-100 cm	26.720	590	1.387	0.122	0.003	0.0185	0.0003	0.34804	116.4	2.6	118.1	1.9
U1457C-31R-1, 94-100 cm	27.356	3070	49.500	0.121	0.002	0.0178	0.0002	0.72091	115.8	2	113.6	1.4
U1457C-31R-1, 94-100 cm	27.674	268.2	1.771	0.319	0.007	0.0433	0.0005	0.06268	280.7	5.3	272.9	2.9
U1457C-31R-1, 94-100 cm	27.675	1030	0.884	0.129	0.003	0.0189	0.0003	0.34476	122.8	2.8	120.5	1.9
U1457C-31R-1, 94-100 cm	21.630	401	0.698	0.121	0.005	0.0179	0.0004	0.27868	115.8	4	114.6	2.7
U1457C-31R-1, 94-100 cm	26.402	57.3	0.407	1.256	0.034	0.1389	0.0017	0.33720	824	16	837.9	9.8
U1457C-31R-1, 94-100 cm	21.950	776	1.705	0.124	0.003	0.0185	0.0002	0.22117	118.9	2.5	118.4	1.5
U1457C-31R-1, 94-100 cm	27.674	486	1.629	0.116	0.003	0.0172	0.0003	0.34065	110.8	2.9	109.6	1.8
U1457C-31R-1, 94-100 cm	5.408	3210	3.340	0.131	0.006	0.0192	0.0008	0.65559	124.9	5.4	122.5	5.1
U1457C-31R-1, 94-100 cm	15.587	262	0.845	0.119	0.005	0.0175	0.0003	0.08406	114.1	4.9	111.6	1.9
U1457C-31R-1, 94-100 cm	27.674	192	0.501	0.059	0.004	0.0093	0.0002	0.06902	58.2	3.5	59.5	0.99
U1457C-31R-1, 94-100 cm	23.858	1017	17.320	1.162	0.020	0.1192	0.0021	0.78876	781.2	9.6	726	12
U1457C-31R-1, 94-100 cm	27.675	1380	7.000	0.234	0.005	0.0340	0.0006	0.55196	213.1	3.8	215.2	3.8
U1457C-31R-1, 94-100 cm	17.813	304	0.896	1.719	0.045	0.1706	0.0037	0.81225	1015	16	1015	20
U1457C-31R-1, 94-100 cm	17.496	558	16.100	1.749	0.023	0.1724	0.0017	0.61412	1026	8.5	1025	9.1
U1457C-31R-1, 94-100 cm	2.227	648	108.000	0.025	0.003	0.0035	0.0005	0.43168	24.7	3.3	22.5	3.3
U1457C-31R-1, 94-100 cm	18.132	579	0.899	1.285	0.023	0.1362	0.0023	0.71516	838	10	823	13
U1457C-31R-1, 94-100 cm	26.402	759	7.760	0.574	0.008	0.0717	0.0008	0.66304	460.6	5.2	446.1	4.8
U1457C-31R-1, 94-100 cm	27.674	1970	6.660	0.129	0.003	0.0180	0.0003	0.51976	123.3	2.7	114.8	2.1
U1457C-31R-1, 94-100 cm	2.227	970	130.000	0.032	0.005	0.0047	0.0007	0.44404	31.7	4.8	29.9	4.4
U1457C-31R-1, 94-100 cm	18.451	918	105.000	1.335	0.028	0.1321	0.0021	0.63407	861	13	800	12
U1457C-31R-1, 94-100 cm	6.680	932	3.410	1.688	0.058	0.1665	0.0053	0.76991	1002	22	992	29
U1457C-31R-1, 94-100 cm	13.042	847	0.594	2.708	0.033	0.2185	0.0021	0.66329	1330	9.1	1274	11
U1457C-31R-1, 94-100 cm	25.448	822	1.937	9.683	0.079	0.4589	0.0042	0.51503	2404	7.5	2434	19
U1457C-31R-1, 94-100 cm	24.811	666	1.339	9.760	0.110	0.4580	0.0058	0.68838	2410	10	2437	26

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-31R-1, 94-100 cm	24.811	167	0.721	1.185	0.024	0.1348	0.0019	0.39094	792	11	815	11
U1457C-31R-1, 94-100 cm	20.358	418.3	1.166	3.611	0.045	0.2678	0.0031	0.68483	1551	9.8	1529	16
U1457C-31R-1, 94-100 cm	25.130	140.1	0.820	0.086	0.005	0.0129	0.0003	0.22871	83	4.8	82.3	1.6
U1457C-31R-1, 94-100 cm	27.674	327	1.649	0.713	0.011	0.0884	0.0008	0.30282	546	6.5	546.2	4.4
U1457C-31R-1, 94-100 cm	27.675	228	3.170	0.121	0.004	0.0182	0.0003	0.01748	115.4	3.5	116	1.6
U1457C-31R-1, 94-100 cm	7.634	402	4.070	0.634	0.013	0.0815	0.0009	0.35005	498.3	8.2	505.2	5.4
U1457C-31R-1, 94-100 cm	13.678	482	0.991	4.784	0.052	0.3066	0.0025	0.59994	1781	9.2	1724	12
U1457C-31R-1, 94-100 cm	25.130	217	1.610	1.435	0.022	0.1541	0.0017	0.41470	902	9.2	923.6	9.7
U1457C-31R-1, 94-100 cm	26.084	279.2	0.362	1.269	0.018	0.1385	0.0009	0.40057	830.9	7.7	836.2	4.9
U1457C-31R-1, 94-100 cm	18.769	232.9	2.130	1.769	0.023	0.1777	0.0012	0.27402	1033	8.5	1054	6.4
U1457C-31R-1, 94-100 cm	9.224	476	2.710	6.460	0.200	0.3720	0.0110	0.76930	2036	27	2036	50
U1457C-31R-1, 94-100 cm	6.682	1240	2.060	1.474	0.062	0.1402	0.0052	0.54298	917	25	845	29
U1457C-31R-1, 94-100 cm	5.453	3950	0.619	0.101	0.004	0.0126	0.0003	0.68907	98	3.9	80.4	2.2
U1457C-31R-1, 94-100 cm	18.451	485	0.390	1.915	0.031	0.1785	0.0025	0.56753	1085	11	1059	14
U1457C-31R-1, 94-100 cm	25.766	2919	2.420	1.296	0.011	0.1360	0.0010	0.61022	843.6	4.9	821.9	5.9
U1457C-31R-1, 94-100 cm	10.817	203	2.105	0.853	0.026	0.1003	0.0026	0.72162	625	14	619	14
U1457C-31R-1, 94-100 cm	12.725	2369	1.556	0.587	0.013	0.0720	0.0017	0.81255	468.4	8.6	448	10
U1457C-31R-1, 94-100 cm	11.770	1870	1.660	0.177	0.004	0.0256	0.0003	0.35586	165.2	3.2	163.1	1.9
U1457C-31R-1, 94-100 cm	20.358	390	1.127	1.144	0.017	0.1237	0.0013	0.05581	773.3	8.1	752	7.3
U1457C-31R-1, 94-100 cm	24.493	305	0.829	1.198	0.014	0.1308	0.0013	0.43178	799.9	6.8	792.6	7.2
U1457C-31R-1, 94-100 cm	5.726	262	2.390	5.300	0.180	0.3320	0.0120	0.73390	1866	29	1846	60
U1457C-31R-1, 94-100 cm	10.816	1219	5.460	0.930	0.019	0.1062	0.0018	0.84956	667.1	9.9	651	11
U1457C-31R-1, 94-100 cm	23.857	1132	3.990	10.490	0.140	0.4130	0.0055	0.88762	2477	12	2227	25
U1457C-31R-1, 94-100 cm	22.586	229.2	0.907	2.232	0.033	0.2014	0.0019	0.52568	1190	10	1183	10
U1457C-31R-1, 94-100 cm	2.547	199	0.735	1.211	0.074	0.1269	0.0043	0.51907	804	33	770	24
U1457C-31R-1, 94-100 cm	26.085	1272	1.540	0.019	0.001	0.0029	0.0000	0.00536	19.47	0.74	18.91	0.28
U1457C-31R-1, 94-100 cm	27.674	1274	2.920	1.674	0.025	0.1690	0.0021	0.74557	997	9.8	1006	12
U1457C-31R-1, 94-100 cm	27.674	358.8	0.756	1.275	0.013	0.1422	0.0010	0.36278	834	5.8	857.2	5.8
U1457C-31R-1, 94-100 cm	7.316	1260	10.700	1.722	0.057	0.1673	0.0039	0.78771	1015	21	997	22
U1457C-31R-1, 94-100 cm	10.499	328.1	2.465	3.296	0.054	0.2545	0.0031	0.77182	1479	13	1462	16
U1457C-31R-1, 94-100 cm	27.674	670	0.438	0.067	0.002	0.0102	0.0002	0.17216	65.5	2	65.2	1
U1457C-31R-1, 94-100 cm	23.857	237	2.679	1.703	0.024	0.1760	0.0016	0.57927	1008	8.8	1045	8.9
U1457C-31R-1, 94-100 cm	21.630	120.2	0.689	0.842	0.020	0.1017	0.0013	0.20824	620	11	624	7.6
U1457C-31R-1, 94-100 cm	27.674	453	6.230	0.615	0.008	0.0801	0.0006	0.42372	485.9	4.8	496.6	3.7
U1457C-31R-1, 94-100 cm	11.135	1553	1.110	0.072	0.002	0.0108	0.0002	0.19372	70.3	2.1	69.2	1.2
U1457C-31R-1, 94-100 cm	25.766	725	4.537	9.540	0.120	0.4452	0.0050	0.73779	2389	11	2372	22
U1457C-31R-1, 94-100 cm	20.994	805	124.000	0.581	0.010	0.0744	0.0008	0.42437	464.6	6.1	462.5	4.5
U1457C-31R-1, 94-100 cm	27.674	4900	1.215	0.084	0.001	0.0128	0.0002	0.58700	82.3	1.3	82.1	1.1
U1457C-31R-1, 94-100 cm	2.545	781	26.100	0.034	0.005	0.0043	0.0004	0.42769	33.5	5.1	27.6	2.4
U1457C-31R-1, 94-100 cm	11.135	1158	6.420	1.354	0.030	0.1215	0.0022	0.73203	868	13	739	12
U1457C-31R-1, 94-100 cm	17.177	285.7	2.615	0.486	0.013	0.0626	0.0008	0.21899	401.4	8.5	391.4	4.6

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-31R-1, 94-100 cm	14.951	146	1.940	1.559	0.036	0.1639	0.0030	0.46972	952	14	978	16
U1457C-31R-1, 94-100 cm	13.997	249.4	2.316	0.778	0.015	0.0938	0.0014	0.09791	583.8	8.8	577.7	8.1
U1457C-31R-1, 94-100 cm	6.998	304	0.774	2.840	0.140	0.2080	0.0087	0.93086	1359	38	1217	47
U1457C-31R-1, 94-100 cm	5.091	1889	15.780	0.117	0.006	0.0169	0.0005	0.37993	112	5.4	107.9	3.3
U1457C-31R-1, 94-100 cm	6.044	353	1.099	2.749	0.049	0.2150	0.0045	0.78044	1341	13	1255	24
U1457C-31R-1, 94-100 cm	4.135	383	5.040	0.451	0.029	0.0547	0.0027	0.34445	377	20	343	17
U1457C-31R-1, 94-100 cm	27.675	763	0.707	1.915	0.025	0.1825	0.0019	0.70729	1085	8.7	1080	11
U1457C-31R-1, 94-100 cm	12.089	794	15.000	1.066	0.020	0.1184	0.0023	0.70122	736	10	721	13
U1457C-31R-1, 94-100 cm	7.316	626	1.738	1.681	0.050	0.1629	0.0044	0.88343	1000	19	973	24
U1457C-31R-1, 94-100 cm	13.042	1015	2.401	1.601	0.026	0.1608	0.0022	0.67218	970	10	961	12
U1457C-31R-1, 94-100 cm	27.674	669	0.711	0.183	0.004	0.0267	0.0003	0.33036	170.7	3.5	169.7	1.6
U1457C-31R-1, 94-100 cm	27.674	341	1.485	0.330	0.007	0.0469	0.0006	0.45330	289.3	5	295.4	3.9
U1457C-31R-1, 94-100 cm	27.675	1640	4.120	0.656	0.009	0.0820	0.0009	0.62299	511.8	5.4	507.8	5.6
U1457C-31R-1, 94-100 cm	23.857	857	4.020	0.900	0.014	0.1075	0.0015	0.73992	650.6	7.6	657.8	8.6
U1457C-31R-1, 94-100 cm	14.316	2030	2.430	0.123	0.004	0.0184	0.0003	0.03581	118.6	3.7	117.6	1.9
U1457C-31R-1, 94-100 cm	11.770	901	6.380	0.428	0.010	0.0554	0.0009	0.56174	361.1	6.8	347.7	5.2
U1457C-31R-1, 94-100 cm	17.495	978	1.750	1.238	0.016	0.1320	0.0015	0.70364	817.4	7.2	799.2	8.6
U1457C-31R-1, 94-100 cm	17.814	1304	3.190	0.116	0.003	0.0174	0.0003	0.28445	111.2	2.3	111.1	1.8
U1457C-31R-1, 94-100 cm	10.815	220	1.382	0.625	0.040	0.0249	0.0008	0.45065	488	25	158.3	5.1
U1457C-31R-1, 94-100 cm	12.724	107.3	1.467	0.720	0.032	0.0748	0.0021	0.02390	548	19	465	13
U1457C-31R-1, 94-100 cm	16.541	2420	1.550	0.039	0.001	0.0058	0.0001	0.17940	38.4	1	37.59	0.41
U1457C-31R-1, 94-100 cm	27.675	101.9	0.564	0.064	0.005	0.0108	0.0003	0.03479	63	4.5	69.5	1.6
U1457C-31R-1, 94-100 cm	27.674	533	2.320	5.513	0.080	0.3510	0.0044	0.83166	1903	12	1941	21
U1457C-31R-1, 94-100 cm	27.674	1225	0.786	0.072	0.002	0.0107	0.0001	0.41221	70.4	1.8	68.61	0.91
U1457C-31R-1, 94-100 cm	17.496	414	1.079	2.774	0.050	0.2280	0.0034	0.83730	1346	14	1323	18
U1457C-31R-1, 94-100 cm	28.946	400	0.741	0.957	0.014	0.1053	0.0012	0.55439	680.9	7.3	645	7.2
U1457C-31R-1, 94-100 cm	27.674	473	1.831	0.121	0.003	0.0185	0.0003	0.06953	116.3	3	118.2	1.6
U1457C-31R-1, 94-100 cm	27.674	2029	3.520	0.651	0.010	0.0825	0.0012	0.69005	508.3	6.4	511	7
U1457C-31R-1, 94-100 cm	14.952	1452	0.991	1.123	0.010	0.1151	0.0007	0.56522	764.3	5	702.1	4.2
U1457C-31R-1, 94-100 cm	27.674	130.5	0.518	0.052	0.004	0.0080	0.0002	0.00452	50.8	3.3	51.4	1.1
U1457C-31R-1, 94-100 cm	27.675	630	3.470	0.111	0.003	0.0170	0.0002	0.16014	106.9	2.3	108.8	1.2
U1457C-31R-1, 94-100 cm	24.811	98	1.301	1.266	0.028	0.1412	0.0016	0.42511	828	13	851.3	9.2
U1457C-31R-1, 94-100 cm	22.586	409	2.179	0.658	0.009	0.0843	0.0009	0.38844	512.7	5.7	521.8	5.1
U1457C-31R-1, 94-100 cm	8.270	493	2.360	0.711	0.018	0.0878	0.0012	0.68574	545	11	542.7	6.8
U1457C-31R-1, 94-100 cm	15.269	588	1.108	2.007	0.016	0.1920	0.0014	0.32950	1118	5.5	1132	7.7
U1457C-31R-1, 94-100 cm	27.674	217.3	1.960	1.558	0.028	0.1619	0.0023	0.51988	953	11	967	13
U1457C-31R-1, 94-100 cm	16.223	248	1.806	9.690	0.150	0.4394	0.0053	0.85028	2403	15	2347	24
U1457C-31R-1, 94-100 cm	30.219	336	3.620	0.645	0.028	0.0822	0.0031	0.89913	500	17	508	19
U1457C-31R-1, 94-100 cm	27.674	2110	1.320	0.018	0.001	0.0029	0.0000	0.03520	18.36	0.6	18.45	0.25
U1457C-31R-1, 94-100 cm	6.999	751	3.770	0.644	0.016	0.0830	0.0016	0.33587	504.3	9.7	513.7	9.5
U1457C-31R-1, 94-100 cm	5.851	900	2.000	0.122	0.010	0.0181	0.0006	0.10162	116.7	8.6	115.3	3.9

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-31R-1, 94-100 cm	13.165	127.1	2.080	7.650	0.220	0.3505	0.0091	0.74138	2185	26	1935	43
U1457C-31R-1, 94-100 cm	27.675	661	1.480	0.111	0.004	0.0168	0.0003	0.35107	106.9	3.7	107.4	1.8
U1457C-31R-1, 94-100 cm	25.568	860	1.750	0.322	0.008	0.0454	0.0010	0.59663	283.6	6.3	286	5.9
U1457C-31R-1, 94-100 cm	27.674	180	0.871	0.061	0.004	0.0094	0.0002	0.04967	59.7	3.9	60.1	1.3
U1457C-31R-1, 94-100 cm	27.675	195.9	1.167	0.107	0.005	0.0158	0.0004	0.16914	102.9	4.2	101.2	2.5
U1457C-31R-1, 94-100 cm	27.674	89.8	0.951	11.010	0.170	0.4762	0.0075	0.74810	2520	15	2508	33
U1457C-31R-1, 94-100 cm	22.759	366	1.363	0.113	0.005	0.0165	0.0003	0.36309	108.6	4.1	105.1	2.1
U1457C-31R-1, 94-100 cm	27.674	333	1.595	0.117	0.005	0.0172	0.0003	0.11268	112	4.3	109.8	1.8
U1457C-31R-1, 94-100 cm	22.525	375	1.140	0.126	0.005	0.0180	0.0003	0.11869	119.9	4.3	115.3	2.1
U1457C-31R-1, 94-100 cm	13.632	947	1.221	0.638	0.016	-0.0043	0.0001	0.62151	500	10	-28.02	0.58
U1457C-33R-3, 10-17 cm	27.675	63.7	1.381	0.063	0.007	0.0085	0.0004	0.06741	62.3	6.8	54.5	2.3
U1457C-33R-3, 10-17 cm	26.057	287	10.130	0.758	0.018	0.0907	0.0017	0.53796	571	10	560	10
U1457C-33R-3, 10-17 cm	12.300	422	20.570	1.719	0.045	0.1573	0.0027	0.35497	1013	17	941	15
U1457C-33R-3, 10-17 cm	21.201	183.5	0.332	2.127	0.043	0.1965	0.0034	0.61612	1155	14	1156	18
U1457C-33R-3, 10-17 cm	12.300	975	1.342	0.992	0.035	0.1081	0.0038	0.74590	697	18	661	22
U1457C-33R-3, 10-17 cm	19.314	460	64.500	0.041	0.002	0.0061	0.0002	0.25511	40.3	2.4	39.2	1.1
U1457C-33R-3, 10-17 cm	10.681	134.4	0.377	6.620	0.180	0.3789	0.0099	0.85280	2058	23	2069	47
U1457C-33R-3, 10-17 cm	1.809	4740	33.500	0.487	0.036	0.0601	0.0042	0.61057	402	25	376	25
U1457C-33R-3, 10-17 cm	21.201	477	0.887	1.352	0.030	0.1191	0.0023	0.73938	866	13	725	13
U1457C-33R-3, 10-17 cm	20.661	270	1.160	1.496	0.035	0.1511	0.0029	0.61060	926	14	906	16
U1457C-33R-3, 10-17 cm	18.234	355	5.750	5.075	0.082	0.3289	0.0051	0.74761	1830	14	1832	25
U1457C-33R-3, 10-17 cm	15.536	826	1.310	4.435	0.086	0.2840	0.0060	0.87189	1716	16	1610	30
U1457C-33R-3, 10-17 cm	27.675	214	0.427	0.086	0.005	0.0125	0.0003	0.09115	83.5	4.5	79.9	2
U1457C-33R-3, 10-17 cm	27.675	255	1.635	5.051	0.077	0.3215	0.0045	0.79840	1825	13	1796	22
U1457C-33R-3, 10-17 cm	10.951	608	1.139	1.159	0.043	0.1078	0.0036	0.67571	779	21	659	21
U1457C-33R-3, 10-17 cm	14.458	1425	9.510	0.601	0.014	0.0675	0.0015	0.75040	477.2	8.6	421.1	8.9
U1457C-33R-3, 10-17 cm	18.503	348	0.627	1.435	0.037	0.1452	0.0034	0.60908	901	15	873	19
U1457C-33R-3, 10-17 cm	27.675	50.2	1.728	1.250	0.110	0.1209	0.0031	0.41576	779	32	735	18
U1457C-33R-3, 10-17 cm	27.674	826	1.239	0.047	0.002	0.0071	0.0002	0.36021	46.3	1.7	45.7	1.1
U1457C-33R-3, 10-17 cm	27.674	184	1.013	0.323	0.010	0.0457	0.0008	0.22561	282.8	7.8	288	4.9
U1457C-33R-3, 10-17 cm	19.853	122.8	1.131	1.274	0.046	0.1292	0.0021	0.11746	829	20	783	12
U1457C-33R-3, 10-17 cm	23.628	2820	0.822	0.096	0.003	0.0141	0.0004	0.72850	92.7	2.3	90.1	2.2
U1457C-33R-3, 10-17 cm	18.773	321.4	1.971	0.055	0.003	0.0083	0.0002	0.21980	54.1	3	53.1	1.6
U1457C-33R-3, 10-17 cm	27.675	581	0.693	0.124	0.004	0.0168	0.0003	0.34724	119.3	3.7	107.4	2.1
U1457C-33R-3, 10-17 cm	16.076	136.4	0.934	2.628	0.087	0.2083	0.0051	0.58973	1302	24	1219	27
U1457C-33R-3, 10-17 cm	27.674	705	4.810	0.960	0.014	0.1099	0.0016	0.66029	682.4	7.5	672	9.3
U1457C-33R-3, 10-17 cm	19.313	227.1	0.881	18.860	0.340	0.5720	0.0110	0.67300	3031	17	2911	45
U1457C-33R-3, 10-17 cm	27.675	251.9	1.199	1.102	0.020	0.1217	0.0016	0.47222	753.9	9.9	739.8	9.2
U1457C-33R-3, 10-17 cm	16.346	577	2.450	1.955	0.055	0.1833	0.0047	0.80823	1096	19	1084	26
U1457C-33R-3, 10-17 cm	9.603	932	29.500	1.284	0.029	0.1365	0.0026	0.58662	837	13	824	15
U1457C-33R-3, 10-17 cm	5.395	162	2.392	3.380	0.200	0.2610	0.0092	0.80195	1492	47	1494	48

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-33R-3, 10-17 cm	23.629	604.5	5.170	5.853	0.087	0.3055	0.0046	0.75482	1952	13	1717	23
U1457C-33R-3, 10-17 cm	21.201	673	1.072	0.864	0.021	0.0920	0.0022	0.85769	630	11	567	13
U1457C-33R-3, 10-17 cm	27.675	97.2	1.254	1.459	0.041	0.1617	0.0035	0.63642	908	17	965	19
U1457C-33R-3, 10-17 cm	14.997	248	0.715	1.030	0.026	0.1076	0.0022	0.50475	717	13	659	13
U1457C-33R-3, 10-17 cm	19.852	258.9	9.590	4.574	0.060	0.3069	0.0038	0.70202	1743	11	1725	19
U1457C-33R-3, 10-17 cm	27.674	196.5	1.174	1.174	0.022	0.1302	0.0017	0.60964	786	10	788.8	9.5
U1457C-33R-3, 10-17 cm	13.379	287	1.040	0.974	0.027	0.1117	0.0026	0.52126	689	14	682	15
U1457C-33R-3, 10-17 cm	21.202	293	2.020	15.580	0.830	0.4290	0.0220	0.82535	2810	55	2280	100
U1457C-33R-3, 10-17 cm	14.458	477	4.850	0.598	0.015	0.0749	0.0014	0.55262	475.3	9.6	465.6	8.6
U1457C-33R-3, 10-17 cm	27.675	429	1.920	0.790	0.015	0.0957	0.0012	0.50737	590.1	8.4	588.9	7.1
U1457C-33R-3, 10-17 cm	27.674	480	1.370	1.845	0.033	0.1795	0.0036	0.77914	1059	12	1063	20
U1457C-33R-3, 10-17 cm	27.675	82.6	0.509	5.960	0.230	0.3290	0.0110	0.74620	1955	32	1824	51
U1457C-33R-3, 10-17 cm	21.201	1634	1.378	0.020	0.001	0.0032	0.0001	0.33125	20.54	0.99	20.44	0.53
U1457C-33R-3, 10-17 cm	27.675	98.6	1.236	0.068	0.007	0.0092	0.0003	0.05566	65.8	6.1	59.2	1.9
U1457C-33R-3, 10-17 cm	19.044	539	1.409	1.433	0.026	0.1411	0.0024	0.66875	901	11	851	14
U1457C-33R-3, 10-17 cm	17.694	266	1.357	7.720	0.170	0.3943	0.0071	0.83229	2194	20	2141	33
U1457C-33R-3, 10-17 cm	19.853	784	4.680	0.119	0.003	0.0175	0.0004	0.44012	114.5	3.2	112	2.2
U1457C-33R-3, 10-17 cm	16.885	1772	7.610	1.282	0.026	0.1326	0.0024	0.78890	836	12	802	13
U1457C-33R-3, 10-17 cm	25.246	122.5	1.420	1.249	0.031	0.1309	0.0020	0.60216	820	14	793	12
U1457C-33R-3, 10-17 cm	26.595	869	3.670	5.182	0.070	0.3112	0.0037	0.83859	1847	11	1746	18
U1457C-33R-3, 10-17 cm	27.675	1347	2.610	0.121	0.003	0.0178	0.0003	0.62319	115.6	2.5	113.4	1.7
U1457C-33R-3, 10-17 cm	23.089	36.7	0.587	1.109	0.049	0.1249	0.0033	0.21041	755	25	758	19
U1457C-33R-3, 10-17 cm	16.616	1610	4.910	1.807	0.036	0.1681	0.0030	0.79254	1046	13	1001	17
U1457C-33R-3, 10-17 cm	12.839	902	2.008	0.414	0.013	0.0548	0.0014	0.69438	350.8	9.2	344.1	8.6
U1457C-33R-3, 10-17 cm	27.675	317	8.410	1.385	0.027	0.1459	0.0026	0.64613	880	11	879	15
U1457C-33R-3, 10-17 cm	16.615	102.2	0.945	1.057	0.035	0.1146	0.0027	0.61202	732	18	699	15
U1457C-33R-3, 10-17 cm	27.674	267	2.740	1.197	0.036	0.1238	0.0035	0.64852	798	17	754	19
U1457C-33R-3, 10-17 cm	27.675	330	1.630	0.973	0.029	0.1111	0.0033	0.72935	689	16	680	20
U1457C-33R-3, 10-17 cm	27.674	112.2	1.309	0.087	0.006	0.0120	0.0004	0.19158	84	5.8	76.9	2.5
U1457C-33R-3, 10-17 cm	12.569	655	1.557	5.150	0.160	0.3069	0.0092	0.90709	1839	26	1723	45
U1457C-33R-3, 10-17 cm	27.675	163.2	0.969	1.541	0.027	0.1540	0.0018	0.51508	945	11	923	10
U1457C-33R-3, 10-17 cm	27.674	534	0.948	0.154	0.004	0.0226	0.0004	0.38107	145.2	3.9	144	2.7
U1457C-33R-3, 10-17 cm	27.674	246	0.956	1.275	0.024	0.1390	0.0023	0.71121	834	11	838	13
U1457C-33R-3, 10-17 cm	22.011	261	1.024	4.950	0.092	0.3160	0.0048	0.75446	1807	16	1769	24
U1457C-33R-3, 10-17 cm	21.740	857	22.800	0.757	0.014	0.0910	0.0017	0.77284	571.5	8.4	561	10
U1457C-33R-3, 10-17 cm	27.674	1941	0.606	0.544	0.007	0.0685	0.0009	0.69494	440.8	4.6	427.2	5.7
U1457C-33R-3, 10-17 cm	17.155	592	1.500	1.191	0.024	0.1248	0.0021	0.73728	795	11	758	12
U1457C-33R-3, 10-17 cm	22.820	776	2.300	5.134	0.089	0.3265	0.0053	0.74023	1843	16	1820	26
U1457C-33R-3, 10-17 cm	27.674	681	8.990	1.120	0.022	0.1226	0.0021	0.70470	761	11	745	12
U1457C-33R-3, 10-17 cm	27.675	615	11.820	0.633	0.015	0.0783	0.0018	0.76640	497.4	9.5	486	11
U1457C-33R-3, 10-17 cm	5.287	2793	16.400	0.640	0.029	0.0774	0.0035	0.80653	501	18	480	21

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-33R-3, 10-17 cm	13.486	258.9	0.831	1.110	0.030	0.1204	0.0027	0.67283	756	14	733	15
U1457C-33R-3, 10-17 cm	2.079	1370	163.000	0.026	0.004	0.0038	0.0004	0.25117	25.8	3.5	24.7	2.7
U1457C-33R-3, 10-17 cm	9.604	85.9	0.896	3.270	0.120	0.2538	0.0095	0.59003	1468	28	1456	49
U1457C-33R-3, 10-17 cm	20.122	2880	0.793	0.039	0.001	0.0054	0.0001	0.50680	38.8	1.3	34.78	0.61
U1457C-33R-3, 10-17 cm	27.944	969	9.850	5.054	0.081	0.3050	0.0049	0.87434	1825	13	1714	24
U1457C-33R-3, 10-17 cm	9.333	1500	0.465	0.046	0.002	0.0069	0.0002	0.11982	45.9	2.2	44.1	1
U1457C-33R-3, 10-17 cm	20.123	301	2.600	0.837	0.019	0.1001	0.0014	0.61735	616	10	614.7	8.4
U1457C-33R-3, 10-17 cm	27.674	641	1.424	0.111	0.003	0.0165	0.0003	0.24011	106.7	3.1	105.3	1.6
U1457C-33R-3, 10-17 cm	15.268	81.5	0.599	0.113	0.010	0.0120	0.0005	0.13504	107.6	8.7	77.1	3.4
U1457C-33R-3, 10-17 cm	17.424	301	1.561	0.814	0.023	0.0923	0.0022	0.68544	603	13	569	13
U1457C-33R-3, 10-17 cm	19.313	685	7.950	0.615	0.018	0.0756	0.0020	0.59337	485	11	469	12
U1457C-33R-3, 10-17 cm	27.674	262.7	0.925	0.712	0.017	0.0814	0.0016	0.40526	546	10	504	9.4
U1457C-33R-3, 10-17 cm	27.675	772	3.350	7.320	0.190	0.3650	0.0110	0.67754	2141	23	2000	52
U1457C-33R-3, 10-17 cm	8.793	960	6.200	0.207	0.011	0.0251	0.0011	0.35181	190.7	8.9	159.5	7
U1457C-33R-3, 10-17 cm	21.201	340	1.022	1.280	0.030	0.1379	0.0033	0.80449	834	14	832	19
U1457C-33R-3, 10-17 cm	22.550	251.2	1.123	4.972	0.069	0.3157	0.0043	0.70157	1812	12	1768	21
U1457C-33R-3, 10-17 cm	27.135	1819	4.860	1.069	0.016	0.1148	0.0016	0.80136	737	7.7	700.4	9
U1457C-33R-3, 10-17 cm	27.674	649	0.867	0.052	0.003	0.0075	0.0002	0.39442	51.4	2.4	48.33	0.93
U1457C-33R-3, 10-17 cm	2.697	1426	6.200	0.075	0.008	0.0108	0.0008	0.25042	73.4	7.5	69.3	5.4
U1457C-33R-3, 10-17 cm	27.675	731	4.250	5.157	0.082	0.3265	0.0051	0.89121	1842	14	1820	25
U1457C-33R-3, 10-17 cm	27.675	452	4.790	1.581	0.034	0.1600	0.0034	0.69730	959	13	956	19
U1457C-33R-3, 10-17 cm	27.674	1128	16.500	0.057	0.002	0.0084	0.0003	0.70340	56.3	2.3	54	1.6
U1457C-33R-3, 10-17 cm	14.728	437	1.374	1.686	0.048	0.1648	0.0031	0.71508	1000	18	983	17
U1457C-33R-3, 10-17 cm	18.234	560	4.780	0.198	0.006	0.0286	0.0006	0.32433	182.9	5.4	181.7	3.4
U1457C-33R-3, 10-17 cm	16.615	650	1.920	0.961	0.024	0.0961	0.0022	0.70135	682	12	591	13
U1457C-33R-3, 10-17 cm	27.674	3350	3.240	0.100	0.002	0.0149	0.0002	0.69428	96.7	1.7	95.3	1.3
U1457C-33R-3, 10-17 cm	27.674	257	0.566	0.061	0.004	0.0089	0.0002	0.03003	59.8	3.6	57.4	1.3
U1457C-33R-3, 10-17 cm	20.931	489	1.025	0.111	0.004	0.0166	0.0003	0.30640	106.3	3.3	106	1.8
U1457C-33R-3, 10-17 cm	23.898	263.8	1.425	5.042	0.069	0.3210	0.0043	0.69180	1826	11	1794	21
U1457C-33R-3, 10-17 cm	27.675	171.2	0.885	0.080	0.005	0.0115	0.0003	0.08009	77.4	4.7	73.7	1.9
U1457C-33R-3, 10-17 cm	14.459	4050	7.420	0.772	0.023	0.0750	0.0020	0.67078	580	13	466	12
U1457C-33R-3, 10-17 cm	17.424	172.6	3.470	5.249	0.097	0.3339	0.0060	0.78299	1858	16	1856	29
U1457C-33R-3, 10-17 cm	27.675	2371	0.971	0.018	0.001	0.0028	0.0000	0.09146	18.35	0.62	18.29	0.26
U1457C-33R-3, 10-17 cm	17.424	1049	2.180	0.790	0.017	0.0910	0.0017	0.74220	590.2	9.5	561	10
U1457C-33R-3, 10-17 cm	18.234	732	6.990	0.344	0.008	0.0460	0.0008	0.62567	300	5.9	289.6	4.7
U1457C-33R-3, 10-17 cm	27.674	635	1.707	0.106	0.004	0.0158	0.0003	0.26150	102.4	3.2	100.7	1.8
U1457C-33R-3, 10-17 cm	27.674	125	0.952	5.231	0.076	0.3358	0.0039	0.59883	1855	12	1865	19
U1457C-33R-3, 10-17 cm	22.010	366	4.060	0.039	0.003	0.0045	0.0001	0.03112	38.3	3.1	29.03	0.81
U1457C-33R-3, 10-17 cm	23.931	345	3.020	8.850	0.170	0.3735	0.0065	0.70406	2318	17	2043	31
U1457C-33R-3, 10-17 cm	27.674	472	0.783	0.050	0.002	0.0075	0.0002	0.24285	49.1	2.3	48.36	0.94
U1457C-33R-3, 10-17 cm	27.675	702	2.430	1.309	0.024	0.1388	0.0024	0.59094	852	10	837	14

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-33R-3, 10-17 cm	27.674	606	1.051	0.647	0.012	0.0800	0.0011	0.66319	505.3	7.5	496.2	6.7
U1457C-33R-3, 10-17 cm	27.675	924	7.700	1.673	0.026	0.1650	0.0022	0.66177	997.9	9.5	984	12
U1457C-33R-3, 10-17 cm	25.334	798	8.200	5.147	0.079	0.3289	0.0050	0.79084	1841	13	1831	24
U1457C-33R-3, 10-17 cm	17.611	445	0.932	1.271	0.028	0.1374	0.0023	0.61486	831	13	829	13
U1457C-33R-3, 10-17 cm	27.674	400	8.520	0.795	0.013	0.0976	0.0012	0.41334	593.8	6.9	600.4	7
U1457C-33R-3, 10-17 cm	9.420	1130	103.000	0.584	0.017	0.0728	0.0019	0.66238	466	11	453	12
U1457C-33R-3, 10-17 cm	11.701	160.7	1.557	1.633	0.041	0.1611	0.0028	0.40150	981	16	962	16
U1457C-33R-3, 10-17 cm	24.398	187.8	1.910	2.747	0.059	0.2289	0.0042	0.72880	1344	15	1327	22
U1457C-33R-3, 10-17 cm	20.653	179.8	1.265	3.134	0.072	0.2439	0.0049	0.74638	1437	18	1405	25
U1457C-33R-3, 10-17 cm	14.803	96.4	2.330	1.415	0.060	0.1501	0.0052	0.61953	889	25	900	29
U1457C-33R-3, 10-17 cm	10.063	59	1.000	3.790	0.150	0.2860	0.0100	0.76532	1583	33	1617	51
U1457C-33R-3, 10-17 cm	27.675	380	2.146	1.500	0.026	0.1547	0.0025	0.73401	930	10	927	14
U1457C-33R-3, 10-17 cm	21.589	586	6.340	0.530	0.011	0.0679	0.0010	0.60926	431.1	7	423.6	6.1
U1457C-33R-3, 10-17 cm	27.674	391	1.212	0.072	0.003	0.0104	0.0002	0.15632	70.2	3	66.4	1.3
U1457C-33R-3, 10-17 cm	27.674	630	2.500	0.108	0.004	0.0160	0.0003	0.27850	103.6	3.4	102.3	1.6
U1457C-33R-3, 10-17 cm	27.675	75.7	1.030	1.361	0.035	0.1418	0.0024	0.30896	870	15	854	13
U1456C-45X-3, 45-51 cm	23.515	216.3	0.759	0.087	0.006	0.0117	0.0004	0.11918	84.4	5.1	74.9	2.4
U1456C-45X-3, 45-51 cm	28.507	139.4	1.305	7.850	0.260	0.3970	0.0130	0.73516	2198	32	2146	61
U1456C-45X-3, 45-51 cm	28.229	660	0.747	1.463	0.030	0.1422	0.0024	0.58917	916	12	856	14
U1456C-45X-3, 45-51 cm	23.516	1172	9.360	1.590	0.050	0.1518	0.0050	0.67672	960	20	913	29
U1456C-45X-3, 45-51 cm	14.920	422	2.456	0.685	0.017	0.0879	0.0019	0.36377	529	11	543	11
U1456C-45X-3, 45-51 cm	27.675	434	3.660	0.908	0.026	0.0936	0.0025	0.51467	652	14	578	15
U1456C-45X-3, 45-51 cm	2.773	2620	2.310	0.760	0.038	0.0920	0.0030	0.81483	573	22	567	18
U1456C-45X-3, 45-51 cm	23.238	506	1.480	1.325	0.019	0.1433	0.0017	0.54189	855.5	8.5	863	9.8
U1456C-45X-3, 45-51 cm	27.674	606.7	27.200	5.830	0.074	0.3518	0.0049	0.71567	1950	11	1941	23
U1456C-45X-3, 45-51 cm	27.675	607	6.740	1.473	0.044	0.1500	0.0047	0.55367	918	18	899	26
U1456C-45X-3, 45-51 cm	17.693	410	4.950	0.630	0.013	0.0784	0.0012	0.35836	495.2	8.3	486.3	7.4
U1456C-45X-3, 45-51 cm	26.565	545	2.200	0.696	0.021	0.0849	0.0028	0.49020	534	12	524	16
U1456C-45X-3, 45-51 cm	16.861	1278	1.673	0.018	0.001	0.0028	0.0001	0.29228	17.85	0.94	18.15	0.36
U1456C-45X-3, 45-51 cm	27.675	305	1.771	1.392	0.022	0.1493	0.0019	0.45146	883.8	9.3	897	11
U1456C-45X-3, 45-51 cm	17.139	1223	2.570	0.379	0.013	0.0480	0.0015	0.47257	325.4	9.7	301.9	9.1
U1456C-45X-3, 45-51 cm	27.674	165.8	0.970	0.057	0.004	0.0085	0.0002	0.10121	56.9	3.9	54.8	1.2
U1456C-45X-3, 45-51 cm	2.941	1410	28.000	0.765	0.071	0.0847	0.0057	0.74242	574	40	524	34
U1456C-45X-3, 45-51 cm	12.149	151.8	1.310	22.020	0.420	0.6180	0.0130	0.64145	3182	18	3097	52
U1456C-45X-3, 45-51 cm	27.674	578	1.433	0.302	0.010	0.0417	0.0010	0.49469	267.7	7.7	263.2	6.4
U1456C-45X-3, 45-51 cm	27.951	786	1.460	1.034	0.033	0.1083	0.0032	0.65655	716	16	662	18
U1456C-45X-3, 45-51 cm	27.675	614	1.890	0.100	0.004	0.0158	0.0006	0.49912	96.7	4	100.7	3.5
U1456C-45X-3, 45-51 cm	27.674	546	16.800	4.544	0.057	0.3054	0.0036	0.70934	1737	10	1717	18
U1456C-45X-3, 45-51 cm	27.674	423	1.188	0.110	0.004	0.0161	0.0002	0.13300	106	3.2	103.2	1.5
U1456C-45X-3, 45-51 cm	9.931	104.6	0.846	0.061	0.009	0.0097	0.0007	0.26836	59.1	8.3	62.2	4.4
U1456C-45X-3, 45-51 cm	17.138	149.4	1.193	5.640	0.110	0.3305	0.0064	0.63976	1919	17	1839	31

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456C-45X-3, 45-51 cm	27.674	229	3.720	1.575	0.048	0.1612	0.0054	0.52391	956	19	961	30
U1456C-45X-3, 45-51 cm	3.604	1360	2.110	0.798	0.026	0.0865	0.0030	0.39895	595	15	535	18
U1456C-45X-3, 45-51 cm	21.853	195.7	1.404	2.017	0.038	0.1908	0.0027	0.55385	1119	13	1125	14
U1456C-45X-3, 45-51 cm	22.129	857	12.660	3.166	0.092	0.2052	0.0056	0.57772	1442	22	1201	30
U1456C-45X-3, 45-51 cm	27.674	246	2.350	0.059	0.004	0.0091	0.0004	0.15517	57.8	3.9	58.3	2.2
U1456C-45X-3, 45-51 cm	1.941	332	11.100	0.167	0.024	0.0252	0.0024	0.54244	156	21	160	15
U1456C-45X-3, 45-51 cm	15.475	311	1.734	1.307	0.027	0.1398	0.0024	0.71402	850	12	843	14
U1456C-45X-3, 45-51 cm	16.308	598	3.380	1.669	0.024	0.1699	0.0018	0.52709	997.4	9.4	1011	10
U1456C-45X-3, 45-51 cm	19.634	289	1.940	3.229	0.073	0.2561	0.0046	0.70219	1460	18	1469	24
U1456C-45X-3, 45-51 cm	20.744	663	1.390	1.207	0.019	0.1336	0.0015	0.58266	802.7	8.6	808.4	8.4
U1456C-45X-3, 45-51 cm	4.385	812	5.060	1.270	0.110	0.1293	0.0088	0.73218	826	50	783	50
U1456C-45X-3, 45-51 cm	5.494	270	1.510	0.075	0.009	0.0104	0.0008	0.12752	73.4	8.2	66.9	4.8
U1456C-45X-3, 45-51 cm	27.675	561	2.990	5.320	0.120	0.3357	0.0070	0.56605	1867	19	1862	34
U1456C-45X-3, 45-51 cm	27.674	427	4.530	1.825	0.046	0.1831	0.0042	0.64515	1049	16	1082	23
U1456C-45X-3, 45-51 cm	26.011	340.4	1.064	3.355	0.038	0.2633	0.0033	0.58016	1493	9	1506	17
U1456C-45X-3, 45-51 cm	18.247	216	1.966	0.113	0.007	0.0167	0.0004	0.08373	108.3	6.2	106.4	2.5
U1456C-45X-3, 45-51 cm	28.230	256	13.700	0.832	0.027	0.0989	0.0024	0.59376	611	15	607	14
U1456C-45X-3, 45-51 cm	21.297	858	2.256	6.080	0.100	0.3077	0.0044	0.82163	1987	15	1729	22
U1456C-45X-3, 45-51 cm	27.674	86.2	0.687	0.744	0.027	0.0903	0.0018	0.41808	562	16	557	11
U1456C-45X-3, 45-51 cm	27.674	2343	0.770	0.039	0.001	0.0057	0.0001	0.27568	38.73	0.99	36.42	0.38
U1456C-45X-3, 45-51 cm	26.289	868	4.120	0.995	0.026	0.1049	0.0023	0.63491	698	13	643	14
U1456C-45X-3, 45-51 cm	10.484	199	0.999	0.103	0.010	0.0139	0.0004	0.15782	99	9.1	88.7	2.8
U1456C-45X-3, 45-51 cm	20.743	492.4	1.927	5.568	0.081	0.3222	0.0049	0.75322	1911	12	1799	24
U1456C-45X-3, 45-51 cm	10.207	736	1.638	4.330	0.110	0.2490	0.0056	0.74632	1695	21	1432	29
U1456C-45X-3, 45-51 cm	27.674	7.98	1.810	2.130	0.120	0.1869	0.0072	0.27513	1128	42	1106	40
U1456C-45X-3, 45-51 cm	22.130	414	1.029	1.151	0.022	0.1281	0.0022	0.49142	776	10	777	13
U1456C-45X-3, 45-51 cm	9.377	1000	1.610	0.059	0.003	0.0089	0.0004	0.22952	58.5	3.2	57.3	2.4
U1456C-45X-3, 45-51 cm	19.079	421	9.300	1.744	0.042	0.1692	0.0037	0.54256	1022	16	1007	21
U1456C-45X-3, 45-51 cm	19.356	113.8	1.061	1.209	0.052	0.1352	0.0044	0.62103	798	23	816	25
U1456C-45X-3, 45-51 cm	27.674	241	1.791	2.066	0.052	0.1876	0.0044	0.48011	1132	17	1107	24
U1456C-45X-3, 45-51 cm	27.674	743	1.770	0.547	0.012	0.0715	0.0021	0.51908	442.9	8	445	13
U1456C-45X-3, 45-51 cm	25.456	158.4	1.497	8.080	0.120	0.4114	0.0055	0.53498	2238	13	2220	25
U1456C-45X-3, 45-51 cm	25.456	81.7	0.575	4.435	0.067	0.3039	0.0035	0.44383	1716	12	1710	17
U1456C-45X-3, 45-51 cm	13.535	427	1.970	7.300	0.280	0.3500	0.0130	0.91179	2138	36	1928	60
U1456C-45X-3, 45-51 cm	27.674	59.6	0.835	1.211	0.034	0.1318	0.0020	0.24937	803	16	798	11
U1456C-45X-3, 45-51 cm	27.675	430	3.240	6.890	0.099	0.3938	0.0051	0.66866	2096	12	2139	24
U1456C-45X-3, 45-51 cm	14.920	854	3.060	1.274	0.023	0.1343	0.0021	0.62317	833	10	812	12
U1456C-45X-3, 45-51 cm	20.743	155.6	1.389	6.541	0.064	0.3731	0.0032	0.50028	2050	8.7	2043	15
U1456C-45X-3, 45-51 cm	27.674	990	0.892	0.081	0.002	0.0126	0.0001	0.04478	79.3	2.3	80.74	0.91
U1456C-45X-3, 45-51 cm	27.674	989	0.771	0.175	0.004	0.0251	0.0003	0.27054	163.4	3.3	160	2.1
U1456C-45X-3, 45-51 cm	19.634	466	1.559	3.196	0.065	0.2066	0.0037	0.83724	1453	15	1210	20

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456C-45X-3, 45-51 cm	27.674	188.6	1.152	0.807	0.023	0.0982	0.0019	0.53061	598	13	603	11
U1456C-45X-3, 45-51 cm	21.021	2650	3.950	0.116	0.004	0.0176	0.0004	0.48284	111.8	3.5	112.1	2.4
U1456C-45X-3, 45-51 cm	27.674	718	2.360	0.659	0.012	0.0823	0.0015	0.53832	512.8	7.1	509.6	8.8
U1456C-45X-3, 45-51 cm	14.366	195	3.900	0.843	0.035	0.1029	0.0041	0.55812	620	20	630	24
U1456C-45X-3, 45-51 cm	10.485	204	1.175	0.148	0.010	0.0195	0.0008	0.28850	139.5	9.1	124.2	4.8
U1456C-45X-3, 45-51 cm	25.734	81.3	1.237	0.792	0.027	0.0955	0.0021	0.08393	589	15	587	13
U1456C-45X-3, 45-51 cm	5.495	138.7	0.541	0.187	0.019	0.0142	0.0005	0.33879	173	16	91	3.3
U1456C-45X-3, 45-51 cm	8.267	196	0.917	0.091	0.010	0.0131	0.0005	0.10840	88.3	8.8	84.1	3
U1456C-45X-3, 45-51 cm	27.675	316	1.035	0.187	0.007	0.0248	0.0005	0.27104	173.1	6	158.1	3.1
U1456C-45X-3, 45-51 cm	24.624	465	2.610	10.120	0.280	0.4070	0.0120	0.74964	2437	26	2193	56
U1456C-45X-3, 45-51 cm	21.575	2620	1.211	0.175	0.003	0.0255	0.0003	0.87875	163.2	2.8	162	2
U1456C-45X-3, 45-51 cm	27.674	193.3	1.910	0.122	0.007	0.0175	0.0005	0.06835	116.2	5.9	111.9	2.9
U1456C-45X-3, 45-51 cm	27.674	253	2.880	1.273	0.041	0.1290	0.0028	0.45211	830	19	781	16
U1456C-45X-3, 45-51 cm	8.040	531	120.000	0.019	0.003	0.0029	0.0002	0.31775	19	2.9	18.5	1.3
U1456C-45X-3, 45-51 cm	9.098	1180	2.530	0.727	0.041	0.0748	0.0038	0.57053	552	24	464	23
U1456C-45X-3, 45-51 cm	27.674	178.8	1.056	0.708	0.018	0.0912	0.0024	0.45612	543	11	562	14
U1456C-45X-3, 45-51 cm	27.674	144.4	0.474	0.612	0.015	0.0818	0.0016	0.32830	482.9	9.7	506.3	9.3
U1456C-45X-3, 45-51 cm	2.495	1359	106.000	0.151	0.021	0.0207	0.0018	0.50550	142	18	132	11
U1456C-45X-3, 45-51 cm	17.138	1374	0.561	0.769	0.009	0.0937	0.0009	0.47805	578.7	5.4	577	5.2
U1456C-45X-3, 45-51 cm	12.980	920	26.400	0.058	0.004	0.0085	0.0004	0.49499	57.2	3.4	54.7	2.3
U1456C-45X-3, 45-51 cm	27.674	1797	4.980	0.024	0.002	0.0036	0.0002	0.62972	24.3	1.5	23.2	1.1
U1456C-45X-3, 45-51 cm	10.763	644	1.426	0.586	0.018	0.0747	0.0014	0.51337	467	11	464.5	8.1
U1456C-45X-3, 45-51 cm	12.980	1545	25.300	0.643	0.039	0.0717	0.0040	0.69458	499	24	445	24
U1456C-45X-3, 45-51 cm	20.466	1674	1.580	0.022	0.001	0.0034	0.0001	0.21532	22.1	1.1	21.84	0.55
U1456C-45X-3, 45-51 cm	14.089	206	1.970	1.096	0.038	0.1219	0.0044	0.59815	748	18	740	25
U1456C-45X-3, 45-51 cm	27.675	425	2.410	1.032	0.036	0.1177	0.0034	0.73025	714	18	716	20
U1456C-45X-3, 45-51 cm	7.435	393	36.000	0.047	0.005	0.0073	0.0004	0.17837	46.5	5.2	46.6	2.3
U1456C-45X-3, 45-51 cm	1.664	2720	290.000	0.114	0.011	0.0171	0.0008	0.15502	109.7	9.7	109.1	5
U1456C-45X-3, 45-51 cm	17.416	513	8.520	0.911	0.017	0.1041	0.0019	0.73501	656.8	9.3	638	11
U1456C-45X-3, 45-51 cm	27.675	451	5.780	1.025	0.018	0.1175	0.0019	0.45430	716.1	9.1	717	11
U1456C-45X-3, 45-51 cm	21.574	818	13.000	0.164	0.006	0.0245	0.0008	0.55973	153.9	5.2	156.1	4.9
U1456C-45X-3, 45-51 cm	27.674	499	12.310	1.273	0.031	0.1372	0.0036	0.64390	830	14	830	20
U1456C-45X-3, 45-51 cm	16.861	687	1.456	0.966	0.015	0.1130	0.0017	0.36981	685.6	7.6	689.8	9.8
U1456C-45X-3, 45-51 cm	21.852	85	1.950	1.041	0.061	0.1096	0.0053	0.61139	714	31	668	31
U1456C-45X-3, 45-51 cm	27.675	147.7	0.577	3.295	0.096	0.2508	0.0065	0.51267	1476	22	1444	33
U1456C-45X-3, 45-51 cm	27.674	473	1.042	0.112	0.004	0.0164	0.0003	0.30310	107.7	3.9	104.7	2.2
U1456C-45X-3, 45-51 cm	27.675	62.5	0.787	0.060	0.012	0.0082	0.0003	0.12567	57.6	9.8	52.8	2.1
U1456C-45X-3, 45-51 cm	27.675	247.5	3.060	0.239	0.008	0.0348	0.0008	0.13218	217.5	6.9	220.3	4.9
U1456C-45X-3, 45-51 cm	23.239	916	4.630	0.605	0.009	0.0788	0.0009	0.54356	479.9	5.7	488.8	5.1
U1456C-45X-3, 45-51 cm	13.257	261	0.583	0.154	0.008	0.0221	0.0005	0.12194	145.1	7	140.6	3.4
U1456C-45X-3, 45-51 cm	14.644	152.5	0.640	0.043	0.004	0.0068	0.0002	0.03976	43	4.2	43.8	1.4

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456C-45X-3, 45-51 cm	27.674	260.7	1.449	0.117	0.004	0.0164	0.0003	0.21724	112.4	3.8	105	2
U1456C-45X-3, 45-51 cm	23.115	285	1.220	1.205	0.022	0.1317	0.0018	0.54064	803	10	798	10
U1456C-45X-3, 45-51 cm	24.773	104.6	0.621	1.551	0.034	0.1555	0.0027	0.54817	948	14	931	15
U1456C-45X-3, 45-51 cm	27.675	86	1.352	0.082	0.006	0.0126	0.0004	0.03869	80.3	5.8	80.8	2.4
U1456C-45X-3, 45-51 cm	27.674	728	2.720	0.112	0.003	0.0161	0.0003	0.43625	107.4	3	102.7	1.6
U1456C-45X-3, 45-51 cm	27.674	393.3	3.347	1.353	0.019	0.1440	0.0017	0.46847	867.6	8	866.8	9.8
U1456C-45X-3, 45-51 cm	16.692	102.7	1.517	3.609	0.091	0.2661	0.0057	0.70853	1547	20	1520	29
U1456C-45X-3, 45-51 cm	27.674	65.9	1.383	0.081	0.007	0.0132	0.0004	0.03177	77.9	6.7	84.3	2.7
U1456C-45X-3, 45-51 cm	23.530	520	3.360	0.611	0.010	0.0786	0.0011	0.52203	483.3	6.4	487.4	6.7
U1456C-45X-3, 45-51 cm	27.675	441	6.220	0.051	0.003	0.0078	0.0002	0.16873	50.5	2.5	50.2	1.4
U1456C-45X-3, 45-51 cm	27.674	847	1.845	0.115	0.003	0.0177	0.0003	0.43336	110.8	2.3	112.9	1.7
U1456C-45X-3, 45-51 cm	27.675	1560	0.950	0.034	0.001	0.0051	0.0001	0.22126	34.3	1.2	32.92	0.56
U1456C-45X-3, 45-51 cm	27.674	318	1.890	1.272	0.026	0.1411	0.0028	0.65389	831	12	850	16
U1456C-45X-3, 45-51 cm	27.674	211.4	1.874	3.073	0.042	0.2470	0.0031	0.51342	1425	10	1422	16
U1456C-45X-3, 45-51 cm	24.566	2103	72.000	0.097	0.003	0.0143	0.0003	0.66174	93.5	2.3	91.7	1.8
U1456C-45X-3, 45-51 cm	16.691	1430	4.990	0.117	0.005	0.0177	0.0005	0.67274	111.7	4.4	113	3.1
U1456C-45X-3, 45-51 cm	16.277	757	0.401	0.069	0.003	0.0099	0.0002	0.39307	67.9	2.8	63.2	1.2
U1456C-45X-3, 45-51 cm	27.674	1014	2.145	1.346	0.021	0.1445	0.0024	0.74004	865.3	9.2	870	14
U1456C-45X-3, 45-51 cm	27.675	490	2.522	0.119	0.003	0.0182	0.0003	0.23765	113.9	3	116.3	1.6
U1456C-45X-3, 45-51 cm	27.674	103.7	1.987	1.139	0.024	0.1222	0.0016	0.48057	770	12	743	9.3
U1456C-45X-3, 45-51 cm	27.675	256	1.600	1.289	0.023	0.1387	0.0019	0.49998	839	10	837	10
U1456C-45X-3, 45-51 cm	27.674	1647	2.690	0.117	0.003	0.0177	0.0003	0.55779	112.5	2.3	113	1.7
U1456C-45X-3, 45-51 cm	1.637	3790	105.000	0.017	0.005	0.0025	0.0004	0.62749	17.3	5	16.2	2.8
U1456C-45X-3, 45-51 cm	18.764	873	7.420	0.992	0.022	0.1152	0.0027	0.70543	700	11	702	16
U1456C-45X-3, 45-51 cm	27.675	171.1	1.169	0.062	0.004	0.0096	0.0003	0.20625	60.5	3.6	61.7	1.6
U1456C-45X-3, 45-51 cm	15.190	247.7	1.227	1.044	0.023	-0.0065	0.0001	0.66906	725	11	-42.03	0.8
U1456C-45X-3, 45-51 cm	27.674	871	1.321	0.117	0.003	0.0174	0.0003	0.40829	112.5	2.9	110.9	1.9
U1456C-45X-3, 45-51 cm	21.886	647	2.820	1.732	0.041	0.1720	0.0042	0.83692	1017	15	1022	23
U1456C-45X-3, 45-51 cm	27.674	346	10.600	1.434	0.026	0.1491	0.0022	0.65471	901	11	896	12
U1457C-41R-2, 20-26 cm	14.917	65.7	0.479	10.190	0.180	0.4614	0.0063	0.37949	2449	17	2444	28
U1457C-41R-2 20-26 cm	5.468	1080	7.600	0.705	0.033	0.0839	0.0018	0.66618	541	19	519	11
U1457C-41R-2 20-26 cm	7.323	1711	13.330	2.931	0.098	0.2125	0.0059	0.94941	1387	26	1241	32
U1457C-41R-2 20-26 cm	24.636	934	1.441	0.126	0.004	0.0179	0.0003	0.50480	120.8	3.3	114.3	2.1
U1457C-41R-2 20-26 cm	22.815	228	0.882	1.076	0.021	0.1215	0.0014	0.31996	740	10	739.2	8.1
U1457C-41R-2 20-26 cm	9.449	303	0.668	0.059	0.006	0.0091	0.0003	0.08016	57.8	6	58.6	1.9
U1457C-41R-2 20-26 cm	28.282	1281	0.664	0.021	0.001	0.0030	0.0001	0.01711	20.9	0.91	19.38	0.34
U1457C-41R-2 20-26 cm	15.220	534	2.460	1.307	0.027	0.1390	0.0025	0.52010	847	12	839	14
U1457C-41R-2 20-26 cm	9.145	717	10.200	0.424	0.017	0.0507	0.0017	0.63048	358	12	318	11
U1457C-41R-2 20-26 cm	27.675	229	0.972	0.038	0.003	0.0057	0.0002	0.15030	37.2	2.9	36.81	0.97
U1457C-41R-2 20-26 cm	19.170	279.4	3.090	1.380	0.024	0.1465	0.0017	0.37933	879	10	881.3	9.6
U1457C-41R-2 20-26 cm	15.524	303.8	1.462	1.613	0.026	0.1614	0.0019	0.38570	974.1	9.9	965	10

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-41R-2 20-26 cm	16.436	572	1.954	1.278	0.017	0.1345	0.0012	0.53509	835.2	7.7	813.6	7.1
U1457C-41R-2 20-26 cm	27.675	272	1.120	1.536	0.024	0.1580	0.0014	0.36204	943.3	9.4	945.6	7.9
U1457C-41R-2 20-26 cm	27.674	959	0.525	0.047	0.002	0.0070	0.0001	0.08146	46.7	1.9	45.13	0.61
U1457C-41R-2 20-26 cm	23.119	525	3.890	0.796	0.013	0.0943	0.0011	0.48271	593.5	7.4	581.1	6.2
U1457C-41R-2 20-26 cm	23.421	663	1.635	1.247	0.018	0.1331	0.0018	0.62175	821	8.4	805	10
U1457C-41R-2 20-26 cm	17.346	114.4	2.770	1.087	0.028	0.1150	0.0019	0.30222	745	14	702	11
U1457C-41R-2 20-26 cm	18.865	575	1.396	1.602	0.025	0.1570	0.0016	0.42963	970	9.6	939.7	9
U1457C-41R-2 20-26 cm	27.675	1457	2.870	0.023	0.001	0.0035	0.0001	0.15765	22.68	0.89	22.65	0.4
U1457C-41R-2 20-26 cm	28.586	943	15.000	0.236	0.007	0.0351	0.0009	0.58434	214.3	6	222.3	5.8
U1457C-41R-2 20-26 cm	24.333	169.4	1.929	1.315	0.024	0.1403	0.0015	0.27397	850	11	846.2	8.3
U1457C-41R-2 20-26 cm	27.674	1145	2.140	0.169	0.003	0.0251	0.0002	0.30694	158.5	2.5	159.8	1.4
U1457C-41R-2 20-26 cm	25.245	449	1.829	0.653	0.012	0.0816	0.0008	0.48043	509.1	7.5	505.6	5
U1457C-41R-2 20-26 cm	27.674	501	3.680	1.231	0.016	0.1330	0.0013	0.50280	813.6	7.5	804.6	7.7
U1457C-41R-2 20-26 cm	27.674	275	1.260	0.174	0.006	0.0256	0.0004	0.16234	162.5	4.8	162.8	2.4
U1457C-41R-2 20-26 cm	21.904	200	1.024	0.692	0.023	0.0860	0.0018	0.46663	533	14	531	11
U1457C-41R-2 20-26 cm	8.841	436	1.507	1.086	0.026	0.1097	0.0014	0.51644	745	13	670.9	8
U1457C-41R-2 20-26 cm	7.626	1170	5.410	2.251	0.059	0.1913	0.0042	0.65198	1195	18	1128	23
U1457C-41R-2 20-26 cm	6.683	292	7.640	3.373	0.075	0.2413	0.0042	0.62444	1497	17	1393	22
U1457C-41R-2 20-26 cm	27.675	309	2.150	1.125	0.024	0.1261	0.0020	0.45663	763	11	765	11
U1457C-41R-2 20-26 cm	10.056	242	0.674	0.995	0.051	0.1133	0.0028	0.54779	702	27	691	16
U1457C-41R-2 20-26 cm	26.156	465	5.750	1.683	0.063	0.1526	0.0043	0.20372	993	23	917	25
U1457C-41R-2 20-26 cm	26.155	582	3.750	2.450	0.130	0.1759	0.0066	0.86408	1232	37	1041	36
U1457C-41R-2 20-26 cm	21.599	765	25.900	4.940	0.110	0.2996	0.0066	0.61973	1804	18	1687	32
U1457C-41R-2 20-26 cm	27.674	172.7	0.741	0.109	0.007	0.0164	0.0005	0.35166	104.7	6.2	104.5	3
U1457C-41R-2 20-26 cm	26.155	454	1.329	1.638	0.020	0.1650	0.0014	0.55530	983.9	7.6	984.1	8
U1457C-41R-2 20-26 cm	8.234	1377	1.042	0.997	0.026	0.0940	0.0021	0.65745	701	13	579	12
U1457C-41R-2 20-26 cm	27.674	142.3	0.688	3.982	0.068	0.2900	0.0052	0.52713	1627	14	1640	26
U1457C-41R-2 20-26 cm	21.599	433	1.660	7.830	0.120	0.3565	0.0056	0.65278	2209	13	1964	27
U1457C-41R-2 20-26 cm	24.940	1470	1.596	0.133	0.004	0.0195	0.0003	0.35110	126.8	3.4	124.4	2
U1457C-41R-2 20-26 cm	5.164	1099	27.700	0.570	0.035	0.0691	0.0034	0.84811	456	22	430	20
U1457C-41R-2 20-26 cm	21.296	44.5	-17.400	1.315	0.063	0.1375	0.0054	0.43207	842	28	828	30
U1457C-41R-2 20-26 cm	5.804	1047	6.020	6.900	0.240	0.3290	0.0130	0.76747	2095	30	1829	64
U1457C-41R-2 20-26 cm	27.675	77.5	0.912	1.376	0.045	0.1482	0.0036	0.37693	877	18	890	20
U1457C-41R-2 20-26 cm	10.664	1224	35.700	5.040	0.130	0.3170	0.0110	0.59420	1823	22	1774	54
U1457C-41R-2 20-26 cm	27.675	780	1.761	0.110	0.004	0.0163	0.0004	0.44147	105.8	3.4	104.2	2.3
U1457C-41R-2 20-26 cm	27.675	80.5	0.480	0.661	0.022	0.0820	0.0016	0.22096	512	13	507.6	9.6
U1457C-41R-2 20-26 cm	12.790	87.9	1.296	0.127	0.014	0.0186	0.0009	0.39623	120	13	118.7	5.9
U1457C-41R-2 20-26 cm	27.674	129.9	1.064	0.060	0.005	0.0082	0.0003	0.04673	58.8	5	52.3	1.6
U1457C-41R-2 20-26 cm	27.674	57.9	0.651	0.060	0.008	0.0078	0.0004	0.04158	58.2	7.6	50.2	2.3
U1457C-41R-2 20-26 cm	27.674	208	1.503	0.043	0.003	0.0068	0.0002	0.00739	42.3	2.7	43.4	1.1
U1457C-41R-2 20-26 cm	6.379	846	0.964	0.924	0.029	0.0918	0.0029	0.64648	664	15	566	17

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-41R-2 20-26 cm	28.377	733	0.626	0.068	0.003	0.0001	0.0011	0.01815	66.9	2.5	0.4	7
U1457C-41R-2 20-26 cm	12.696	379.4	1.408	0.319	0.011	0.0451	0.0008	0.32064	280.4	8.1	284.1	4.8
U1457C-41R-2 20-26 cm	27.674	373	1.946	1.580	0.022	0.1603	0.0016	0.47070	960.8	8.6	958.3	8.9
U1457C-41R-2 20-26 cm	27.674	1550	14.820	4.761	0.066	0.2996	0.0041	0.75711	1776	12	1688	21
U1457C-41R-2 20-26 cm	19.951	470	1.476	2.521	0.053	0.2080	0.0029	0.71000	1275	15	1218	16
U1457C-41R-2 20-26 cm	27.674	3800	3.670	0.014	0.000	0.0020	0.0000	0.34510	14.5	0.41	13.07	0.22
U1457C-41R-2 20-26 cm	18.781	969	3.620	4.915	0.071	-0.0164	0.0002	0.75166	1803	12	-106.3	1.4
U1457C-41R-2 20-26 cm	27.674	572	1.700	0.123	0.004	0.0174	0.0002	0.32794	117.5	3.2	111.1	1.4
U1457C-41R-2 20-26 cm	27.674	569	2.940	1.462	0.024	0.1498	0.0019	0.60897	913	9.8	899	11
U1457C-41R-2 20-26 cm	11.058	595	25.700	0.650	0.016	0.0812	0.0014	0.59652	507.9	9.6	503.3	8.4
U1457C-41R-2 20-26 cm	27.675	3330	1.562	0.021	0.001	0.0032	0.0003	0.11688	20.6	0.61	20.7	1.7
U1457C-41R-2 20-26 cm	10.824	448	4.050	5.460	0.150	-0.0178	0.0004	0.90096	1891	22	-115.9	2.6
U1457C-41R-2 20-26 cm	12.462	236.1	0.591	1.141	0.030	0.1236	0.0026	0.49314	771	15	751	15
U1457C-41R-2 20-26 cm	27.674	346	2.187	9.970	0.110	0.4460	0.0042	0.73483	2430	10	2376	19
U1457C-41R-2 20-26 cm	19.016	92.9	1.492	1.320	0.036	0.1370	0.0025	0.42700	851	16	827	14
U1457C-41R-2 20-26 cm	24.632	246	2.420	0.983	0.022	0.1111	0.0018	0.47912	693	11	679	10
U1457C-41R-2 20-26 cm	18.079	370	11.600	0.819	0.019	0.0979	0.0017	0.59268	606	11	601.9	9.9
U1457C-41R-2 20-26 cm	7.021	1228	3.240	0.680	0.022	0.0796	0.0019	0.50953	526	14	494	11
U1457C-41R-2 20-26 cm	12.931	62.6	1.592	1.379	0.053	0.1483	0.0037	0.55221	875	23	891	21
U1457C-41R-2 20-26 cm	14.335	244	0.970	0.068	0.007	0.0081	0.0004	0.59782	66.2	6.7	52.2	2.7
U1457C-41R-2 20-26 cm	27.674	1482	0.953	0.127	0.003	0.0175	0.0003	0.43136	121	3	111.8	1.7
U1457C-41R-2 20-26 cm	5.442	1009	11.210	0.484	0.020	0.0632	0.0017	0.66944	400	14	395	10
U1457C-41R-2 20-26 cm	12.637	427	6.500	1.527	0.050	0.1472	0.0032	0.58300	938	19	885	18
U1457C-41R-2 20-26 cm	27.675	1558	5.350	0.107	0.003	0.0162	0.0003	0.42118	102.9	2.3	103.8	1.6
U1457C-41R-2 20-26 cm	18.313	634	0.665	0.061	0.003	0.0090	0.0001	0.31213	59.6	2.4	57.72	0.91
U1457C-41R-2 20-26 cm	21.824	162	1.063	0.066	0.006	0.0097	0.0003	0.05440	64.8	5.2	62.2	1.9
U1457C-41R-2 20-26 cm	27.674	195	1.115	0.091	0.005	0.0134	0.0004	0.16914	87.7	4.8	85.8	2.3
U1457C-41R-2 20-26 cm	27.675	1130	4.180	0.384	0.012	0.0513	0.0012	0.56766	328.9	8.6	322.3	7.4
U1457C-41R-2 20-26 cm	27.674	2050	2.930	0.551	0.011	0.0713	0.0013	0.75132	444.8	7.1	443.8	7.8
U1457C-41R-2 20-26 cm	11.526	336	1.556	1.245	0.028	0.1337	0.0023	0.60390	820	13	809	13
U1457C-41R-2 20-26 cm	17.377	27.5	0.412	1.102	0.049	0.1196	0.0034	0.16975	748	24	728	19
U1457C-41R-2 20-26 cm	27.674	603	4.520	8.380	0.140	0.4172	0.0068	0.81761	2269	15	2245	31
U1457C-41R-2 20-26 cm	27.674	139.3	1.482	7.459	0.092	0.3984	0.0043	0.63381	2166	11	2161	20
U1457C-41R-2 20-26 cm	21.121	540	4.420	0.954	0.020	0.1039	0.0020	0.67753	680	11	637	12
U1457C-41R-2 20-26 cm	14.569	336	1.350	0.986	0.028	0.1101	0.0026	0.65858	695	14	673	15
U1457C-41R-2 20-26 cm	27.674	115.6	1.613	1.078	0.027	-0.0050	0.0170	0.04607	741	13	-5	72
U1457C-41R-2 20-26 cm	27.674	1686	0.768	0.157	0.003	0.0230	0.0015	0.05421	148.2	2.5	146.2	9.7
U1457C-41R-2 20-26 cm	22.525	121.4	0.764	0.070	0.006	0.0100	0.0003	0.04998	68.5	5.7	63.9	1.8
U1457C-41R-2 20-26 cm	26.036	378.9	1.347	5.708	0.089	0.3315	0.0046	0.76866	1929	14	1844	22
U1457C-41R-2 20-26 cm	23.931	1356	10.850	0.752	0.013	0.0870	0.0014	0.68740	568.4	7.4	537.8	8.3
U1457C-41R-2 20-26 cm	27.674	1806	1.268	0.047	0.001	0.0070	0.0001	0.42464	46.5	1.2	44.96	0.69

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-41R-2 20-26 cm	9.888	193.1	1.338	0.855	0.037	0.0963	0.0023	0.51667	629	21	592	14
U1457C-41R-2 20-26 cm	27.674	427.8	2.153	1.560	0.026	0.1566	0.0023	0.68958	954	11	937	13
U1457C-41R-2 20-26 cm	3.569	1970	16.840	0.459	0.018	0.0567	0.0020	0.48564	383	13	355	12
U1457C-41R-2 20-26 cm	12.403	254.3	1.215	1.729	0.042	0.1686	0.0031	0.65943	1017	16	1004	17
U1457C-41R-2 20-26 cm	27.675	551	1.160	0.098	0.003	0.0150	0.0003	0.30562	94.5	2.8	96	1.7
U1457C-41R-2 20-26 cm	3.744	670	73.500	0.242	0.019	0.0314	0.0014	0.48701	220	16	199.6	8.4
U1457C-41R-2 20-26 cm	5.911	326.5	1.997	10.430	0.200	0.4282	0.0071	0.54699	2473	18	2297	32
U1457C-41R-2 20-26 cm	13.868	657	1.594	0.828	0.026	0.0972	0.0024	0.76408	610	14	598	14
U1457C-41R-2 20-26 cm	27.674	3120	1.530	0.025	0.001	0.0037	0.0001	0.40658	25.49	0.79	23.66	0.4
U1457C-41R-2 20-26 cm	7.255	473	4.170	0.610	0.021	0.0781	0.0027	0.57040	483	13	484	16
U1457C-41R-2 20-26 cm	13.867	105.1	1.550	1.522	0.044	0.1490	0.0028	0.45950	936	18	895	16
U1457C-41R-2 20-26 cm	12.462	123.1	1.570	0.457	0.027	0.0540	0.0018	0.65579	379	19	339	11
U1457C-41R-2 20-26 cm	16.441	453	1.469	1.107	0.021	0.1177	0.0015	0.51252	755.7	9.9	717.4	8.9
U1457C-41R-2 20-26 cm	27.675	353.5	6.270	1.531	0.029	0.1555	0.0026	0.71005	942	12	931	15
U1457C-41R-2 20-26 cm	27.674	344	1.165	1.638	0.039	0.1618	0.0036	0.62292	982	15	965	20
U1457C-41R-2 20-26 cm	18.548	587	5.390	1.700	0.048	0.1490	0.0036	0.75995	1005	18	895	20
U1457C-41R-2 20-26 cm	27.675	117.3	0.493	0.637	0.018	0.0780	0.0013	0.47399	498	11	483.8	8
U1457C-41R-2 20-26 cm	27.674	843	5.230	0.315	0.007	0.0421	0.0008	0.64725	277.6	5.5	265.8	4.8
U1457C-41R-2 20-26 cm	10.122	808	0.583	0.051	0.003	0.0073	0.0002	0.19642	50.8	3.2	46.7	1.2
U1457C-41R-2 20-26 cm	7.080	267.7	3.310	1.434	0.057	0.1469	0.0042	0.72928	901	24	883	23
U1457C-41R-2 20-26 cm	25.568	1283	2.164	3.764	0.052	0.2647	0.0031	0.71955	1583	11	1513	16
U1457C-41R-2 20-26 cm	19.717	146	1.756	1.634	0.037	0.1643	0.0029	0.55047	983	15	980	16
U1457C-41R-2 20-26 cm	19.718	231	0.590	0.055	0.004	0.0079	0.0002	0.14652	54.1	3.8	50.5	1.3
U1457C-41R-2 20-26 cm	26.270	491	1.072	3.975	0.055	0.2838	0.0035	0.68021	1627	11	1609	17
U1457C-41R-2 20-26 cm	15.505	588	16.210	5.142	0.091	0.3118	0.0047	0.77705	1843	14	1749	23
U1457C-41R-2 20-26 cm	16.676	520	4.740	4.601	0.079	0.3112	0.0049	0.71524	1747	14	1746	24
U1457C-41R-2 20-26 cm	8.250	332.9	0.335	0.781	0.035	0.0801	0.0024	0.34344	584	20	496	14
U1457C-41R-2 20-26 cm	9.654	738	1.212	2.635	0.065	0.1811	0.0040	0.76162	1308	18	1073	22
U1457C-41R-2 20-26 cm	27.675	1215	2.920	0.223	0.004	0.0315	0.0004	0.51601	204.2	3.5	199.9	2.7
U1457C-41R-2 20-26 cm	9.888	303	0.818	0.095	0.007	0.0125	0.0004	0.16668	92	6.8	80.3	2.3
U1457C-41R-2 20-26 cm	15.973	540	4.300	0.038	0.003	0.0055	0.0002	0.15940	37.7	3	35	1.3
U1457C-42R-1 80-88 cm	15.588	324	1.270	1.011	0.019	0.1152	0.0015	0.51582	708.6	9.7	703	8.7
U1457C-42R-1 80-88 cm	27.674	652	1.209	1.807	0.018	0.1719	0.0014	0.56609	1047	6.3	1022	7.8
U1457C-42R-1 80-88 cm	27.675	101.1	0.827	1.663	0.028	0.1632	0.0015	0.31721	994	11	974.3	8.2
U1457C-42R-1 80-88 cm	14.951	682	30.100	11.660	0.120	0.4624	0.0037	0.62544	2576	10	2450	16
U1457C-42R-1 80-88 cm	19.087	608	3.680	0.806	0.011	0.0944	0.0010	0.31832	599.7	6.1	581.3	5.9
U1457C-42R-1 80-88 cm	27.674	138	1.780	0.040	0.003	0.0057	0.0002	0.12465	39.5	3.3	36.7	1.1
U1457C-42R-1 80-88 cm	25.448	201	0.598	0.052	0.004	0.0075	0.0002	0.11508	50.9	3.5	48.2	1.2
U1457C-42R-1 80-88 cm	27.674	192.7	0.718	0.057	0.003	0.0090	0.0002	0.12405	56.4	3.1	57.6	1.2
U1457C-42R-1 80-88 cm	27.674	100.4	0.521	0.089	0.006	0.0139	0.0003	0.02780	86.4	5.6	88.9	1.6
U1457C-42R-1 80-88 cm	27.674	1823	46.200	0.050	0.001	0.0076	0.0002	0.66367	49.1	1.2	48.9	1

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-42R-1 80-88 cm	16.858	1085	23.400	1.384	0.036	0.1454	0.0036	0.65247	879	15	875	20
U1457C-42R-1 80-88 cm	10.816	749	6.180	1.776	0.032	0.1750	0.0034	0.74200	1036	12	1039	18
U1457C-42R-1 80-88 cm	27.674	248	1.663	0.115	0.006	0.0168	0.0006	0.33376	109.6	5.5	107.2	3.6
U1457C-42R-1 80-88 cm	27.675	283	0.585	0.178	0.005	0.0265	0.0004	0.42668	165.5	4.6	168.3	2.7
U1457C-42R-1 80-88 cm	3.817	584	3.300	5.070	0.260	0.3170	0.0170	0.58596	1826	44	1771	81
U1457C-42R-1 80-88 cm	17.813	358	1.798	13.810	0.180	0.5354	0.0050	0.56513	2735	12	2763	21
U1457C-42R-1 80-88 cm	3.499	595	20.200	0.251	0.016	0.0356	0.0015	0.47398	227	13	225.6	9.2
U1457C-42R-1 80-88 cm	8.272	341.4	2.287	9.300	0.110	0.4248	0.0055	0.69229	2367	11	2282	25
U1457C-42R-1 80-88 cm	17.495	459	3.370	0.992	0.024	0.1043	0.0020	0.76466	698	12	639	11
U1457C-42R-1 80-88 cm	12.724	383	3.260	10.860	0.180	0.4537	0.0068	0.64298	2509	15	2411	30
U1457C-42R-1 80-88 cm	19.086	493	2.179	1.799	0.025	0.1777	0.0021	0.65642	1045	9.6	1054	12
U1457C-42R-1 80-88 cm	14.951	259.4	1.127	4.629	0.070	0.2890	0.0048	0.68363	1753	13	1635	24
U1457C-42R-1 80-88 cm	27.674	163.1	3.510	1.380	0.022	0.1468	0.0017	0.37485	878.9	9.4	882.9	9.7
U1457C-42R-1 80-88 cm	13.360	904	13.340	0.637	0.010	0.0795	0.0010	0.38155	499.8	5.8	492.8	6.1
U1457C-42R-1 80-88 cm	27.674	193.6	1.476	4.617	0.071	0.3121	0.0049	0.71722	1749	13	1750	24
U1457C-42R-1 80-88 cm	27.675	237	1.241	1.608	0.026	0.1647	0.0028	0.48156	971	10	982	15
U1457C-42R-1 80-88 cm	27.675	82.2	0.784	4.910	0.150	0.3298	0.0086	0.59682	1794	26	1832	42
U1457C-42R-1 80-88 cm	15.587	92.5	0.543	11.300	0.150	0.4947	0.0051	0.59480	2546	12	2590	22
U1457C-42R-1 80-88 cm	23.539	152.6	2.510	1.089	0.030	0.1233	0.0026	0.74816	745	14	749	15
U1457C-42R-1 80-88 cm	24.493	537	0.490	0.707	0.012	0.0869	0.0011	0.70446	542.3	7	537.1	6.4
U1457C-42R-1 80-88 cm	2.545	725	30.000	0.026	0.005	0.0037	0.0003	0.08860	25.8	4.4	23.6	1.8
U1457C-42R-1 80-88 cm	27.674	369	1.064	0.256	0.005	0.0364	0.0003	0.02170	231.3	4.2	230.5	2.1
U1457C-42R-1 80-88 cm	27.674	770	2.470	2.044	0.018	0.1977	0.0016	0.71931	1130	6	1163	8.8
U1457C-42R-1 80-88 cm	8.907	678	9.110	1.002	0.022	0.1158	0.0020	0.59087	704	11	706	12
U1457C-42R-1 80-88 cm	23.221	241	2.100	4.566	0.062	0.2905	0.0039	0.87463	1741	11	1643	19
U1457C-42R-1 80-88 cm	27.675	698	5.010	1.681	0.024	0.1676	0.0022	0.66904	999.7	9	999	12
U1457C-42R-1 80-88 cm	26.402	382	1.902	1.220	0.013	0.1338	0.0010	0.49116	808.9	6.1	809.6	5.8
U1457C-42R-1 80-88 cm	27.675	593	0.654	0.042	0.002	0.0063	0.0001	0.02537	41.3	1.4	40.24	0.68
U1457C-42R-1 80-88 cm	27.674	194.4	1.350	1.627	0.025	0.1631	0.0016	0.61519	978.8	9.6	973.7	8.9
U1457C-42R-1 80-88 cm	15.906	66.2	0.305	1.630	0.041	0.1604	0.0026	0.28297	982	16	959	14
U1457C-42R-1 80-88 cm	27.674	50.9	0.657	1.262	0.031	0.1375	0.0016	0.19800	825	14	830.4	9.2
U1457C-42R-1 80-88 cm	27.675	197	0.619	0.057	0.004	0.0090	0.0002	0.00845	55.6	3.4	57.8	1.2
U1457C-42R-1 80-88 cm	27.674	260.1	1.200	1.314	0.018	0.1426	0.0012	0.32979	851.8	8.2	859.1	7
U1457C-42R-1 80-88 cm	2.863	1061	39.900	0.161	0.012	0.0233	0.0010	0.78800	152	11	148.5	6
U1457C-42R-1 80-88 cm	20.040	144.5	1.110	1.507	0.024	0.1561	0.0013	0.39058	931.8	9.7	934.9	7.5
U1457C-42R-1 80-88 cm	25.129	908	1.765	0.564	0.006	0.0723	0.0005	0.35797	453.8	4	449.9	3.1
U1457C-42R-1 80-88 cm	27.674	319	0.983	0.061	0.003	0.0092	0.0002	0.12978	60.4	2.7	58.8	1.1
U1457C-42R-1 80-88 cm	16.541	104.9	0.973	1.757	0.045	0.1746	0.0035	0.57208	1027	17	1037	19
U1457C-42R-1 80-88 cm	14.315	236	1.803	1.272	0.019	0.1377	0.0016	0.33342	832.6	8.6	831.3	9.2
U1457C-42R-1 80-88 cm	27.675	546.9	3.730	1.579	0.018	0.1624	0.0017	0.51570	961.2	7.3	970	9.4
U1457C-42R-1 80-88 cm	27.675	391	0.585	0.464	0.008	0.0625	0.0005	0.20623	387.1	5.3	390.7	3

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-42R-1 80-88 cm	27.674	191.4	0.986	0.088	0.004	0.0133	0.0002	0.06521	84.9	3.6	84.9	1.4
U1457C-42R-1 80-88 cm	8.906	259	2.010	1.340	0.063	0.1472	0.0078	0.53868	859	28	883	44
U1457C-42R-1 80-88 cm	13.997	494	4.540	11.410	0.500	0.4960	0.0180	0.94500	2540	44	2588	78
U1457C-42R-1 80-88 cm	18.768	916	4.900	1.146	0.015	0.1243	0.0014	0.59777	774.9	7.1	755.3	8
U1457C-42R-1 80-88 cm	27.039	113.2	1.024	0.067	0.005	0.0087	0.0002	0.01039	65.6	4.8	55.6	1.5
U1457C-42R-1 80-88 cm	27.674	125	1.530	0.559	0.016	0.0736	0.0008	0.18843	449	11	457.7	4.9
U1457C-42R-1 80-88 cm	27.356	4760	7.420	0.039	0.001	0.0061	0.0001	0.14562	38.8	1.1	39.22	0.45
U1457C-42R-1 80-88 cm	27.674	972	1.378	0.274	0.004	0.0373	0.0004	0.45356	245.3	3.2	235.9	2.4
U1457C-42R-1 80-88 cm	15.587	854	1.814	9.350	0.160	0.4086	0.0056	0.85787	2370	15	2207	25
U1457C-42R-1 80-88 cm	13.042	674	6.150	0.114	0.004	0.0170	0.0004	0.31141	109.2	3.8	108.6	2.2
U1457C-42R-1 80-88 cm	27.674	324	1.108	10.499	0.079	0.4683	0.0031	0.69760	2479	6.9	2476	13
U1457C-42R-1 80-88 cm	13.361	67.4	0.306	0.102	0.012	0.0094	0.0004	0.05771	97	11	60.3	2.3
U1457C-42R-1 80-88 cm	11.134	695	5.090	2.286	0.050	0.2023	0.0034	0.68994	1206	15	1187	18
U1457C-42R-1 80-88 cm	19.086	1133	1.264	0.040	0.001	0.0060	0.0001	0.22610	39.9	1.1	38.5	0.48
U1457C-42R-1 80-88 cm	23.222	925	18.490	0.764	0.009	0.0922	0.0009	0.55055	576.1	5	568.6	5.1
U1457C-42R-1 80-88 cm	27.674	505	2.940	0.098	0.002	0.0147	0.0002	0.02080	94.8	2.1	93.7	1
U1457C-42R-1 80-88 cm	11.771	1145	3.360	1.539	0.022	0.1509	0.0021	0.73707	945.4	8.8	906	11
U1457C-42R-1 80-88 cm	23.856	758	4.300	9.756	0.074	0.4177	0.0031	0.66280	2412	6.8	2249	14
U1457C-42R-1 80-88 cm	22.586	152.4	1.718	0.070	0.005	0.0104	0.0002	0.07441	68	4.3	66.8	1.4
U1457C-42R-1 80-88 cm	27.674	72.2	0.890	2.045	0.038	0.1837	0.0021	0.35899	1128	13	1087	11
U1457C-42R-1 80-88 cm	27.674	705	1.340	0.061	0.002	0.0093	0.0002	0.08509	59.7	2	59.4	1.3
U1457C-42R-1 80-88 cm	27.357	768	5.800	0.044	0.001	0.0062	0.0001	0.00555	43.3	1.4	40	0.51
U1457C-42R-1 80-88 cm	19.405	348	3.061	1.909	0.045	0.1679	0.0030	0.56993	1081	16	1000	17
U1457C-42R-1 80-88 cm	25.447	22.19	1.026	0.074	0.011	0.0095	0.0005	0.03629	71	10	61.4	3
U1457C-42R-1 80-88 cm	27.674	619	1.780	1.635	0.019	0.1651	0.0015	0.67714	983	7.2	984.6	8.1
U1457C-42R-1 80-88 cm	27.675	544	4.050	0.899	0.012	0.1087	0.0014	0.55056	651.4	6.4	664.7	8.3
U1457C-42R-1 80-88 cm	27.674	1406	1.918	0.023	0.001	0.0036	0.0000	0.15891	23.5	0.78	23.03	0.25
U1457C-42R-1 80-88 cm	27.674	218	1.543	1.205	0.022	0.1350	0.0016	0.45427	801.1	9.9	816	8.9
U1457C-42R-1 80-88 cm	27.674	161.3	0.736	0.116	0.005	0.0178	0.0003	0.06753	111.1	4.3	113.9	1.9
U1457C-42R-1 80-88 cm	27.674	114.5	1.289	1.224	0.019	0.1361	0.0012	0.23119	811.5	9.2	822.2	6.5
U1457C-42R-1 80-88 cm	27.675	540	1.249	0.113	0.003	0.0173	0.0003	0.34554	108.7	2.8	110.5	1.9
U1457C-42R-1 80-88 cm	27.675	468	1.933	0.560	0.009	0.0737	0.0010	0.18784	451.1	5.8	458.4	6
U1457C-42R-1 80-88 cm	27.674	1298	4.120	0.040	0.001	0.0059	0.0001	0.22598	40	1	37.99	0.76
U1457C-42R-1 80-88 cm	11.771	126.3	0.900	1.286	0.046	0.1399	0.0044	0.77596	840	22	844	25
U1457C-42R-1 80-88 cm	27.674	181.3	1.223	4.614	0.098	0.3277	0.0070	0.64259	1748	18	1824	34
U1457C-42R-1 80-88 cm	27.675	347.1	1.777	1.880	0.018	0.1825	0.0013	0.38593	1073	6.5	1081	7
U1457C-42R-1 80-88 cm	13.678	818	2.930	0.679	0.013	0.0867	0.0017	0.50977	525.8	8	536	10
U1457C-42R-1 80-88 cm	13.043	70.8	1.022	0.066	0.010	0.0097	0.0005	0.22075	64.2	9.4	62	2.9
U1457C-42R-1 80-88 cm	21.312	887	2.900	0.483	0.013	0.0606	0.0015	0.83495	398.7	8.7	378.9	9.3
U1457C-42R-1 80-88 cm	27.674	216	1.843	1.050	0.016	0.1219	0.0010	0.28889	727.6	7.8	741.1	5.9
U1457C-42R-1 80-88 cm	21.312	1398	8.700	0.946	0.021	0.1055	0.0024	0.92491	674	11	646	14

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-42R-1 80-88 cm	27.675	51.3	0.341	0.661	0.021	0.0831	0.0013	0.15966	514	13	514.7	7.7
U1457C-42R-1 80-88 cm	4.447	956	29.000	0.578	0.047	0.0736	0.0042	0.51276	470	25	457	25
U1457C-42R-1 80-88 cm	14.102	349.7	3.125	3.828	0.078	0.2658	0.0052	0.62760	1596	16	1519	27
U1457C-42R-1 80-88 cm	6.144	501	7.210	0.413	0.020	0.0527	0.0016	0.59198	350	15	330.9	9.7
U1457C-42R-1 80-88 cm	27.674	560	1.874	1.219	0.018	0.1334	0.0017	0.58388	808.1	8	807	9.5
U1457C-42R-1 80-88 cm	27.674	1520	3.730	0.592	0.012	0.0742	0.0013	0.65306	470.9	7.5	461.2	7.6
U1457C-42R-1 80-88 cm	21.589	306.2	1.454	7.170	0.110	0.3802	0.0057	0.68977	2130	14	2076	27
U1457C-42R-1 80-88 cm	27.674	965	1.865	0.109	0.003	0.0165	0.0003	0.39528	105	2.6	105.6	1.6
U1457C-42R-1 80-88 cm	27.675	107.4	1.690	0.066	0.005	0.0096	0.0003	0.16319	64.7	4.9	61.5	1.8
U1457C-42R-1 80-88 cm	11.760	613	2.360	0.187	0.009	0.0246	0.0006	0.16293	176.7	8.6	156.5	3.4
U1457C-42R-1 80-88 cm	26.973	87.8	1.246	1.424	0.035	0.1456	0.0022	0.37402	897	14	876	12
U1457C-42R-1 80-88 cm	27.674	82.2	0.940	2.072	0.046	0.1957	0.0031	0.43596	1137	15	1152	17
U1457C-42R-1 80-88 cm	27.675	390.3	0.713	0.047	0.002	0.0075	0.0001	0.10602	46.9	2.1	48.4	0.85
U1457C-42R-1 80-88 cm	12.696	138.5	1.794	0.101	0.009	0.0128	0.0004	0.06994	97.4	8.5	82.2	2.5
U1457C-42R-1 80-88 cm	27.674	257	2.060	1.759	0.042	0.1750	0.0032	0.70912	1028	15	1039	18
U1457C-42R-1 80-88 cm	6.144	890	14.300	0.760	0.039	0.0937	0.0038	0.53575	572	23	577	22
U1457C-42R-1 80-88 cm	8.251	2730	10.000	0.114	0.006	0.0151	0.0052	0.11928	109.8	5.4	96	33
U1457C-42R-1 80-88 cm	27.674	368	1.710	0.114	0.005	0.0170	0.0004	0.33805	109.5	4.2	108.5	2.5
U1457C-42R-1 80-88 cm	19.015	379	1.041	1.625	0.040	0.1571	0.0036	0.60085	977	15	940	20
U1457C-42R-1 80-88 cm	5.383	512	0.543	7.690	0.260	0.3440	0.0100	0.81814	2201	26	1904	49
U1457C-42R-1 80-88 cm	13.164	209.5	2.263	3.652	0.099	0.2678	0.0069	0.62398	1557	21	1528	35
U1457C-42R-1 80-88 cm	27.675	296	1.155	0.046	0.002	-0.0002	0.0011	0.02704	45.9	2.3	1.2	5.3
U1457C-42R-1 80-88 cm	18.547	119.3	1.653	0.712	0.023	0.0876	0.0019	0.43477	544	14	541	11
U1457C-42R-1 80-88 cm	9.186	205	1.389	1.309	0.042	0.1380	0.0044	0.70122	848	19	832	25
U1457C-42R-1 80-88 cm	9.127	63	-7.000	0.025	0.009	0.0036	0.0004	0.30148	24.7	8.3	23.1	2.4
U1457C-42R-1 80-88 cm	15.973	450	1.810	1.343	0.034	0.1429	0.0033	0.52193	862	15	860	18
U1457C-42R-1 80-88 cm	9.655	160.9	1.057	10.920	0.340	0.4820	0.0130	0.79010	2511	28	2532	56
U1457C-42R-1 80-88 cm	24.398	164	1.027	1.432	0.037	0.1452	0.0027	0.52579	898	15	874	15
U1457C-42R-1 80-88 cm	27.674	160	1.354	0.111	0.006	0.0165	0.0004	0.33419	106.4	5.2	105.3	2.5
U1457C-42R-1 80-88 cm	16.441	1889	1.121	1.473	0.019	0.1482	0.0019	0.60372	918.7	7.9	891	10
U1457C-42R-1 80-88 cm	26.271	215	1.232	4.473	0.092	0.3062	0.0060	0.71701	1721	17	1720	30
U1457C-42R-1 80-88 cm	27.674	361	17.090	0.214	0.007	0.0309	0.0005	0.30187	196.3	5.6	196	3
U1457C-42R-1 80-88 cm	22.291	474	5.660	1.785	0.038	0.1684	0.0029	0.65380	1037	14	1003	16
U1457C-42R-1 80-88 cm	21.122	563	1.900	11.430	0.250	0.4812	0.0090	0.71474	2553	20	2529	39
U1457C-42R-1 80-88 cm	24.632	65.9	2.433	0.202	0.013	0.0287	0.0006	0.04271	185	10	182.4	4
U1457C-43R-1 55-63 cm	5.385	561	9.300	0.133	0.011	0.0193	0.0008	0.17954	126.5	9.9	123.2	5.1
U1457C-43R-1 55-63 cm	21.070	566	6.200	0.812	0.014	0.0946	0.0013	0.59881	604	7.9	582.4	7.9
U1457C-43R-1 55-63 cm	27.674	576	1.099	0.059	0.003	0.0092	0.0003	0.51610	58.4	3.1	58.9	1.6
U1457C-43R-1 55-63 cm	20.519	2816	2.810	0.559	0.005	0.0713	0.0006	0.56429	450.6	3.5	443.7	3.6
U1457C-43R-1 55-63 cm	26.023	114.5	0.557	1.360	0.033	0.1389	0.0023	0.51033	868	14	838	13
U1457C-43R-1 55-63 cm	19.419	240	0.670	3.248	0.048	0.2362	0.0025	0.50113	1469	11	1366	13

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-43R-1 55-63 cm	10.888	63.5	1.870	3.070	0.200	0.1469	0.0093	0.76026	1418	52	880	52
U1457C-43R-1 55-63 cm	10.888	144	0.877	1.262	0.050	0.1284	0.0021	0.32946	825	22	779	12
U1457C-43R-1 55-63 cm	20.794	138	2.158	5.389	0.080	0.3142	0.0043	0.57795	1881	13	1760	21
U1457C-43R-1 55-63 cm	14.190	815	1.461	1.215	0.019	0.1312	0.0018	0.59357	808.5	9.1	794	10
U1457C-43R-1 55-63 cm	19.969	236	30.500	0.785	0.022	0.0949	0.0019	0.64713	587	12	586	11
U1457C-43R-1 55-63 cm	24.372	560	2.220	9.100	0.110	0.4112	0.0051	0.86136	2345	11	2219	23
U1457C-43R-1 55-63 cm	6.210	533	1.146	1.322	0.046	0.1231	0.0035	0.55229	854	20	748	20
U1457C-43R-1 55-63 cm	15.291	775	4.560	4.777	0.094	0.3060	0.0065	0.78531	1778	17	1719	32
U1457C-43R-1 55-63 cm	8.963	374	1.360	0.177	0.012	0.0252	0.0006	0.03553	165	10	160.5	3.8
U1457C-43R-1 55-63 cm	27.674	130.7	5.180	8.080	0.110	0.3871	0.0040	0.69746	2237	12	2108	18
U1457C-43R-1 55-63 cm	11.163	767	1.740	8.380	0.210	0.3937	0.0091	0.85716	2274	22	2138	42
U1457C-43R-1 55-63 cm	21.895	211.4	0.472	0.743	0.019	0.0891	0.0015	0.49945	562	11	550	8.9
U1457C-43R-1 55-63 cm	6.604	499	1.091	0.150	0.009	0.0214	0.0006	0.05261	141.4	7.5	136.6	3.5
U1457C-43R-1 55-63 cm	16.117	716	3.760	3.210	0.050	0.2222	0.0038	0.78261	1458	12	1293	20
U1457C-43R-1 55-63 cm	23.272	125.3	1.630	1.735	0.039	0.1666	0.0027	0.53030	1018	14	993	15
U1457C-43R-1 55-63 cm	14.466	566	44.200	0.088	0.004	0.0133	0.0003	0.21091	85.7	4.1	84.9	1.8
U1457C-43R-1 55-63 cm	21.070	195.2	1.940	0.106	0.006	0.0164	0.0004	0.00949	101.4	5.5	104.7	2.6
U1457C-43R-1 55-63 cm	22.170	177.4	0.621	0.593	0.017	0.0732	0.0010	0.33529	473	11	455	5.9
U1457C-43R-1 55-63 cm	18.043	170.5	1.057	0.993	0.028	0.1058	0.0017	0.33309	698	14	648	10
U1457C-43R-1 55-63 cm	26.848	116.7	0.920	0.062	0.006	0.0088	0.0003	0.03517	60.1	5.2	56.7	1.8
U1457C-43R-1 55-63 cm	13.916	1578	0.979	0.018	0.001	0.0028	0.0001	0.08851	17.7	1	17.77	0.33
U1457C-43R-1 55-63 cm	27.675	118.2	1.360	1.569	0.029	0.1572	0.0018	0.37285	956	11	941	10
U1457C-43R-1 55-63 cm	18.593	267.8	1.817	11.320	0.170	0.4659	0.0067	0.77437	2550	14	2464	29
U1457C-43R-1 55-63 cm	10.337	889	1.088	0.791	0.023	0.0750	0.0017	0.77505	590	13	466	10
U1457C-43R-1 55-63 cm	17.767	214.6	0.891	1.049	0.025	0.1150	0.0019	0.37803	727	13	701	11
U1457C-43R-1 55-63 cm	26.298	115.2	0.892	5.320	0.110	0.2969	0.0048	0.69244	1869	18	1678	25
U1457C-43R-1 55-63 cm	25.748	436	1.850	1.574	0.023	0.1541	0.0020	0.52769	958.5	9.2	924	11
U1457C-43R-1 55-63 cm	27.675	482	1.032	0.060	0.003	0.0090	0.0002	0.24159	59	3	57.9	1.5
U1457C-43R-1 55-63 cm	11.439	394	1.166	1.315	0.042	0.1378	0.0039	0.83035	850	19	832	22
U1457C-43R-1 55-63 cm	27.674	176	1.156	0.119	0.008	0.0156	0.0003	0.00469	113.6	6.9	99.5	2
U1457C-43R-1 55-63 cm	3.302	922	8.600	0.586	0.027	0.0699	0.0027	0.77833	468	17	436	16
U1457C-43R-1 55-63 cm	20.795	568	4.760	1.390	0.034	0.1269	0.0027	0.76112	882	14	770	15
U1457C-43R-1 55-63 cm	28.224	1047	6.400	0.694	0.009	0.0843	0.0012	0.46774	534.7	5.5	522.3	7.1
U1457C-43R-1 55-63 cm	17.492	459	6.180	0.678	0.014	0.0860	0.0014	0.39499	524.7	8.6	532.8	8
U1457C-43R-1 55-63 cm	27.675	392	4.300	0.572	0.010	0.0723	0.0010	0.08636	458.2	6.8	449.7	6.1
U1457C-43R-1 55-63 cm	27.674	508.3	2.255	1.019	0.013	0.1151	0.0011	0.44304	712.7	6.7	701.9	6.1
U1457C-43R-1 55-63 cm	27.675	600	2.050	0.554	0.011	0.0717	0.0011	0.51131	446.7	7.5	446.2	6.7
U1457C-43R-1 55-63 cm	22.721	172	3.630	10.220	0.130	0.4519	0.0056	0.46352	2452	12	2406	24
U1457C-43R-1 55-63 cm	12.264	140.8	1.215	0.939	0.038	0.1068	0.0034	0.47482	669	20	653	20
U1457C-43R-1 55-63 cm	27.675	839	6.100	4.010	0.065	0.2872	0.0038	0.80417	1633	13	1626	19
U1457C-43R-1 55-63 cm	15.567	2965	5.850	5.322	0.068	0.3164	0.0037	0.70834	1871	11	1772	18

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-43R-1 55-63 cm	27.674	187.9	1.464	0.111	0.006	0.0167	0.0004	0.16862	106.4	5.5	107	2.2
U1457C-43R-1 55-63 cm	16.116	514	1.031	0.125	0.006	0.0165	0.0003	0.18832	119.2	5.5	105.3	1.9
U1457C-43R-1 55-63 cm	12.814	1880	1.140	0.079	0.003	0.0115	0.0003	0.39454	76.8	2.8	74	1.6
U1457C-43R-1 55-63 cm	27.675	1231	1.310	0.056	0.002	0.0081	0.0002	0.34461	55.4	1.8	52.2	1.1
U1457C-43R-1 55-63 cm	5.935	2010	217.000	0.111	0.008	0.0165	0.0008	0.67418	107	7.1	105.3	5.1
U1457C-43R-1 55-63 cm	14.860	357	6.730	0.681	0.023	0.0763	0.0021	0.60866	525	14	474	12
U1457C-43R-1 55-63 cm	5.385	843	0.731	0.680	0.041	0.0786	0.0042	0.71193	524	25	487	25
U1457C-43R-1 55-63 cm	23.546	1360	2.480	0.916	0.016	0.1048	0.0011	0.64409	659.2	8.4	642.4	6.7
U1457C-43R-1 55-63 cm	11.990	659	3.020	0.624	0.017	0.0788	0.0018	0.55992	491	10	489	11
U1457C-43R-1 55-63 cm	27.675	431	1.034	0.091	0.004	0.0137	0.0002	0.00584	88.4	3.3	87.9	1.4
U1457C-43R-1 55-63 cm	27.675	145.1	-68.000	0.593	0.018	0.0734	0.0014	0.34156	473	12	456.6	8.7
U1457C-43R-1 55-63 cm	6.145	54.3	1.069	12.140	0.520	0.4650	0.0210	0.87333	2609	40	2456	94
U1457C-43R-1 55-63 cm	19.483	514	1.996	1.160	0.020	0.1257	0.0023	0.67492	780.6	9.6	763	13
U1457C-43R-1 55-63 cm	27.675	104.7	1.087	0.123	0.008	0.0179	0.0004	0.06188	117.3	6.9	114.2	2.4
U1457C-43R-1 55-63 cm	27.674	188.7	1.026	5.141	0.083	0.3307	0.0045	0.67034	1839	14	1840	22
U1457C-43R-1 55-63 cm	18.782	94.2	0.649	1.177	0.043	0.1326	0.0030	0.38104	785	20	805	18
U1457C-43R-1 55-63 cm	20.419	2960	32.300	0.602	0.011	0.0760	0.0012	0.77070	477.8	7	472.1	7.2
U1457C-43R-1 55-63 cm	27.675	961	2.529	0.109	0.003	0.0160	0.0002	0.38601	104.7	2.5	102.5	1.3
U1457C-43R-1 55-63 cm	14.569	867	7.910	0.680	0.021	0.0830	0.0018	0.70077	525	13	514	10
U1457C-43R-1 55-63 cm	7.957	239	5.800	1.567	0.050	0.1539	0.0044	0.70560	955	20	922	25
U1457C-43R-1 55-63 cm	6.145	1566	1.800	1.049	0.055	0.1160	0.0053	0.81523	726	28	707	31
U1457C-43R-1 55-63 cm	4.272	2600	3.500	0.113	0.009	0.0176	0.0010	0.45818	108.2	8.3	112.5	6
U1457C-43R-1 55-63 cm	27.674	432	4.870	0.551	0.010	0.0720	0.0009	0.51433	444.7	6.5	448.6	5.5
U1457C-43R-1 55-63 cm	12.931	915	1.649	1.862	0.041	0.1713	0.0029	0.75550	1066	14	1019	16
U1457C-43R-1 55-63 cm	27.674	822	1.446	0.616	0.011	0.0762	0.0011	0.65508	486.4	6.9	473	6.5
U1457C-43R-1 55-63 cm	27.674	105	1.206	0.055	0.006	0.0084	0.0003	0.03543	53.3	5.9	53.9	1.8
U1457C-43R-1 55-63 cm	27.675	407	1.100	1.222	0.022	0.1304	0.0020	0.64187	809	10	790	11
U1457C-43R-1 55-63 cm	20.185	154.6	1.052	1.448	0.034	0.1481	0.0026	0.41550	906	14	890	15
U1457C-43R-1 55-63 cm	25.334	177.5	0.725	4.868	0.073	0.3159	0.0046	0.71040	1796	13	1768	23
U1457C-43R-1 55-63 cm	26.972	308	1.104	0.343	0.011	0.0455	0.0012	0.67868	298	8.7	286.6	7.5
U1457C-43R-1 55-63 cm	27.674	1563	31.600	0.224	0.005	0.0322	0.0006	0.55803	204.9	4.3	204	3.5
U1457C-43R-1 55-63 cm	9.186	328	8.030	0.629	0.023	-0.0043	0.0001	0.70758	494	15	-27.87	0.84
U1457C-43R-1 55-63 cm	27.674	619	2.880	0.338	0.007	0.0469	0.0008	0.43718	296	5.6	295.4	4.9
U1457C-43R-1 55-63 cm	27.675	461	3.740	5.534	0.087	0.3495	0.0058	0.71950	1904	14	1930	27
U1457C-43R-1 55-63 cm	22.525	67.5	0.622	1.146	0.043	0.1132	0.0026	0.39940	769	20	691	15
U1457C-43R-1 55-63 cm	16.910	923	3.760	2.462	0.036	0.2002	0.0033	0.72301	1260	11	1176	18
U1457C-43R-1 55-63 cm	27.674	54.5	0.676	1.350	0.039	0.1402	0.0019	0.27411	862	17	845	11
U1457C-43R-1 55-63 cm	16.441	322	1.309	0.130	0.006	0.0189	0.0005	0.31432	124.2	5.6	120.5	3.3
U1457C-43R-1 55-63 cm	7.489	242	6.380	4.580	0.230	0.3050	0.0120	0.77008	1737	41	1714	58
U1457C-43R-1 55-63 cm	16.909	48.5	0.794	7.000	0.180	0.3888	0.0077	0.52250	2105	23	2115	36
U1457C-43R-1 55-63 cm	19.951	329	1.538	5.202	0.081	0.3321	0.0058	0.71403	1851	13	1847	28

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-43R-1 55-63 cm	24.398	999	2.730	0.321	0.009	0.0408	0.0010	0.76491	282.1	6.5	257.5	6.4
U1457C-43R-1 55-63 cm	7.549	1077	4.140	0.723	0.041	0.0771	0.0037	0.26727	550	23	478	22
U1457C-43R-1 55-63 cm	11.292	579	17.100	0.682	0.022	0.0834	0.0023	0.51665	527	13	516	14
U1457C-43R-1 55-63 cm	27.674	240.6	1.573	0.744	0.030	0.0917	0.0033	0.59647	561	17	567	19
U1456D-12R-1 30-36 cm	27.675	274	1.910	0.071	0.003	0.0103	0.0002	0.26415	70.3	3.4	65.8	1.2
U1456D-12R-1 30-36 cm	24.797	986	3.790	0.523	0.011	0.0615	0.0010	0.74803	426	7.1	384.4	6.2
U1456D-12R-1 30-36 cm	18.180	152.2	1.118	3.505	0.085	0.2222	0.0047	0.76975	1524	19	1292	25
U1456D-12R-1 30-36 cm	15.013	607	10.300	0.480	0.011	0.0627	0.0012	0.54421	397.4	7.8	391.7	7.5
U1456D-12R-1 30-36 cm	27.674	442	1.840	0.136	0.005	0.0203	0.0003	0.16823	129	4	129.4	2
U1456D-12R-1 30-36 cm	27.675	1143	10.800	0.587	0.009	0.0753	0.0011	0.62776	468.5	5.6	467.7	6.5
U1456D-12R-1 30-36 cm	27.675	1408	18.500	0.100	0.002	0.0151	0.0003	0.28177	96.3	2	96.7	1.6
U1456D-12R-1 30-36 cm	27.674	200	1.602	0.988	0.019	0.1093	0.0014	0.48163	696	9.6	668.5	8.2
U1456D-12R-1 30-36 cm	27.674	296	0.799	0.081	0.004	0.0116	0.0002	0.12945	78.8	3.9	74.5	1.2
U1456D-12R-1 30-36 cm	27.675	287	0.951	0.071	0.003	0.0107	0.0002	0.01167	69.1	3.2	68.6	1.2
U1456D-12R-1 30-36 cm	21.631	551	7.830	1.758	0.027	0.1708	0.0026	0.67216	1029	9.8	1016	14
U1456D-12R-1 30-36 cm	27.675	292	0.782	0.068	0.003	0.0102	0.0002	0.09108	67	3.2	65.4	1.3
U1456D-12R-1 30-36 cm	5.179	2332	9.820	0.752	0.021	0.0904	0.0018	0.63201	569	12	558	11
U1456D-12R-1 30-36 cm	13.288	1182	1.501	1.654	0.032	0.1598	0.0034	0.78819	990	12	955	19
U1456D-12R-1 30-36 cm	16.164	1780	1.000	0.055	0.002	0.0079	0.0002	0.50476	54	1.9	50.8	1.3
U1456D-12R-1 30-36 cm	21.057	1827	9.350	1.801	0.031	0.1690	0.0026	0.76814	1044	11	1006	15
U1456D-12R-1 30-36 cm	4.028	1970	37.200	0.013	0.002	0.0021	0.0001	0.02885	13.1	1.9	13.64	0.65
U1456D-12R-1 30-36 cm	11.273	563	0.660	0.081	0.005	0.0116	0.0004	0.41009	78.9	5	74.6	2.8
U1456D-12R-1 30-36 cm	5.231	322	0.773	0.114	0.010	0.0162	0.0005	0.32033	109.7	8.8	103.7	3.1
U1456D-12R-1 30-36 cm	27.674	593	3.550	1.452	0.021	0.1471	0.0018	0.55857	909	8.8	885	10
U1456D-12R-1 30-36 cm	23.933	1440	4.830	0.213	0.004	0.0309	0.0004	0.57437	195.6	3.3	196.4	2.5
U1456D-12R-1 30-36 cm	12.424	454	0.725	0.616	0.021	0.0739	0.0022	0.61662	486	13	459	13
U1456D-12R-1 30-36 cm	22.207	120	2.193	0.732	0.022	0.0895	0.0015	0.40340	556	12	552.4	8.8
U1456D-12R-1 30-36 cm	27.675	363	0.973	0.176	0.006	0.0239	0.0004	0.35348	163.7	5.1	152	2.5
U1456D-12R-1 30-36 cm	27.674	75.1	1.288	0.089	0.008	0.0135	0.0005	0.14274	85.7	7.5	86.2	3
U1456D-12R-1 30-36 cm	27.675	382.6	0.821	0.118	0.004	0.0172	0.0003	0.19496	113.1	3.5	110.2	1.8
U1456D-12R-1 30-36 cm	16.452	344.2	2.300	0.274	0.010	0.0388	0.0009	0.29714	245.2	7.7	245.3	5.8
U1456D-12R-1 30-36 cm	20.481	2200	0.367	0.042	0.001	0.0065	0.0001	0.44791	42.1	1.4	41.45	0.72
U1456D-12R-1 30-36 cm	6.957	296	0.494	0.073	0.008	0.0102	0.0003	0.04989	71.5	7.6	65.6	2.1
U1456D-12R-1 30-36 cm	6.381	758	1.426	1.053	0.030	0.1150	0.0025	0.36967	730	15	702	14
U1456D-12R-1 30-36 cm	27.674	251	11.000	0.976	0.027	0.1119	0.0024	0.58803	688	14	683	14
U1456D-12R-1 30-36 cm	22.208	59.3	1.048	0.064	0.008	0.0085	0.0004	0.16759	61.8	7.6	54.5	2.3
U1456D-12R-1 30-36 cm	25.372	568	5.060	4.902	0.063	0.3169	0.0041	0.63601	1802	10	1774	20
U1456D-12R-1 30-36 cm	27.674	1372	2.160	0.110	0.002	0.0163	0.0002	0.36915	105.9	2.1	104.2	1.5
U1456D-12R-1 30-36 cm	27.675	2100	0.733	0.114	0.002	0.0170	0.0003	0.53850	109.1	2.1	108.3	1.6
U1456D-12R-1 30-36 cm	13.575	354	2.690	4.960	0.130	0.2950	0.0077	0.84587	1808	23	1664	38
U1456D-12R-1 30-36 cm	27.674	471	1.034	1.126	0.018	0.1222	0.0019	0.60167	765.3	9	743	11

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-12R-1 30-36 cm	17.316	353	0.909	0.113	0.006	0.0169	0.0003	0.03119	108.8	5.3	108.2	2.2
U1456D-12R-1 30-36 cm	27.674	551.3	1.379	0.191	0.005	0.0278	0.0004	0.37165	177.4	3.8	176.5	2.7
U1456D-12R-1 30-36 cm	15.301	2593	11.010	0.034	0.001	0.0050	0.0001	0.39284	34	1.3	31.81	0.7
U1456D-12R-1 30-36 cm	21.345	167	0.462	1.218	0.032	0.1292	0.0021	0.39286	808	15	783	12
U1456D-12R-1 30-36 cm	8.971	301	2.200	0.123	0.011	0.0179	0.0006	0.17520	117	10	114.5	3.5
U1456D-12R-1 30-36 cm	27.674	727	6.110	0.617	0.011	0.0770	0.0011	0.64234	487	6.7	478.2	6.6
U1456D-12R-1 30-36 cm	27.675	1040	1.331	0.120	0.004	0.0175	0.0003	0.45069	115.6	3.7	111.7	2
U1456D-12R-1 30-36 cm	27.675	468	1.007	0.082	0.003	0.0121	0.0003	0.42872	80	3.2	77.6	1.8
U1456D-12R-1 30-36 cm	26.523	292	3.130	0.606	0.012	0.0779	0.0012	0.70984	479.9	7.8	483.7	7
U1456D-12R-1 30-36 cm	27.674	312.6	0.930	0.066	0.003	0.0101	0.0002	0.07072	65	3.2	64.8	1.3
U1456D-12R-1 30-36 cm	3.741	1577	23.300	0.605	0.034	0.0746	0.0024	0.49781	479	21	464	14
U1456D-12R-1 30-36 cm	10.698	249	1.745	9.090	0.240	0.3720	0.0110	0.81543	2343	24	2038	50
U1456D-12R-1 30-36 cm	27.675	898	1.102	0.103	0.003	0.0156	0.0003	0.41578	99.5	2.4	100.1	1.6
U1456D-12R-1 30-36 cm	14.726	1720	0.907	0.088	0.003	0.0109	0.0002	0.46672	85.1	2.7	69.6	1.5
U1456D-12R-1 30-36 cm	7.821	381	2.012	10.270	0.180	0.4408	0.0093	0.75407	2458	16	2353	41
U1456D-12R-1 30-36 cm	6.381	2462	1.399	0.040	0.002	0.0059	0.0001	0.29072	39.4	2.1	38.12	0.93
U1456D-12R-1 30-36 cm	10.985	309.6	0.995	7.610	0.250	0.3490	0.0110	0.85290	2180	30	1926	52
U1456D-12R-1 30-36 cm	27.674	569	1.508	0.673	0.010	0.0842	0.0011	0.48684	522.1	6.3	521.2	6.3
U1456D-12R-1 30-36 cm	16.165	771	1.887	0.115	0.004	0.0164	0.0003	0.27225	110.2	3.8	104.7	1.8
U1456D-12R-1 30-36 cm	13.287	170.2	1.890	0.020	0.004	0.0027	0.0002	0.21486	20.2	3.8	17.03	0.97
U1456D-12R-1 30-36 cm	12.999	3800	17.700	0.567	0.010	0.0719	0.0013	0.71641	455.7	6.7	447.7	7.6
U1456D-12R-1 30-36 cm	27.674	202.3	0.936	0.068	0.004	0.0103	0.0002	0.07301	66.7	3.9	66.1	1.5
U1456D-12R-1 30-36 cm	27.674	63.4	0.908	1.203	0.037	0.1270	0.0027	0.41302	797	17	770	15
U1456D-12R-1 30-36 cm	27.674	1274	1.150	0.121	0.003	0.0176	0.0002	0.33086	116	2.5	112.2	1.5
U1456D-12R-1 30-36 cm	10.123	897	0.752	0.041	0.003	0.0063	0.0002	0.01680	41.2	2.4	40.4	1
U1456D-12R-1 30-36 cm	27.675	551	0.960	0.070	0.003	0.0100	0.0002	0.02850	68.4	2.4	64.1	1.2
U1456D-12R-1 30-36 cm	22.207	191.7	0.627	1.108	0.022	0.1212	0.0018	0.32558	755	11	737	11
U1456D-12R-1 30-36 cm	27.674	1388	1.675	0.054	0.002	0.0082	0.0001	0.27951	53.7	1.5	52.39	0.78
U1456D-12R-1 30-36 cm	27.675	236	0.822	0.071	0.004	0.0103	0.0003	0.10692	68.9	3.8	65.7	1.6
U1456D-12R-1 30-36 cm	23.933	232.5	0.678	2.058	0.039	0.1877	0.0030	0.66306	1132	13	1108	16
U1456D-12R-1 30-36 cm	27.675	650	1.411	0.113	0.003	0.0172	0.0003	0.09940	108.9	2.8	109.7	1.6
U1456D-12R-1 30-36 cm	27.674	928	3.550	0.109	0.003	0.0157	0.0002	0.20125	104.9	2.5	100.3	1.3
U1456D-12R-1 30-36 cm	13.288	505	0.922	7.380	0.210	0.3238	0.0084	0.89285	2153	26	1806	41
U1456D-12R-1 30-36 cm	27.674	137	0.937	0.106	0.007	0.0128	0.0003	0.08504	101.5	6.1	81.7	2
U1456D-12R-1 30-36 cm	27.674	765	0.900	0.073	0.003	0.0105	0.0002	0.02575	71.3	2.3	67.4	1.1
U1456D-12R-1 30-36 cm	27.675	249	4.710	1.828	0.035	0.1801	0.0030	0.84424	1053	13	1067	16
U1456D-12R-1 30-36 cm	4.316	1900	2.730	0.124	0.006	0.0161	0.0008	0.18266	118.5	5.4	102.9	5.3
U1456D-12R-1 30-36 cm	8.683	273.3	1.129	3.860	0.110	0.2491	0.0066	0.77784	1601	24	1433	34
U1456D-12R-1 30-36 cm	6.043	916	27.900	0.768	0.030	0.0925	0.0027	0.51594	577	17	570	16
U1456D-12R-1 30-36 cm	17.604	217.2	1.105	1.767	0.033	0.1732	0.0027	0.45480	1034	12	1029	15
U1456D-12R-1 30-36 cm	17.028	552	1.450	0.065	0.003	0.0098	0.0002	0.22478	63.8	3	62.6	1.5

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-12R-1 30-36 cm	18.755	89.9	0.881	0.071	0.007	0.0105	0.0004	0.14271	70.1	6.9	67.3	2.5
U1456D-12R-1 30-36 cm	27.674	596.8	1.273	0.017	0.001	0.0026	0.0001	0.08097	17.1	1.2	17.01	0.38
U1456D-12R-1 30-36 cm	17.028	304	1.483	0.054	0.005	0.0083	0.0003	0.07758	53.2	4.7	53	1.7
U1456D-12R-1 30-36 cm	27.675	255	2.836	1.208	0.020	0.1337	0.0016	0.47793	802.5	9.4	808.5	9.4
U1456D-12R-1 30-36 cm	4.943	273	1.005	0.057	0.008	0.0077	0.0004	0.02688	56.5	7.7	49.1	2.5
U1456D-12R-1 30-36 cm	27.674	229.9	2.099	0.109	0.005	0.0162	0.0003	0.10151	104.6	4.6	103.8	2
U1456D-12R-1 30-36 cm	27.100	3580	2.260	0.016	0.000	0.0023	0.0000	0.10445	15.62	0.48	15.02	0.22
U1456D-12R-1 30-36 cm	27.674	186	1.079	0.077	0.005	0.0120	0.0003	0.00331	74.8	4.3	76.6	1.7
U1456D-12R-1 30-36 cm	22.782	114	0.613	0.725	0.021	0.0879	0.0016	0.36141	553	13	542.7	9.5
U1456D-12R-1 30-36 cm	27.674	569	0.983	0.588	0.011	0.0750	0.0010	0.50059	469	6.7	466.2	6
U1456D-12R-1 30-36 cm	27.675	248	2.226	12.670	0.170	0.5037	0.0065	0.67368	2654	13	2627	28
U1456D-12R-1 30-36 cm	14.150	2983	6.740	0.047	0.001	0.0072	0.0002	0.34546	46.3	1.4	46.44	0.95
U1456D-12R-1 30-36 cm	19.617	168.5	1.383	8.200	0.120	0.4162	0.0058	0.66305	2251	14	2242	26
U1456D-12R-1 30-36 cm	22.207	77.2	2.178	0.107	0.009	0.0144	0.0004	0.11105	102.3	7.8	92.1	2.8
U1456D-12R-1 30-36 cm	25.372	1860	2.830	0.124	0.003	0.0179	0.0003	0.44431	119	2.8	114.2	1.7
U1456D-12R-1 30-36 cm	19.905	155	2.918	0.768	0.026	0.0910	0.0019	0.52331	575	15	561	11
U1456D-12R-1 30-36 cm	19.331	175.7	1.216	0.060	0.005	0.0085	0.0003	0.22396	58.6	5	54.3	1.9
U1456D-12R-1 30-36 cm	27.674	161	0.946	0.092	0.006	0.0137	0.0003	0.13523	89	5.5	87.4	2
U1456D-12R-1 30-36 cm	20.769	1260	17.900	0.224	0.005	0.0324	0.0005	0.38857	205.2	3.8	205.3	3
U1456D-12R-1 30-36 cm	27.674	354	0.766	1.591	0.028	0.1623	0.0025	0.69493	964	11	969	14
U1456D-12R-1 30-36 cm	26.523	144.8	0.887	3.407	0.058	0.2584	0.0035	0.56643	1508	13	1481	18
U1456D-12R-1 30-36 cm	24.798	170.4	1.443	2.616	0.045	0.2138	0.0033	0.51186	1306	13	1248	18
U1456D-12R-1 30-36 cm	27.675	78.5	0.612	1.185	0.032	0.1315	0.0020	0.32892	790	15	796	12
U1456D-12R-1 30-36 cm	27.674	276.7	0.988	0.116	0.005	0.0175	0.0003	0.13159	111.4	4.4	111.8	1.7
U1456D-12R-1 30-36 cm	20.194	463	0.643	0.089	0.004	0.0132	0.0003	0.27254	86.5	3.7	84.5	1.6
U1456D-12R-1 30-36 cm	28.826	3640	0.913	0.105	0.002	0.0155	0.0003	0.72487	100.9	2.2	99.4	2.1
U1456D-12R-1 30-36 cm	27.674	378	0.420	0.046	0.002	0.0072	0.0001	0.10842	45.5	2.3	46.37	0.87
U1456D-12R-1 30-36 cm	27.674	135.1	2.490	1.616	0.036	0.1579	0.0026	0.51823	973	14	945	14
U1456D-12R-1 30-36 cm	27.674	85.2	0.617	0.606	0.021	0.0783	0.0014	0.25717	478	13	486	8.4
U1456D-12R-1 30-36 cm	27.675	99.7	1.013	0.128	0.008	0.0163	0.0005	0.14429	120.9	7.4	104.2	2.9
U1456D-12R-1 30-36 cm	15.013	25.2	0.642	3.970	0.140	0.2372	0.0071	0.47978	1619	29	1370	37
U1456D-12R-1 30-36 cm	7.362	522	0.919	0.052	0.004	0.0077	0.0003	0.03671	51.2	4	49.7	1.6
U1456D-12R-1 30-36 cm	20.009	119.8	1.213	0.083	0.007	0.0111	0.0004	0.22522	80.5	6.1	71	2.6
U1456D-12R-1 30-36 cm	16.944	1657	3.880	1.178	0.020	0.1256	0.0021	0.78702	789.2	9.3	762	12
U1456D-12R-1 30-36 cm	27.674	670	0.859	0.137	0.004	0.0203	0.0004	0.52926	130.4	3.5	129.4	2.4
U1456D-12R-1 30-36 cm	27.675	308.3	0.596	0.044	0.003	0.0071	0.0002	0.04286	43.9	2.6	45.31	0.96
U1456D-12R-1 30-36 cm	24.225	846	4.170	0.647	0.010	0.0813	0.0013	0.75929	505.9	6.4	503.5	7.7
U1456D-12R-1 30-36 cm	27.675	636	2.023	0.110	0.003	0.0164	0.0002	0.37762	106	2.4	104.6	1.4
U1456D-12R-1 30-36 cm	17.964	92.9	0.928	1.175	0.031	0.1277	0.0021	0.48371	791	16	774	12
U1456D-12R-1 30-36 cm	21.470	597	1.668	1.060	0.019	0.1165	0.0019	0.77880	732.4	9.5	710	11
U1456D-12R-1 30-36 cm	13.918	358	1.643	0.974	0.029	0.1121	0.0029	0.77503	691	15	685	17

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-12R-1 30-36 cm	6.473	422	12.340	1.951	0.063	0.1743	0.0044	0.81664	1097	22	1036	24
U1456D-12R-1 30-36 cm	16.346	598	4.110	5.800	0.160	0.3386	0.0078	0.91329	1941	24	1877	38
U1456D-12R-1 30-36 cm	14.458	520	0.649	4.020	0.110	0.2456	0.0064	0.78656	1633	22	1414	33
U1456D-12R-1 30-36 cm	27.674	352	0.771	0.064	0.004	0.0099	0.0002	0.04417	62.6	4	63.6	1.5
U1456D-12R-1 30-36 cm	16.077	870	0.913	0.274	0.006	0.0384	0.0007	0.47138	245.3	5	242.6	4.5
U1456D-12R-1 30-36 cm	27.674	904	1.980	0.018	0.001	0.0028	0.0001	0.20846	18.47	0.97	17.8	0.37
U1456D-12R-1 30-36 cm	21.740	356	2.556	8.560	0.180	0.4347	0.0081	0.89786	2287	19	2324	36
U1456D-13R-1 30-38 cm	17.469	272	0.681	0.078	0.005	0.0118	0.0002	0.02588	75.9	4.4	75.3	1.3
U1456D-13R-1 30-38 cm	6.983	3010	9.100	0.622	0.019	0.0787	0.0024	0.79676	490	12	488	14
U1456D-13R-1 30-38 cm	18.005	1085	0.994	0.944	0.011	0.1061	0.0012	0.63945	674.5	5.5	650.1	7.1
U1456D-13R-1 30-38 cm	12.903	5440	219.000	0.445	0.012	0.0561	0.0015	0.93621	372.8	8.3	351.6	9.2
U1456D-13R-1 30-38 cm	20.154	331	0.838	5.394	0.081	0.3200	0.0039	0.84743	1882	13	1789	19
U1456D-13R-1 30-38 cm	27.675	215.5	1.026	1.182	0.018	0.1306	0.0015	0.52695	790.8	8.6	791.1	8.8
U1456D-13R-1 30-38 cm	18.273	656	7.170	1.364	0.022	0.1421	0.0020	0.64799	872.5	9.4	856	11
U1456D-13R-1 30-38 cm	23.377	446	1.636	3.822	0.046	0.2648	0.0031	0.76057	1596	9.7	1514	16
U1456D-13R-1 30-38 cm	27.675	87.3	0.668	0.083	0.008	0.0117	0.0003	0.16777	79.5	7.6	75	1.9
U1456D-13R-1 30-38 cm	17.468	446	0.959	0.125	0.004	0.0185	0.0003	0.19381	119	4	117.9	2.1
U1456D-13R-1 30-38 cm	19.885	1458	22.340	0.553	0.015	0.0705	0.0017	0.65047	446.1	9.5	439	10
U1456D-13R-1 30-38 cm	6.724	1346	0.241	0.126	0.006	0.0176	0.0007	0.45475	119.9	5.4	112.6	4.2
U1456D-13R-1 30-38 cm	18.006	305.8	0.570	1.345	0.025	0.1287	0.0020	0.40451	864	11	780	11
U1456D-13R-1 30-38 cm	27.675	755	0.589	0.073	0.002	0.0111	0.0002	0.18171	71.9	1.9	71	1
U1456D-13R-1 30-38 cm	27.674	535	0.678	0.131	0.004	0.0187	0.0004	0.38362	124.8	3.6	119.3	2.2
U1456D-13R-1 30-38 cm	19.349	531	11.100	1.467	0.023	0.1533	0.0023	0.63099	917.1	9.2	919	13
U1456D-13R-1 30-38 cm	20.691	262	1.633	0.914	0.026	0.1026	0.0027	0.68169	659	13	629	15
U1456D-13R-1 30-38 cm	22.572	1500	0.750	0.073	0.002	0.0112	0.0001	0.07119	71.5	2	71.63	0.91
U1456D-13R-1 30-38 cm	19.348	309.8	1.250	1.994	0.027	0.1880	0.0021	0.57248	1113	9	1110	12
U1456D-13R-1 30-38 cm	27.675	493	1.340	1.414	0.021	0.1416	0.0018	0.65302	893.5	8.8	853	10
U1456D-13R-1 30-38 cm	26.331	318	0.947	3.802	0.058	0.2730	0.0038	0.74255	1592	12	1555	19
U1456D-13R-1 30-38 cm	27.674	291.5	1.287	0.084	0.003	0.0117	0.0002	0.04547	81.2	3.1	74.74	0.96
U1456D-13R-1 30-38 cm	18.542	2149	1.708	0.035	0.001	0.0052	0.0001	0.18187	34.5	1	33.62	0.61
U1456D-13R-1 30-38 cm	27.674	633	0.626	0.788	0.013	0.0930	0.0010	0.58163	589.2	7	573	5.9
U1456D-13R-1 30-38 cm	20.155	307	0.602	0.054	0.004	0.0070	0.0002	0.17435	53.4	4.2	44.9	1
U1456D-13R-1 30-38 cm	27.674	899	0.962	0.066	0.002	0.0102	0.0002	0.32491	64.8	1.9	65.16	0.94
U1456D-13R-1 30-38 cm	17.737	1781	0.726	0.019	0.001	0.0027	0.0001	0.26064	18.94	0.99	17.34	0.34
U1456D-13R-1 30-38 cm	27.674	2560	1.791	0.630	0.014	0.0759	0.0018	0.57727	495.6	8.7	472	11
U1456D-13R-1 30-38 cm	27.675	164.4	5.200	4.052	0.046	0.2873	0.0029	0.47838	1643	9.2	1627	15
U1456D-13R-1 30-38 cm	27.674	132	1.027	0.106	0.007	0.0160	0.0003	0.06949	101.4	6.3	102.4	2.2
U1456D-13R-1 30-38 cm	27.675	4350	3.090	0.048	0.001	0.0072	0.0001	0.33845	47.35	0.96	46.09	0.7
U1456D-13R-1 30-38 cm	17.199	238.2	0.384	0.150	0.007	0.0192	0.0004	0.11126	141.4	5.9	122.8	2.6
U1456D-13R-1 30-38 cm	22.572	160.6	0.477	1.064	0.030	0.1180	0.0018	0.36895	732	15	719	11
U1456D-13R-1 30-38 cm	8.604	1440	1.194	0.080	0.003	0.0120	0.0002	0.09182	78.1	2.3	77	1.3

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-13R-1 30-38 cm	27.674	454	0.678	0.052	0.003	0.0076	0.0002	0.40220	50.5	2.5	49.01	0.94
U1456D-13R-1 30-38 cm	25.257	345	0.576	1.884	0.038	0.1775	0.0034	0.69397	1073	13	1052	18
U1456D-13R-1 30-38 cm	8.326	1000	1.993	0.298	0.012	0.0377	0.0011	0.82851	264.3	9	238.8	6.7
U1456D-13R-1 30-38 cm	27.674	782	0.873	0.054	0.002	0.0080	0.0001	0.21953	53	2.3	51.24	0.75
U1456D-13R-1 30-38 cm	27.674	1300	1.400	0.114	0.003	0.0167	0.0002	0.13552	109	2.4	106.7	1.5
U1456D-13R-1 30-38 cm	22.572	246	0.635	1.372	0.026	0.1445	0.0020	0.60947	875	11	870	11
U1456D-13R-1 30-38 cm	23.914	119.2	1.391	0.688	0.017	0.0844	0.0011	0.25473	531	10	522	6.7
U1456D-13R-1 30-38 cm	14.783	504	1.119	0.102	0.004	0.0147	0.0003	0.39537	98.6	3.7	94.3	2.1
U1456D-13R-1 30-38 cm	28.480	1100	0.764	0.051	0.002	0.0069	0.0002	0.43870	50.3	2.1	44.6	1.1
U1456D-13R-1 30-38 cm	8.058	1477	6.500	0.807	0.014	0.0937	0.0018	0.37046	600.2	8.1	578	11
U1456D-13R-1 30-38 cm	13.171	246	1.126	1.526	0.027	0.1557	0.0022	0.57133	940	11	933	12
U1456D-13R-1 30-38 cm	12.902	87.4	1.148	0.088	0.012	0.0092	0.0003	0.19507	85	11	58.9	2.1
U1456D-13R-1 30-38 cm	6.994	594	1.522	0.092	0.005	0.0080	0.0002	0.01563	89.2	4.5	51	1.3
U1456D-13R-1 30-38 cm	16.931	396.3	2.013	2.852	0.042	0.2334	0.0032	0.60004	1368	11	1352	17
U1456D-13R-1 30-38 cm	21.765	479	1.408	4.660	0.063	0.3033	0.0039	0.69892	1758	11	1707	19
U1456D-13R-1 30-38 cm	15.857	457	11.200	0.931	0.017	0.1094	0.0019	0.47498	669	9.2	669	11
U1456D-13R-1 30-38 cm	14.513	784	1.390	0.125	0.004	0.0183	0.0003	0.33869	119.1	3.3	116.7	2
U1456D-13R-1 30-38 cm	13.439	740	1.108	0.133	0.006	0.0189	0.0006	0.58276	126.2	5.1	120.9	3.7
U1456D-13R-1 30-38 cm	11.559	1130	0.769	0.065	0.003	0.0089	0.0002	0.02592	63.5	2.7	57.2	1.3
U1456D-13R-1 30-38 cm	24.183	1506	1.846	0.160	0.003	0.0225	0.0003	0.50336	150.3	2.9	143.4	1.9
U1456D-13R-1 30-38 cm	27.674	744	5.260	0.719	0.012	0.0873	0.0013	0.63979	549.2	6.9	539.6	7.9
U1456D-13R-1 30-38 cm	27.674	274	2.170	0.240	0.008	0.0343	0.0007	0.21302	217.9	6.4	217.4	4.5
U1456D-13R-1 30-38 cm	27.675	1500	2.290	0.116	0.002	0.0170	0.0002	0.26047	111.1	2.1	108.9	1
U1456D-13R-1 30-38 cm	27.674	480	1.847	0.075	0.003	0.0114	0.0002	0.13246	73.5	2.5	73	1
U1456D-13R-1 30-38 cm	27.675	881	0.646	1.018	0.015	0.1148	0.0016	0.65688	712.2	7.3	700.6	9.3
U1456D-13R-1 30-38 cm	27.675	798	2.244	0.269	0.005	0.0377	0.0006	0.50245	241.3	3.8	238.4	3.6
U1456D-13R-1 30-38 cm	27.674	509	1.670	1.822	0.020	0.1669	0.0014	0.51964	1053	7.1	994.8	7.5
U1456D-13R-1 30-38 cm	27.675	423	0.688	0.074	0.003	0.0106	0.0001	0.20267	72.6	2.8	68.23	0.91
U1456D-13R-1 30-38 cm	18.005	665	0.542	0.351	0.007	0.0470	0.0006	0.39461	306.2	5.1	295.9	3.5
U1456D-13R-1 30-38 cm	16.393	175	0.629	0.059	0.006	0.0074	0.0003	0.31726	58.4	5.8	47.3	1.6
U1456D-13R-1 30-38 cm	20.154	243	0.725	0.061	0.004	0.0084	0.0002	0.11856	60.2	4.1	54	1.1
U1456D-13R-1 30-38 cm	27.675	575	0.490	1.391	0.018	0.1389	0.0017	0.50246	884.2	7.7	838.3	9.4
U1456D-13R-1 30-38 cm	27.674	162	0.875	0.054	0.006	0.0078	0.0002	0.12223	53	5.8	50.3	1.3
U1456D-13R-1 30-38 cm	5.103	1210	8.400	0.224	0.020	0.0303	0.0025	0.84603	204	17	193	16
U1456D-13R-1 30-38 cm	18.543	324	0.954	0.799	0.019	0.0905	0.0019	0.58780	596	10	558	11
U1456D-13R-1 30-38 cm	27.674	81.9	0.490	1.946	0.040	0.1780	0.0028	0.60342	1095	14	1057	16
U1456D-13R-1 30-38 cm	19.617	538	2.210	1.747	0.048	0.1513	0.0039	0.76649	1024	18	907	22
U1456D-13R-1 30-38 cm	27.674	511	1.052	0.066	0.003	0.0093	0.0002	0.26115	65.1	2.4	59.55	0.94
U1456D-13R-1 30-38 cm	27.674	126	2.600	1.154	0.024	0.1184	0.0020	0.52238	777	11	721	12
U1456D-13R-1 30-38 cm	12.097	628	1.224	0.977	0.021	0.1072	0.0021	0.70345	691	11	656	12
U1456D-13R-1 30-38 cm	27.674	453	0.724	0.114	0.004	0.0165	0.0003	0.39485	109.5	3.1	105.8	2.2

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-13R-1 30-38 cm	27.674	109	1.182	1.322	0.025	0.1377	0.0015	0.39424	853	11	831.3	8.4
U1456D-13R-1 30-38 cm	27.674	874	5.510	0.609	0.009	0.0768	0.0008	0.60219	482.5	5.4	477	4.5
U1456D-13R-1 30-38 cm	6.724	208	0.392	0.075	0.008	0.0107	0.0004	0.18193	73.2	7.7	68.3	2.6
U1456D-13R-1 30-38 cm	8.595	1300	12.600	0.749	0.027	0.0920	0.0034	0.76638	566	15	567	20
U1456D-13R-1 30-38 cm	15.319	725	5.470	0.934	0.018	0.1074	0.0021	0.64542	669	9.6	658	12
U1456D-13R-1 30-38 cm	9.143	134	0.814	0.055	0.010	0.0081	0.0008	0.34553	54.1	9.9	52.1	5.4
U1456D-13R-1 30-38 cm	16.662	408.4	6.860	0.468	0.013	0.0569	0.0014	0.73636	389.1	9.2	356.6	8.4
U1456D-13R-1 30-38 cm	5.382	535	0.696	0.860	0.021	0.0977	0.0022	0.70594	633	14	601	13
U1456D-13R-1 30-38 cm	14.245	419	1.761	4.428	0.086	0.3008	0.0056	0.39267	1715	16	1694	28
U1456D-13R-1 30-38 cm	18.811	141.3	1.351	0.720	0.019	0.0878	0.0009	0.34577	551	11	542.6	5.3
U1456D-13R-1 30-38 cm	27.675	498	1.415	0.117	0.003	0.0167	0.0003	0.22843	111.9	3.1	106.7	1.7
U1456D-13R-1 30-38 cm	27.675	98.5	1.037	0.078	0.008	0.0112	0.0003	0.05458	75.1	7	71.6	2
U1456D-13R-1 30-38 cm	15.050	373.4	2.054	1.442	0.044	0.1469	0.0042	0.83203	903	18	882	24
U1456D-13R-1 30-38 cm	27.674	313	2.510	0.069	0.004	0.0102	0.0002	0.22392	67.4	3.3	65.4	1.2
U1456D-13R-1 30-38 cm	19.348	188	0.837	0.085	0.006	0.0126	0.0003	0.00607	83.2	5.3	80.6	1.6
U1456D-13R-1 30-38 cm	4.835	827	2.160	0.303	0.010	0.0396	0.0010	0.39518	268.7	7.7	250.3	5.9
U1456D-13R-1 30-38 cm	27.674	581	1.080	0.048	0.002	0.0076	0.0002	0.17902	47.8	2.1	48.7	0.96
U1456D-13R-1 30-38 cm	27.675	370	4.200	0.116	0.005	0.0174	0.0003	0.28818	110.7	4.3	111	2.1
U1456D-13R-1 30-38 cm	27.674	39.08	1.046	0.152	0.016	0.0206	0.0007	0.24386	140	14	131.4	4.4
U1456D-13R-1 30-38 cm	27.674	2230	1.310	0.023	0.001	0.0034	0.0001	0.28583	22.71	0.84	21.78	0.49
U1456D-13R-1 30-38 cm	22.839	214.6	0.471	1.240	0.024	0.1307	0.0020	0.42160	817	11	791	11
U1456D-13R-1 30-38 cm	14.783	1086	0.618	0.977	0.016	0.1060	0.0018	0.57596	691.6	8.3	649	11
U1456D-13R-1 30-38 cm	5.640	598	26.200	0.159	0.012	0.0240	0.0013	0.63733	150	10	152.9	7.9
U1456D-13R-1 30-38 cm	13.976	220	1.970	1.593	0.043	0.1542	0.0034	0.73742	965	17	924	19
U1456D-13R-1 30-38 cm	23.914	404	0.829	0.117	0.005	0.0168	0.0003	0.39115	111.9	4.5	107.2	2.1
U1456D-13R-1 30-38 cm	12.634	56	0.555	0.094	0.018	0.0126	0.0005	0.11098	89	17	80.7	3.3
U1456D-13R-1 30-38 cm	27.675	1858	0.458	0.780	0.010	0.0941	0.0011	0.70399	585	5.5	579.8	6.6
U1456D-13R-1 30-38 cm	25.525	475	0.884	1.169	0.018	0.1321	0.0018	0.56370	784.7	8.6	800	10
U1456D-13R-1 30-38 cm	8.067	461	3.230	0.735	0.025	0.0859	0.0035	0.61288	558	14	531	21
U1456D-13R-1 30-38 cm	27.675	1353	0.485	0.069	0.001	0.0101	0.0001	0.25229	67.8	1.4	64.95	0.77
U1456D-13R-1 30-38 cm	27.674	324	0.757	0.090	0.004	0.0135	0.0002	0.13578	86.9	3.9	86.5	1.4
U1456D-13R-1 30-38 cm	4.566	940	11.650	0.325	0.022	0.0427	0.0026	0.59807	285	17	269	16
U1456D-13R-1 30-38 cm	15.319	1105	2.300	0.927	0.014	0.1028	0.0014	0.78116	665.5	7.4	630.9	8
U1456D-13R-1 30-38 cm	6.993	373	60.000	0.175	0.009	0.0242	0.0007	0.31864	163.1	7.8	154.3	4.4
U1456D-13R-1 30-38 cm	23.109	437	0.870	0.117	0.004	0.0175	0.0002	0.39599	112.5	3.8	112	1.4
U1456D-13R-1 30-38 cm	6.724	744	1.800	0.123	0.007	0.0181	0.0006	0.52625	117.3	6.6	115.9	3.8
U1456D-13R-1 30-38 cm	5.909	324	2.044	3.350	0.110	0.2235	0.0064	0.82234	1491	25	1300	34
U1456D-13R-1 30-38 cm	21.497	166.3	22.900	2.848	0.075	0.1846	0.0043	0.74503	1363	20	1091	23
U1456D-13R-1 30-38 cm	27.674	3440	1.466	0.051	0.002	0.0074	0.0001	0.58250	50.8	1.5	47.39	0.75
U1456D-13R-1 30-38 cm	18.274	184.2	2.610	1.253	0.030	0.1379	0.0025	0.61202	822	14	832	14
U1456D-13R-1 30-38 cm	12.365	287	1.206	0.122	0.010	0.0179	0.0007	0.06818	116.3	8.8	114.5	4.3

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-13R-1 30-38 cm	27.675	97.2	1.104	6.069	0.059	0.3556	0.0023	0.46540	1985	8.6	1961	11
U1456D-13R-1 30-38 cm	14.783	1266	0.483	0.014	0.001	0.0016	0.0000	0.05264	13.8	1.2	10.05	0.26
U1456D-13R-1 30-38 cm	18.274	1630	61.200	0.736	0.015	0.0893	0.0019	0.61897	559.3	8.6	551	11
U1456D-13R-1 30-38 cm	4.566	337.5	1.892	1.670	0.041	0.1644	0.0036	0.59548	996	16	981	20
U1456D-13R-1 30-38 cm	22.571	543	1.354	2.980	0.071	0.2199	0.0052	0.79599	1397	19	1280	28
U1456D-13R-1 30-38 cm	27.675	1119	1.068	0.143	0.002	0.0207	0.0002	0.26537	136	2.1	132.1	1.1
U1456D-13R-1 30-38 cm	27.674	4150	1.781	0.036	0.001	0.0053	0.0001	0.42963	35.7	0.92	34.1	0.51
U1456D-13R-1 30-38 cm	27.674	553.9	0.943	0.052	0.003	0.0078	0.0001	0.02670	51.4	2.3	49.82	0.68
U1456D-13R-1 30-38 cm	23.914	84.1	0.802	1.165	0.024	0.1253	0.0013	0.17416	783	11	760.8	7.2
U1456D-15R-1 55-61 cm	25.729	83.4	0.602	0.077	0.008	0.0105	0.0003	0.15682	73.8	7.8	67.3	2.1
U1456D-15R-1 55-61 cm	27.674	81.7	0.377	0.669	0.022	0.0808	0.0009	0.19239	517	13	500.9	5.4
U1456D-15R-1 55-61 cm	22.323	370	1.207	0.165	0.006	0.0233	0.0003	0.29452	154.5	5	148.5	2
U1456D-15R-1 55-61 cm	27.674	438	1.954	0.071	0.003	0.0103	0.0002	0.18708	69	2.9	65.9	1.2
U1456D-15R-1 55-61 cm	27.674	511	2.859	0.051	0.003	0.0078	0.0001	0.15775	50.3	2.4	49.86	0.82
U1456D-15R-1 55-61 cm	10.402	197.7	0.857	10.610	0.150	0.4628	0.0052	0.54118	2488	13	2451	23
U1456D-15R-1 55-61 cm	27.675	1509	3.360	0.037	0.001	0.0056	0.0001	0.19057	37.2	1.1	36.06	0.35
U1456D-15R-1 55-61 cm	22.809	1625	1.542	0.036	0.001	0.0055	0.0001	0.14914	35.6	1.1	35.46	0.42
U1456D-15R-1 55-61 cm	27.917	1130	3.840	0.047	0.002	0.0071	0.0001	0.00514	46.7	1.8	45.36	0.71
U1456D-15R-1 55-61 cm	21.836	1680	0.930	0.053	0.002	0.0082	0.0001	0.35549	52.6	1.5	52.89	0.84
U1456D-15R-1 55-61 cm	26.215	140	2.440	0.812	0.020	0.0978	0.0016	0.23667	601	11	601.3	9.3
U1456D-15R-1 55-61 cm	27.675	279	1.306	0.059	0.004	0.0085	0.0002	0.14404	57.6	3.4	54.8	1
U1456D-15R-1 55-61 cm	20.376	200.4	1.760	2.103	0.035	0.1910	0.0028	0.64050	1148	12	1126	15
U1456D-15R-1 55-61 cm	25.486	65.29	0.938	0.137	0.010	0.0200	0.0005	0.05131	129.2	8.5	127.9	2.9
U1456D-15R-1 55-61 cm	9.429	1045	1.700	7.461	0.090	0.3627	0.0048	0.71437	2168	11	1994	22
U1456D-15R-1 55-61 cm	27.674	1452	1.350	0.037	0.001	0.0055	0.0001	0.31835	36.4	1.3	35.21	0.71
U1456D-15R-1 55-61 cm	27.675	428	5.800	4.229	0.078	0.2966	0.0048	0.64848	1675	15	1673	24
U1456D-15R-1 55-61 cm	16.240	1190	10.800	0.631	0.011	0.0786	0.0012	0.63628	496.4	7	487.9	7.1
U1456D-15R-1 55-61 cm	20.134	119	1.700	0.327	0.012	0.0432	0.0009	0.26202	285.7	9.3	272.4	5.5
U1456D-15R-1 55-61 cm	14.051	163.2	1.895	1.104	0.033	0.1219	0.0020	0.46291	753	16	741	12
U1456D-15R-1 55-61 cm	16.970	584	1.380	0.643	0.013	0.0863	0.0015	0.43936	503.3	8.1	533.3	9.1
U1456D-15R-1 55-61 cm	9.186	362	4.070	0.333	0.013	0.0424	0.0013	0.37253	291.3	9.7	267.9	8.1
U1456D-15R-1 55-61 cm	27.675	528	4.030	0.829	0.012	0.0998	0.0010	0.33434	612	6.7	613.2	6
U1456D-15R-1 55-61 cm	9.672	380	1.311	0.213	0.013	0.0180	0.0004	0.05074	195	11	114.7	2.4
U1456D-15R-1 55-61 cm	23.052	1260	1.511	0.039	0.001	0.0059	0.0001	0.20802	38.5	1.3	38.15	0.65
U1456D-15R-1 55-61 cm	1.973	730	2.490	0.445	0.045	0.0488	0.0022	0.67434	372	31	307	13
U1456D-15R-1 55-61 cm	7.483	137.3	6.200	2.310	0.060	0.2009	0.0032	0.22327	1214	18	1180	17
U1456D-15R-1 55-61 cm	4.866	1181	11.130	0.124	0.009	0.0160	0.0008	0.61032	118.2	8.3	102.5	4.9
U1456D-15R-1 55-61 cm	7.969	247.1	0.721	0.601	0.017	0.0699	0.0018	0.43515	478	10	435	11
U1456D-15R-1 55-61 cm	27.674	558	1.121	0.104	0.003	0.0161	0.0002	0.14633	100.4	2.9	102.6	1.3
U1456D-15R-1 55-61 cm	15.998	438	0.717	0.070	0.003	0.0079	0.0002	0.28951	68.6	3.2	50.7	1.3
U1456D-15R-1 55-61 cm	27.674	359	1.037	0.307	0.007	0.0433	0.0006	0.36083	271.2	5.1	272.9	3.4

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-15R-1 55-61 cm	27.675	1147	1.960	0.017	0.001	0.0026	0.0000	0.09437	16.82	0.86	16.72	0.29
U1456D-15R-1 55-61 cm	21.107	138.5	0.325	0.711	0.019	0.0888	0.0014	0.29709	543	11	548.4	8.2
U1456D-15R-1 55-61 cm	15.754	1789	2.494	0.230	0.005	0.0334	0.0007	0.58736	210.7	4.1	211.9	4.5
U1456D-15R-1 55-61 cm	23.782	983	1.120	0.051	0.002	0.0073	0.0001	0.14761	50	1.9	46.97	0.73
U1456D-15R-1 55-61 cm	27.675	289.1	1.547	4.270	0.120	0.2786	0.0078	0.63484	1678	22	1580	39
U1456D-15R-1 55-61 cm	27.674	674	1.960	0.112	0.004	0.0167	0.0003	0.36304	108	3.2	106.5	2
U1456D-15R-1 55-61 cm	11.677	563	43.000	0.651	0.023	0.0796	0.0023	0.42488	508	14	493	14
U1456D-15R-1 55-61 cm	10.402	245	1.991	1.312	0.036	0.1392	0.0033	0.64598	853	17	840	19
U1456D-15R-1 55-61 cm	25.485	221.6	4.870	4.540	0.110	0.3047	0.0073	0.63916	1732	20	1711	36
U1456D-15R-1 55-61 cm	14.537	231	1.303	1.450	0.029	0.1468	0.0019	0.57685	909	12	883	11
U1456D-15R-1 55-61 cm	20.863	293	1.782	0.094	0.006	0.0138	0.0005	0.21311	90.7	5.4	88.1	3.3
U1456D-15R-1 55-61 cm	15.024	190.4	0.925	0.066	0.006	0.0091	0.0003	0.23398	64.5	5.3	58.3	2
U1456D-15R-1 55-61 cm	27.674	289	1.724	1.310	0.031	0.1338	0.0031	0.45351	847	14	809	18
U1456D-15R-1 55-61 cm	16.484	362.5	0.675	0.067	0.004	0.0102	0.0003	0.11510	65.2	3.6	65.1	1.6
U1456D-15R-1 55-61 cm	27.674	815	1.790	0.702	0.012	0.0862	0.0011	0.51942	539.3	7	532.8	6.3
U1456D-15R-1 55-61 cm	7.055	887	165.000	0.569	0.038	0.0661	0.0056	0.49316	461	27	412	34
U1456D-15R-1 55-61 cm	11.376	363	1.751	3.344	0.092	0.2377	0.0066	0.63743	1488	21	1373	34
U1456D-15R-1 55-61 cm	27.674	176.4	2.185	1.914	0.042	0.1824	0.0034	0.53045	1082	14	1079	19
U1456D-15R-1 55-61 cm	25.972	640	0.860	0.064	0.003	0.0097	0.0002	0.10194	63.1	2.4	62.36	0.97
U1456D-15R-1 55-61 cm	18.673	121.2	0.662	3.032	0.071	0.2469	0.0044	0.72583	1415	17	1425	22
U1456D-15R-1 55-61 cm	20.619	319	0.828	0.093	0.005	0.0133	0.0003	0.17346	89.7	4.3	85.4	1.9
U1456D-15R-1 55-61 cm	27.675	1133	1.360	0.018	0.001	0.0024	0.0001	0.16924	18.16	0.98	15.52	0.51
U1456D-15R-1 55-61 cm	6.023	354	3.680	0.054	0.007	0.0066	0.0005	0.38079	53.4	6.6	42.5	2.9
U1456D-15R-1 55-61 cm	27.674	281	1.552	1.186	0.016	0.1298	0.0015	0.56926	793.1	7.6	786.5	8.5
U1456D-15R-1 55-61 cm	24.025	891.3	0.689	0.099	0.002	0.0077	0.0001	0.25413	95.6	2.2	49.55	0.6
U1456D-15R-1 55-61 cm	27.675	176	1.237	0.093	0.006	0.0135	0.0003	0.02429	89.8	5.6	86.3	1.7
U1456D-15R-1 55-61 cm	25.485	447	1.101	0.061	0.003	0.0093	0.0002	0.07524	59.8	2.6	59.9	1
U1456D-15R-1 55-61 cm	18.430	268.9	1.504	6.908	0.070	0.3366	0.0030	0.52017	2099	9.1	1870	14
U1456D-15R-1 55-61 cm	23.782	798	14.200	1.702	0.023	0.1684	0.0020	0.72492	1008	8.5	1003	11
U1456D-15R-1 55-61 cm	18.673	148.8	1.774	9.860	0.140	0.4392	0.0061	0.71296	2420	13	2346	27
U1456D-15R-1 55-61 cm	27.674	182	0.769	0.050	0.004	0.0079	0.0002	0.02958	49.2	3.4	50.9	1.3
U1456D-15R-1 55-61 cm	27.675	552	0.799	0.046	0.002	0.0070	0.0001	0.03758	45.6	2.3	45.17	0.56
U1456D-15R-1 55-61 cm	27.675	1510	3.441	0.121	0.002	0.0183	0.0002	0.31999	115.6	2	117	1.1
U1456D-15R-1 55-61 cm	27.675	297	1.401	0.063	0.004	0.0101	0.0002	0.07362	61.8	3.3	65.1	1.3
U1456D-15R-1 55-61 cm	8.271	641	23.100	0.698	0.034	0.0856	0.0019	0.21871	536	19	529	11
U1456D-15R-1 55-61 cm	9.185	224.2	3.940	1.281	0.028	0.1383	0.0018	0.38091	836	13	835	10
U1456D-15R-1 55-61 cm	27.674	595	4.270	0.590	0.011	0.0768	0.0013	0.63597	470.2	7.2	476.7	7.9
U1456D-15R-1 55-61 cm	21.349	167	1.920	1.966	0.042	0.1603	0.0024	0.50124	1101	14	958	13
U1456D-15R-1 55-61 cm	20.620	372.5	3.620	1.491	0.029	0.1563	0.0028	0.59600	925	12	935	16
U1456D-15R-1 55-61 cm	24.755	521	0.709	6.350	0.110	0.2915	0.0046	0.77553	2021	15	1648	23
U1456D-15R-1 55-61 cm	27.675	284	1.060	0.051	0.004	0.0082	0.0002	0.14062	50.5	3.6	52.7	1.3

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-15R-1 55-61 cm	10.947	103	2.620	0.112	0.013	0.0180	0.0007	0.06922	106	12	115.2	4.5
U1456D-15R-1 55-61 cm	8.456	168.9	0.505	0.616	0.028	0.0763	0.0018	0.37829	485	18	474	11
U1456D-15R-1 55-61 cm	27.674	900	0.510	0.052	0.002	0.0080	0.0002	0.32354	50.9	1.8	51.35	0.96
U1456D-15R-1 55-61 cm	22.565	304	0.878	0.076	0.004	0.0121	0.0002	0.46123	74.6	3.3	77.3	1.2
U1456D-15R-1 55-61 cm	27.674	139.7	0.743	0.074	0.005	0.0111	0.0003	0.19994	72.2	4.7	71.4	1.7
U1456D-15R-1 55-61 cm	11.861	86.1	2.179	1.436	0.039	0.1524	0.0023	0.16380	902	16	914	13
U1456D-15R-1 55-61 cm	24.999	733	2.947	9.820	0.110	0.4400	0.0048	0.64071	2418	11	2349	21
U1456D-15R-1 55-61 cm	27.674	752	1.617	0.118	0.003	0.0178	0.0003	0.27007	113	2.4	113.8	1.6
U1456D-15R-1 55-61 cm	27.675	314	2.790	0.660	0.012	0.0826	0.0009	0.43634	513.4	7.2	511.5	5.1
U1456D-15R-1 55-61 cm	27.674	250	1.031	1.229	0.017	0.1364	0.0014	0.44995	812.7	8	824.1	8.1
U1456D-15R-1 55-61 cm	27.674	207.4	1.132	0.060	0.004	0.0086	0.0002	0.05529	59	3.6	55.3	1.2
U1456D-15R-1 55-61 cm	15.024	179.7	1.620	3.620	0.100	0.2406	0.0073	0.71617	1549	23	1388	38
U1456D-15R-1 55-61 cm	27.675	144	2.280	1.248	0.027	0.1326	0.0018	0.23898	820	12	802	10
U1456D-15R-1 55-61 cm	27.674	272.8	1.008	0.051	0.003	0.0073	0.0002	0.04189	50.1	3.1	47.1	1
U1456D-15R-1 55-61 cm	25.485	427	4.720	1.597	0.025	0.1512	0.0023	0.35310	967.5	9.6	907	13
U1456D-15R-1 55-61 cm	27.674	1611	3.670	0.117	0.003	0.0177	0.0003	0.49797	112.2	2.5	113	1.9
U1456D-15R-1 55-61 cm	9.185	1151	18.900	1.117	0.036	0.1268	0.0043	0.60374	760	17	769	24
U1456D-15R-1 55-61 cm	4.806	660	0.581	0.629	0.025	0.0744	0.0021	0.68407	495	15	463	13
U1456D-15R-1 55-61 cm	24.512	610	6.980	0.367	0.012	0.0428	0.0010	0.73954	316.3	9	270	6.4
U1456D-15R-1 55-61 cm	27.674	52.5	0.639	0.065	0.006	0.0003	0.0015	0.00716	63.3	6	1.4	9.4
U1456D-15R-1 55-61 cm	22.906	49	0.911	0.090	0.010	0.0143	0.0006	0.03400	86.5	8.8	91.5	3.5
U1456D-15R-1 55-61 cm	27.675	276	0.680	0.060	0.003	0.0089	0.0002	0.14727	59	2.9	57	1.4
U1456D-15R-1 55-61 cm	11.353	780	9.000	0.661	0.024	0.0837	0.0027	0.70412	514	15	518	16
U1456D-15R-1 55-61 cm	7.702	541	2.057	1.577	0.044	0.1653	0.0050	0.65681	959	17	986	28
U1456D-15R-1 55-61 cm	27.674	97.8	1.299	1.065	0.029	0.1189	0.0026	0.43986	733	14	724	15
U1456D-15R-1 55-61 cm	27.674	226.7	0.977	1.459	0.056	0.1455	0.0054	0.47953	904	23	877	31
U1456D-15R-1 55-61 cm	27.675	1469	1.332	0.069	0.002	0.0104	0.0002	0.41005	67.3	1.8	66.9	1.1
U1456D-15R-1 55-61 cm	27.674	476	7.500	1.617	0.050	0.1653	0.0044	0.80919	975	20	987	24
U1456D-15R-1 55-61 cm	27.674	511	0.999	0.054	0.002	0.0078	0.0002	0.18537	52.9	2	50.02	0.99
U1456D-15R-1 55-61 cm	27.675	299	2.270	0.116	0.005	0.0181	0.0005	0.52492	110.8	4.5	115.7	3.2
U1456D-15R-1 55-61 cm	9.519	573	8.370	0.202	0.006	0.0295	0.0007	0.46378	186.7	5.3	187.6	4.4
U1456D-15R-1 55-61 cm	17.589	291	1.436	1.810	0.130	0.1490	0.0080	0.74405	1033	42	891	45
U1456D-15R-1 55-61 cm	6.052	168.4	1.564	0.743	0.042	0.0886	0.0036	0.54539	562	25	547	22
U1456D-15R-1 55-61 cm	13.737	988	23.600	1.300	0.046	0.1354	0.0041	0.87310	842	21	818	23
U1456D-15R-1 55-61 cm	11.920	409	5.290	1.894	0.050	0.1821	0.0038	0.67739	1077	17	1078	20
U1456D-15R-1 55-61 cm	2.651	3050	186.000	0.070	0.009	0.0107	0.0016	0.91794	68.1	8.8	68.4	9.9
U1456D-15R-1 55-61 cm	27.674	272	1.193	1.623	0.029	0.1617	0.0025	0.53136	977	11	966	14
U1456D-15R-1 55-61 cm	27.675	1337	1.057	0.068	0.002	0.0101	0.0001	0.35698	66.6	1.8	64.85	0.88
U1456D-15R-1 55-61 cm	10.069	573	1.570	4.820	0.220	0.3090	0.0140	0.82003	1786	37	1731	69
U1456D-15R-1 55-61 cm	14.471	442	0.746	0.266	0.009	0.0371	0.0007	0.54639	239	7.2	234.9	4.6
U1456D-15R-1 55-61 cm	27.674	266.4	0.874	0.167	0.006	0.0238	0.0005	0.15309	156.1	4.9	151.6	3

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-15R-1 55-61 cm	19.606	361	1.330	3.690	0.130	0.2432	0.0096	0.73513	1562	31	1398	49
U1456D-15R-1 55-61 cm	10.069	310	1.220	0.115	0.009	0.0168	0.0006	0.43214	109.7	7.7	107.6	3.6
U1456D-15R-1 55-61 cm	5.502	666	9.990	7.190	0.380	0.3880	0.0220	0.64901	2142	42	2110	100
U1456D-15R-1 55-61 cm	17.588	89.7	1.810	12.940	0.280	0.4950	0.0100	0.76368	2670	20	2590	44
U1456D-15R-1 55-61 cm	28.042	512	0.828	0.117	0.004	0.0168	0.0002	0.12508	111.9	3.1	107.3	1.5
U1456D-15R-1 55-61 cm	27.674	65.1	0.522	6.430	0.130	0.3656	0.0068	0.61641	2030	18	2006	32
U1456D-15R-1 55-61 cm	27.674	354	1.026	0.067	0.003	0.0100	0.0003	0.16661	65.5	2.8	64	1.6
U1456D-15R-1 55-61 cm	27.674	2030	1.570	0.498	0.011	0.0004	0.0073	0.09830	409.4	7.4	-1	34
U1456D-15R-1 55-61 cm	7.136	1280	1.382	0.132	0.010	0.0181	0.0012	0.64039	125.5	9.2	115.9	7.5
U1456D-15R-1 55-61 cm	16.304	523	2.910	0.118	0.006	0.0171	0.0005	0.25324	112.6	5.3	109.5	3.1
U1456D-15R-1 55-61 cm	27.674	616	0.892	0.109	0.005	0.0164	0.0005	0.62305	104.8	4.2	104.5	2.9
U1456D-15R-1 55-61 cm	17.588	400	1.277	2.187	0.051	0.1966	0.0045	0.80005	1176	16	1156	25
U1456D-15R-1 55-61 cm	27.674	2510	1.640	0.105	0.004	-0.0002	0.0014	0.00276	101.3	3.5	-1.5	9.1
U1456D-15R-1 55-61 cm	17.221	402.5	0.993	1.313	0.031	0.1406	0.0022	0.59912	849	13	848	12
U1456D-15R-1 55-61 cm	27.675	108.8	1.043	1.139	0.030	0.1268	0.0020	0.43299	768	14	769	11
U1456D-15R-1 55-61 cm	27.675	857	0.601	0.176	0.006	0.0245	0.0005	0.59320	164.1	4.8	155.8	3.1
U1456D-15R-1 55-61 cm	21.072	941	1.390	0.064	0.002	0.0093	0.0002	0.19071	62.4	2.3	59.4	1.2
U1456D-19R-2 20-26 cm	27.675	1041	2.220	0.121	0.003	0.0178	0.0002	0.38983	115.7	2.5	113.7	1.4
U1456D-19R-2 20-26 cm	27.674	430	1.377	1.972	0.021	0.1828	0.0014	0.40189	1105	7.3	1082	7.6
U1456D-19R-2 20-26 cm	4.866	360	3.500	0.623	0.083	0.0770	0.0058	0.53881	484	49	478	35
U1456D-19R-2 20-26 cm	21.106	602	3.720	8.030	0.120	0.3766	0.0060	0.81141	2232	13	2059	28
U1456D-19R-2 20-26 cm	7.055	196	1.410	0.119	0.015	0.0145	0.0007	0.08857	114	14	92.5	4.6
U1456D-19R-2 20-26 cm	27.674	482	0.836	0.062	0.003	0.0089	0.0001	0.02348	60.5	2.4	57	0.72
U1456D-19R-2 20-26 cm	23.052	21.61	1.840	0.174	0.024	0.0210	0.0009	0.09155	156	21	133.6	5.8
U1456D-19R-2 20-26 cm	21.107	810	5.720	1.932	0.021	0.1855	0.0018	0.61040	1091	7.4	1097	9.7
U1456D-19R-2 20-26 cm	27.674	170.9	0.628	0.088	0.005	0.0132	0.0003	0.03505	85.3	5	84.6	1.7
U1456D-19R-2 20-26 cm	27.674	49.9	1.636	0.848	0.027	0.1016	0.0014	0.04721	623	15	623.6	8.1
U1456D-19R-2 20-26 cm	28.161	465	1.180	0.062	0.003	0.0085	0.0001	0.02600	60.5	2.7	54.71	0.76
U1456D-19R-2 20-26 cm	21.107	38.76	1.504	0.839	0.040	0.0998	0.0020	0.31115	612	22	615	11
U1456D-19R-2 20-26 cm	23.295	433	1.886	7.710	0.130	0.3461	0.0046	0.74721	2194	16	1915	22
U1456D-19R-2 20-26 cm	12.348	469	1.350	0.081	0.005	0.0122	0.0003	0.15919	79	4.8	78	1.8
U1456D-19R-2 20-26 cm	16.728	398	0.859	10.470	0.160	0.4692	0.0077	0.76222	2477	15	2478	34
U1456D-19R-2 20-26 cm	27.674	54.8	2.543	1.249	0.038	0.1282	0.0019	0.15739	817	18	777	11
U1456D-19R-2 20-26 cm	19.403	784	3.290	1.424	0.021	0.1449	0.0017	0.27663	898.1	9	872	9.3
U1456D-19R-2 20-26 cm	24.756	290	1.457	2.212	0.043	0.1972	0.0035	0.53043	1184	13	1160	19
U1456D-19R-2 20-26 cm	27.674	389	2.650	0.994	0.017	0.1162	0.0017	0.55873	700.6	8.4	708.4	9.7
U1456D-19R-2 20-26 cm	6.023	2560	42.300	0.084	0.004	0.0123	0.0003	0.38197	82.2	3.7	79.1	2
U1456D-19R-2 20-26 cm	5.595	211.2	3.270	4.180	0.160	0.2065	0.0083	0.92048	1666	32	1209	45
U1456D-19R-2 20-26 cm	7.482	222	1.517	0.062	0.007	0.0090	0.0005	0.01693	61.2	6.4	58	3.1
U1456D-19R-2 20-26 cm	27.675	31.02	0.287	0.227	0.018	0.0134	0.0006	0.03810	204	15	85.7	3.5
U1456D-19R-2 20-26 cm	27.674	625	2.170	0.245	0.007	0.0339	0.0006	0.08865	221.6	5.6	215	3.9

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-19R-2 20-26 cm	23.539	108.36	1.064	3.283	0.053	0.2539	0.0028	0.35017	1475	13	1458	15
U1456D-19R-2 20-26 cm	7.785	134.7	1.499	1.083	0.044	0.1139	0.0026	0.00107	743	21	695	15
U1456D-19R-2 20-26 cm	8.515	641	5.210	1.452	0.038	0.1482	0.0032	0.45900	909	16	891	18
U1456D-19R-2 20-26 cm	13.078	567	2.254	2.277	0.037	0.1831	0.0019	0.48381	1206	11	1084	10
U1456D-19R-2 20-26 cm	20.134	477	4.230	2.668	0.045	0.2252	0.0027	0.63092	1318	12	1309	14
U1456D-19R-2 20-26 cm	6.812	356	0.000	0.151	0.017	0.0223	0.0018	0.52378	146	16	142	11
U1456D-19R-2 20-26 cm	9.186	537	3.350	4.292	0.084	0.2699	0.0062	0.64831	1690	16	1539	32
U1456D-19R-2 20-26 cm	2.433	992	12.820	1.132	0.097	0.1240	0.0110	0.91654	766	46	752	64
U1456D-19R-2 20-26 cm	16.970	1868	15.620	5.708	0.091	0.2930	0.0033	0.83882	1930	14	1656	17
U1456D-19R-2 20-26 cm	27.674	238	1.358	2.203	0.031	0.2002	0.0025	0.54636	1181	10	1176	14
U1456D-19R-2 20-26 cm	21.593	251	1.374	8.321	0.085	0.3825	0.0030	0.59760	2265	9.3	2087	14
U1456D-19R-2 20-26 cm	21.592	52	0.211	3.125	0.067	0.0432	0.0011	0.37283	1435	17	272.3	6.8
U1456D-19R-2 20-26 cm	26.701	20	0.166	1.297	0.067	0.1275	0.0034	0.07790	840	30	773	19
U1456D-19R-2 20-26 cm	26.215	339	2.460	1.403	0.017	0.1410	0.0013	0.51030	889.3	7.3	849.9	7.6
U1456D-19R-2 20-26 cm	27.674	1000	1.259	0.044	0.002	0.0067	0.0001	0.22329	43.7	1.9	42.7	0.77
U1456D-19R-2 20-26 cm	13.079	189	3.850	0.223	0.013	0.0310	0.0008	0.27100	203	10	196.6	5.1
U1456D-19R-2 20-26 cm	21.349	1466	1.145	0.124	0.003	0.0180	0.0002	0.28701	118.5	2.3	115.3	1.1
U1456D-19R-2 20-26 cm	24.512	191	1.690	0.763	0.018	0.0923	0.0012	0.26581	574	10	568.9	7
U1456D-19R-2 20-26 cm	25.241	652	1.920	7.260	0.160	0.3601	0.0075	0.76221	2143	19	1979	36
U1456D-19R-2 20-26 cm	25.728	565	0.864	0.083	0.003	0.0121	0.0002	0.35727	80.7	2.9	77.4	1.3
U1456D-19R-2 20-26 cm	16.241	1670	1.560	0.088	0.003	0.0128	0.0002	0.28230	85.9	2.4	82.2	1.4
U1456D-19R-2 20-26 cm	27.675	3110	2.440	0.219	0.003	0.0312	0.0003	0.77078	200.8	2.6	198	2
U1456D-19R-2 20-26 cm	25.971	1047	3.400	0.213	0.004	0.0301	0.0004	0.41404	195.7	3.2	191.2	2.4
U1456D-19R-2 20-26 cm	22.809	433	5.947	1.563	0.019	0.1592	0.0014	0.47369	954.7	7.7	952.2	7.7
U1456D-19R-2 20-26 cm	27.675	977	0.721	0.051	0.002	0.0076	0.0001	0.23751	50.8	1.6	48.84	0.61
U1456D-19R-2 20-26 cm	27.674	1576	19.380	4.778	0.089	0.2856	0.0066	0.43902	1781	16	1616	33
U1456D-19R-2 20-26 cm	27.674	217.2	1.140	1.073	0.023	0.1226	0.0018	0.61149	739	11	745	10
U1456D-19R-2 20-26 cm	21.835	222.1	0.635	5.530	0.110	0.3430	0.0052	0.64566	1901	17	1900	25
U1456D-19R-2 20-26 cm	21.836	1847	6.360	0.211	0.004	0.0304	0.0005	0.53652	195	3.3	192.9	3.4
U1456D-19R-2 20-26 cm	17.700	165.9	1.488	9.640	0.290	0.4320	0.0120	0.87478	2391	29	2312	52
U1456D-19R-2 20-26 cm	12.104	238	5.390	0.134	0.007	0.0199	0.0008	0.30600	127	6.4	126.7	4.9
U1456D-19R-2 20-26 cm	7.298	565	3.510	0.493	0.014	0.0592	0.0015	0.64661	406.2	9.7	370.8	9.4
U1456D-19R-2 20-26 cm	27.675	589	2.050	0.117	0.003	0.0173	0.0002	0.19182	112	3.1	110.6	1.5
U1456D-19R-2 20-26 cm	11.861	850	1.815	0.065	0.004	0.0091	0.0003	0.35349	63.3	3.8	58.3	2.2
U1456D-19R-2 20-26 cm	27.675	210	1.320	0.077	0.004	0.0118	0.0003	0.29958	75.2	4.1	75.8	1.9
U1456D-19R-2 20-26 cm	5.293	3080	1.470	0.119	0.005	0.0172	0.0006	0.46847	114.2	4.4	110	3.7
U1456D-19R-2 20-26 cm	9.001	174.2	2.127	0.461	0.022	0.0548	0.0020	0.37932	383	16	344	12
U1456D-19R-2 20-26 cm	27.675	160.7	1.417	0.096	0.005	0.0128	0.0003	0.21582	93.4	4.9	81.9	1.6
U1456D-19R-2 20-26 cm	25.971	53.38	0.884	1.442	0.052	0.1512	0.0019	0.51029	899	20	907	11
U1456D-19R-2 20-26 cm	4.622	777	16.000	0.716	0.037	0.0800	0.0037	0.54852	547	22	496	22
U1456D-19R-2 20-26 cm	15.755	633	4.320	5.120	0.230	0.2743	0.0097	0.81179	1824	38	1558	49

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-19R-2 20-26 cm	15.024	500	2.490	2.726	0.078	0.2187	0.0048	0.70505	1331	21	1274	26
U1456D-19R-2 20-26 cm	16.971	284.9	0.866	1.086	0.021	0.1220	0.0014	0.39472	746	10	741.8	7.8
U1456D-19R-2 20-26 cm	9.244	362	60.000	0.123	0.010	0.0190	0.0008	0.23453	117.1	8.9	121	5.3
U1456D-19R-2 20-26 cm	12.348	420	4.240	3.240	0.130	0.1570	0.0052	0.92464	1458	30	939	29
U1456D-19R-2 20-26 cm	27.675	442	1.656	11.210	0.160	0.4704	0.0078	0.78593	2537	14	2482	34
U1456D-19R-2 20-26 cm	24.998	367	4.950	2.198	0.061	0.1880	0.0034	0.65156	1174	20	1110	19
U1456D-19R-2 20-26 cm	18.673	262	3.790	4.000	0.190	0.2480	0.0110	0.71949	1615	39	1421	55
U1456D-19R-2 20-26 cm	27.674	1840	4.730	0.110	0.002	0.0162	0.0002	0.27878	106.1	1.8	103.5	1.3
U1456D-19R-2 20-26 cm	27.675	418	2.670	1.570	0.021	0.1631	0.0017	0.55421	957.2	8.5	973.7	9.2
U1456D-19R-2 20-26 cm	9.429	156	2.120	1.101	0.064	0.1241	0.0053	0.75345	748	32	753	30
U1456D-19R-2 20-26 cm	9.001	66.1	1.621	2.420	0.130	0.1911	0.0076	0.62580	1248	41	1126	41
U1456D-19R-2 20-26 cm	27.674	351.9	1.273	0.075	0.003	0.0108	0.0002	0.17990	73.6	3.2	69.3	1.5
U1456D-19R-2 20-26 cm	27.675	136.2	1.306	0.069	0.005	0.0091	0.0003	0.06494	67.2	4.5	58.1	1.7
U1456D-19R-2 20-26 cm	23.296	603	0.822	4.093	0.056	0.2834	0.0041	0.81005	1652	11	1607	21
U1456D-19R-2 20-26 cm	27.674	538	2.890	0.586	0.008	0.0747	0.0007	0.21569	467.5	5.2	464.5	4
U1456D-19R-2 20-26 cm	27.674	206.7	1.020	0.136	0.007	0.0176	0.0003	0.05364	128.4	5.8	112.5	1.7
U1456D-19R-2 20-26 cm	18.674	247.2	1.188	0.615	0.017	0.0707	0.0012	0.57427	485	11	440.1	7.4
U1456D-19R-2 20-26 cm	27.674	447	0.641	0.085	0.003	0.0123	0.0002	0.00164	82.7	2.5	78.59	0.97
U1456D-19R-2 20-26 cm	7.726	299	30.100	0.127	0.007	0.0197	0.0013	0.35691	120.7	6.6	125.5	8.1
U1456D-19R-2 20-26 cm	14.052	289	2.020	0.746	0.023	0.0885	0.0024	0.45650	564	13	546	14
U1456D-19R-2 20-26 cm	7.055	400	28.800	0.244	0.025	0.0326	0.0036	0.55932	220	20	207	22
U1456D-19R-2 20-26 cm	19.160	250	5.670	0.633	0.029	0.0765	0.0036	0.60766	496	19	474	21
U1456D-19R-2 20-26 cm	28.647	541	5.230	1.554	0.026	0.1521	0.0022	0.35596	956	12	912	12
U1456D-19R-2 20-26 cm	27.675	272	24.600	0.363	0.013	0.0484	0.0016	0.72629	313.6	9.8	304.4	9.7
U1456D-19R-2 20-26 cm	5.536	401	65.000	0.033	0.004	0.0055	0.0004	0.04339	33.1	3.8	35.1	2.3
U1456D-19R-2 20-26 cm	15.511	203.9	1.527	0.185	0.009	0.0160	0.0006	0.42941	172	7.9	102.3	3.5
U1456D-19R-2 20-26 cm	27.674	546	2.300	1.875	0.077	0.1844	0.0072	0.71671	1061	28	1086	39
U1456D-19R-2 20-26 cm	24.999	315	1.934	10.020	0.340	0.4390	0.0150	0.68339	2421	31	2333	65
U1456D-19R-2 20-26 cm	25.728	412	0.772	0.099	0.004	0.0147	0.0002	0.08643	96	3.2	94	1.4
U1456D-19R-2 20-26 cm	27.674	3140	2.280	0.039	0.001	0.0058	0.0001	0.44842	38.55	0.94	36.98	0.61
U1456D-19R-2 20-26 cm	7.239	85.8	0.894	0.079	0.014	0.0113	0.0009	0.27148	76	13	72.1	5.6
U1456D-19R-2 20-26 cm	9.915	267	1.230	0.096	0.010	0.0135	0.0005	0.42917	92.3	9	86.3	3.4
U1456D-19R-2 20-26 cm	27.674	1318	2.520	0.111	0.003	0.0168	0.0003	0.35234	106.4	2.5	107.1	1.7
U1456D-19R-2 20-26 cm	27.674	2040	3.190	0.817	0.011	0.0984	0.0012	0.64442	605.5	5.9	605.1	7.1
U1456D-19R-2 20-26 cm	27.674	148	1.260	0.882	0.023	0.1039	0.0025	0.46237	639	12	636	15
U1456D-19R-2 20-26 cm	27.675	831	2.720	0.241	0.008	0.0341	0.0010	0.53059	219.2	6.2	215.9	6.1
U1456D-19R-2 20-26 cm	27.674	424	0.539	1.942	0.025	0.1847	0.0021	0.73066	1094	8.9	1092	11
U1456D-19R-2 20-26 cm	27.675	3360	2.040	0.016	0.001	0.0025	0.0001	0.35602	16.58	0.69	15.86	0.35
U1456D-19R-2 20-26 cm	27.675	1817	0.672	0.055	0.001	0.0079	0.0001	0.43973	54.7	1.4	50.91	0.89
U1456D-19R-2 20-26 cm	15.510	651	0.835	6.992	0.085	0.3818	0.0050	0.59248	2109	11	2084	23
U1456D-19R-2 20-26 cm	11.376	335	2.240	10.250	0.150	0.4093	0.0054	0.65472	2456	13	2211	25

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-19R-2 20-26 cm	19.889	265.8	2.211	0.219	0.008	0.0308	0.0006	0.27062	200.7	6.7	195.2	3.5
U1456D-19R-2 20-26 cm	19.889	274.5	3.650	5.060	0.170	0.2715	0.0083	0.73119	1822	30	1551	43
U1456D-19R-2 20-26 cm	27.675	830	4.810	0.122	0.003	0.0181	0.0003	0.31450	116.4	2.9	115.6	2.2
U1456D-19R-2 20-26 cm	18.916	360	3.590	0.268	0.008	0.0363	0.0008	0.62141	240.9	6.5	229.5	5.1
U1456D-19R-2 20-26 cm	18.673	699	7.700	0.523	0.013	0.0557	0.0012	0.69119	427.3	9.2	349.4	7.2
U1456D-19R-2 20-26 cm	27.674	695	15.100	1.208	0.018	0.1296	0.0016	0.62870	802.7	8.5	786.3	8.8
U1456D-19R-2 20-26 cm	25.972	596	67.200	0.168	0.006	0.0230	0.0005	0.67626	156.8	4.9	146.5	3
U1456D-19R-2 20-26 cm	27.674	229.9	1.396	0.064	0.004	0.0091	0.0002	0.10587	63.2	4.1	58.4	1.4
U1456D-19R-2 20-26 cm	20.377	1349	15.590	0.680	0.009	0.0841	0.0008	0.71246	526.3	5.2	520.6	4.6
U1456D-19R-2 20-26 cm	27.674	129	1.337	0.082	0.006	0.0122	0.0004	0.25031	80.1	5.3	78.2	2.8
U1456D-19R-2 20-26 cm	6.266	712	2.690	1.206	0.081	0.1308	0.0073	0.73257	797	38	791	41
U1456D-19R-2 20-26 cm	27.675	1346	1.500	0.047	0.002	0.0070	0.0001	0.43726	46.6	1.6	44.99	0.87
U1456D-19R-2 20-26 cm	27.674	117	1.677	1.212	0.025	0.1332	0.0017	0.30490	804	12	805.5	9.7
U1456D-19R-2 20-26 cm	27.675	80.6	2.710	1.417	0.034	0.1528	0.0025	0.39730	892	14	916	14
U1456D-19R-2 20-26 cm	25.485	974	0.904	1.065	0.020	0.1129	0.0022	0.72907	735	10	689	12
U1456D-19R-2 20-26 cm	27.675	1027	1.187	0.112	0.003	0.0166	0.0003	0.47681	108	2.7	106.2	2.1
U1456D-19R-2 20-26 cm	27.674	320	1.334	0.097	0.004	0.0143	0.0003	0.28379	93.8	3.7	91.2	1.8
U1456D-19R-2 20-26 cm	27.674	534	2.810	0.064	0.003	0.0093	0.0002	0.43993	62.5	2.5	59.4	1.4
U1456D-19R-2 20-26 cm	27.674	518	6.850	0.017	0.001	0.0027	0.0001	0.19308	17.1	1.3	17.49	0.49
U1456D-19R-2 20-26 cm	27.675	80.6	1.320	0.077	0.006	0.0097	0.0003	0.02350	74.4	5.9	62.4	1.8
U1456D-19R-2 20-26 cm	16.484	1510	1.360	0.066	0.002	0.0075	0.0002	0.37010	65.1	2.3	48.22	0.99
U1456D-19R-2 20-26 cm	27.674	271.2	0.950	0.047	0.003	0.0073	0.0002	0.12976	46.1	2.7	47.1	1
U1456D-19R-2 20-26 cm	11.619	728	51.200	0.725	0.013	0.0896	0.0013	0.33118	553.1	7.5	552.8	7.5
U1456D-19R-2 20-26 cm	3.649	38.5	1.100	6.300	0.300	0.3470	0.0100	0.46228	2014	44	1921	50
U1456D-19R-2 20-26 cm	21.106	859	34.600	0.618	0.010	0.0803	0.0011	0.56742	488	6.4	497.7	6.8
U1456D-19R-2 20-26 cm	15.025	528	8.010	0.626	0.016	0.0803	0.0019	0.63047	493	10	498	11
U1456D-19R-2 20-26 cm	27.674	224.7	0.627	0.661	0.011	0.0826	0.0009	0.24264	514.7	6.8	511.5	5.1
U1456D-19R-2 20-26 cm	27.675	66.7	1.064	0.081	0.008	0.0127	0.0004	0.09352	78.4	7.1	81.5	2.3
U1456D-19R-2 20-26 cm	9.244	512	9.030	6.180	0.110	0.3556	0.0064	0.65153	2000	15	1960	30
U1456D-19R-2 20-26 cm	11.131	336	7.100	11.520	0.180	0.4720	0.0060	0.72498	2564	15	2492	26
U1456D-19R-2 20-26 cm	22.566	776	2.820	0.069	0.003	0.0102	0.0002	0.37912	67.7	2.6	65.5	1.5
U1456D-19R-2 20-26 cm	24.025	656	20.600	0.924	0.021	0.1051	0.0019	0.60349	662	11	644	11
U1456D-19R-2 20-26 cm	27.675	330	0.784	0.125	0.004	0.0184	0.0002	0.10987	119.3	3.8	117.5	1.5
U1456D-19R-2 20-26 cm	12.834	399	5.000	0.616	0.018	0.0790	0.0022	0.46280	486	11	490	13
U1456D-20R-1 95-103 cm	12.594	2720	2.257	0.017	0.001	0.0026	0.0001	0.21752	17.59	0.92	16.98	0.44
U1456D-20R-1 95-103 cm	20.531	99.4	1.285	1.018	0.026	0.1164	0.0015	0.14084	711	13	709.4	8.8
U1456D-20R-1 95-103 cm	27.674	779	0.446	0.053	0.002	0.0083	0.0001	0.12758	52.3	1.7	53.39	0.72
U1456D-20R-1 95-103 cm	27.674	190	1.046	0.676	0.015	0.0842	0.0008	0.08777	524	9	521	5
U1456D-20R-1 95-103 cm	27.675	32.21	0.837	1.430	0.051	0.1470	0.0024	0.19258	895	21	884	13
U1456D-20R-1 95-103 cm	8.824	342	1.388	0.083	0.007	0.0126	0.0003	0.02422	80.8	6.2	80.8	2
U1456D-20R-1 95-103 cm	27.675	445	0.902	0.061	0.004	0.0068	0.0001	0.21957	60.2	3.8	43.52	0.76

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-20R-1 95-103 cm	27.674	124.8	0.617	0.090	0.006	0.0136	0.0003	0.00489	86.7	5.2	86.8	1.7
U1456D-20R-1 95-103 cm	13.784	357.4	1.171	0.318	0.011	0.0434	0.0007	0.45327	280	8.3	273.7	4.5
U1456D-20R-1 95-103 cm	4.564	1462	1.782	0.040	0.003	0.0053	0.0001	0.54547	39.6	3.1	34.09	0.91
U1456D-20R-1 95-103 cm	27.675	398	4.610	0.236	0.007	0.0153	0.0002	0.28707	214.8	5.5	97.8	1.2
U1456D-20R-1 95-103 cm	27.674	118.3	1.010	4.324	0.051	0.3029	0.0026	0.50097	1696	9.7	1705	13
U1456D-20R-1 95-103 cm	27.675	362	1.300	0.078	0.003	0.0120	0.0002	0.20756	76.5	2.9	76.9	1.4
U1456D-20R-1 95-103 cm	12.104	515	3.440	1.622	0.034	0.1345	0.0021	0.64854	977	13	814	12
U1456D-20R-1 95-103 cm	8.031	251.4	0.993	2.818	0.057	0.2236	0.0034	0.44451	1359	15	1301	18
U1456D-20R-1 95-103 cm	27.674	234.2	1.363	0.054	0.003	0.0077	0.0002	0.20036	53.3	3	49.1	1.1
U1456D-20R-1 95-103 cm	27.674	1245	2.534	0.221	0.004	0.0315	0.0003	0.33833	202.9	2.9	199.8	1.7
U1456D-20R-1 95-103 cm	27.674	60.4	0.863	0.092	0.009	0.0136	0.0004	0.00211	90.4	8.6	86.8	2.7
U1456D-20R-1 95-103 cm	20.730	322	0.695	0.076	0.005	0.0098	0.0002	0.03956	74.3	4.5	62.9	1.2
U1456D-20R-1 95-103 cm	24.896	300	0.874	1.601	0.022	0.1594	0.0016	0.39507	970.4	8.4	953	9.1
U1456D-20R-1 95-103 cm	12.594	722	3.475	1.994	0.028	0.1508	0.0019	0.63132	1113	9.5	905	11
U1456D-20R-1 95-103 cm	27.674	1244	9.440	0.294	0.005	0.0398	0.0003	0.31917	261.8	3.6	251.8	2
U1456D-20R-1 95-103 cm	27.675	73.1	6.540	0.747	0.024	0.0902	0.0013	0.14088	564	14	556.7	7.6
U1456D-20R-1 95-103 cm	14.181	1434	1.954	1.326	0.017	0.1370	0.0015	0.67588	857.8	7.2	827.6	8.3
U1456D-20R-1 95-103 cm	3.969	1480	28.500	0.632	0.031	0.0766	0.0030	0.79352	496	20	476	18
U1456D-20R-1 95-103 cm	16.562	295	2.517	2.298	0.042	0.1986	0.0027	0.71430	1210	13	1167	15
U1456D-20R-1 95-103 cm	27.675	216.1	0.587	0.080	0.004	0.0114	0.0002	0.06975	77.5	4.1	72.9	1.5
U1456D-20R-1 95-103 cm	27.674	1272	2.678	0.086	0.002	0.0130	0.0002	0.19679	83.6	2.2	83.3	1.3
U1456D-20R-1 95-103 cm	27.674	278.2	1.357	0.108	0.005	0.0166	0.0003	0.04799	103.6	4.1	106.2	1.6
U1456D-20R-1 95-103 cm	6.244	1029	2.260	1.704	0.043	0.1666	0.0040	0.84536	1009	16	993	22
U1456D-20R-1 95-103 cm	27.674	8450	2.940	0.080	0.001	0.0123	0.0001	0.45009	78.4	0.77	78.49	0.53
U1456D-20R-1 95-103 cm	27.674	873	7.440	1.950	0.020	0.1873	0.0018	0.67427	1098	7.2	1106	9.9
U1456D-20R-1 95-103 cm	16.959	463	2.494	1.436	0.027	0.1523	0.0025	0.61350	903	11	913	14
U1456D-20R-1 95-103 cm	10.014	323.7	0.555	0.089	0.007	0.0107	0.0003	0.34598	86.2	6.3	68.7	2
U1456D-20R-1 95-103 cm	27.675	6150	8.750	0.017	0.000	0.0026	0.0000	0.14447	16.85	0.49	16.87	0.31
U1456D-20R-1 95-103 cm	19.539	833	2.198	2.427	0.027	0.1796	0.0017	0.65411	1250	8	1065	9.3
U1456D-20R-1 95-103 cm	14.976	335.4	7.120	0.215	0.008	0.0314	0.0004	0.13588	197.3	6.3	199.2	2.5
U1456D-20R-1 95-103 cm	27.675	987	5.800	0.849	0.010	0.1016	0.0009	0.47405	624.3	5.2	623.7	5.2
U1456D-20R-1 95-103 cm	8.228	927	2.204	1.298	0.032	0.1276	0.0028	0.77016	844	14	774	16
U1456D-20R-1 95-103 cm	27.674	403	1.336	1.531	0.021	0.1595	0.0017	0.65342	941.4	8.7	953.9	9.4
U1456D-20R-1 95-103 cm	10.411	804	0.713	0.313	0.009	0.0437	0.0007	0.27910	276.2	7.2	275.5	4.2
U1456D-20R-1 95-103 cm	18.944	147	2.324	1.322	0.035	0.1407	0.0028	0.37085	853	15	848	16
U1456D-20R-1 95-103 cm	28.468	2210	4.010	0.975	0.026	0.0927	0.0026	0.91533	689	13	571	15
U1456D-20R-1 95-103 cm	27.278	133.7	0.953	0.056	0.006	0.0078	0.0003	0.01117	55.1	5.3	50.1	1.8
U1456D-20R-1 95-103 cm	14.380	62.5	0.397	1.551	0.052	0.1481	0.0031	0.25405	947	21	890	18
U1456D-20R-1 95-103 cm	5.754	631	2.110	0.105	0.006	0.0164	0.0004	0.28432	101	5.2	104.7	2.2
U1456D-20R-1 95-103 cm	18.150	819	0.745	2.988	0.042	0.2214	0.0032	0.79059	1403	11	1292	18
U1456D-20R-1 95-103 cm	24.647	533	1.530	10.410	0.110	0.4566	0.0046	0.76051	2471	9.9	2424	20

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-20R-1 95-103 cm	15.291	887	1.500	0.051	0.003	0.0077	0.0002	0.00777	50	2.7	49.6	1.1
U1456D-20R-1 95-103 cm	27.674	85.1	0.629	0.080	0.006	0.0116	0.0003	0.18334	77.6	6	74.6	2.2
U1456D-20R-1 95-103 cm	25.748	141	1.477	1.740	0.045	0.1713	0.0033	0.51402	1021	17	1021	17
U1456D-20R-1 95-103 cm	27.674	620	2.240	0.108	0.005	0.0163	0.0003	0.22660	103.7	4.6	104.1	1.6
U1456D-20R-1 95-103 cm	17.218	354	0.509	0.059	0.004	0.0086	0.0002	0.06830	58.3	3.5	55.5	1.3
U1456D-20R-1 95-103 cm	27.674	443	1.282	1.174	0.015	0.1303	0.0011	0.28593	788.3	7.1	789.4	6.3
U1456D-20R-1 95-103 cm	24.372	520	0.996	1.368	0.044	0.1279	0.0040	0.90669	869	19	774	23
U1456D-20R-1 95-103 cm	27.674	375	0.597	0.049	0.003	0.0075	0.0002	0.10084	48.2	2.5	48.03	0.99
U1456D-20R-1 95-103 cm	27.675	316.8	5.600	6.070	0.100	0.3598	0.0051	0.68056	1981	15	1979	24
U1456D-20R-1 95-103 cm	26.023	528	2.319	5.169	0.053	0.3300	0.0039	0.76999	1846	8.8	1837	19
U1456D-20R-1 95-103 cm	6.486	213	5.600	0.122	0.011	0.0177	0.0006	0.05511	116.8	9.6	113	3.8
U1456D-20R-1 95-103 cm	18.988	1300	7.500	0.212	0.005	0.0301	0.0004	0.53544	195.6	4.1	191.2	2.8
U1456D-20R-1 95-103 cm	27.674	86.1	1.642	0.128	0.009	0.0198	0.0005	0.11917	121.5	7.7	126.4	2.9
U1456D-20R-1 95-103 cm	19.694	526	0.693	0.051	0.004	0.0074	0.0003	0.00756	50.2	3.6	47.5	1.6
U1456D-20R-1 95-103 cm	24.922	726	2.490	2.164	0.040	0.1904	0.0037	0.71094	1170	13	1122	20
U1456D-20R-1 95-103 cm	25.473	476	1.654	0.171	0.005	0.0253	0.0005	0.16294	159.7	4.1	160.9	3.1
U1456D-20R-1 95-103 cm	16.392	16.77	-5.900	0.065	0.017	0.0038	0.0006	0.08627	67	18	24.5	3.5
U1456D-20R-1 95-103 cm	27.674	354	0.940	0.114	0.005	0.0169	0.0003	0.04949	109	4.6	108.1	1.7
U1456D-20R-1 95-103 cm	27.675	375	1.175	0.065	0.003	0.0092	0.0002	0.16613	63.7	3	59	1.2
U1456D-20R-1 95-103 cm	20.519	900	1.929	0.162	0.005	0.0231	0.0007	0.51133	151.7	4.7	147.2	4.4
U1456D-20R-1 95-103 cm	20.519	272	3.770	0.799	0.016	0.0964	0.0012	0.32509	595.1	8.9	593.3	7.1
U1456D-20R-1 95-103 cm	11.164	927	44.300	0.119	0.005	0.0176	0.0005	0.37169	113.9	4.7	112.3	2.9
U1456D-20R-1 95-103 cm	24.647	1010	9.750	0.621	0.009	0.0776	0.0009	0.59842	489.7	5.3	481.9	5.3
U1456D-20R-1 95-103 cm	17.493	400	0.783	0.049	0.003	0.0070	0.0002	0.05269	48.3	3.1	45	1
U1456D-20R-1 95-103 cm	27.674	296	0.446	0.157	0.006	0.0230	0.0006	0.20664	147.6	5.4	146.4	3.5
U1456D-20R-1 95-103 cm	27.674	677	1.590	0.091	0.003	0.0133	0.0003	0.30277	87.9	3	84.9	1.8
U1456D-20R-1 95-103 cm	27.675	110.1	1.754	0.089	0.007	0.0134	0.0005	0.04015	85.4	6.2	86	2.9
U1456D-20R-1 95-103 cm	27.674	473	0.876	0.054	0.003	0.0080	0.0002	0.21716	53.3	2.6	51.4	1.2
U1456D-20R-1 95-103 cm	27.674	594	0.585	0.055	0.003	0.0087	0.0002	0.13792	54.3	2.7	55.7	1.2
U1456D-20R-1 95-103 cm	12.814	3180	121.000	0.581	0.009	0.0736	0.0010	0.71846	464.7	5.6	457.7	6.2
U1456D-20R-1 95-103 cm	27.674	178	2.140	0.813	0.019	0.0987	0.0015	0.28471	602	11	606.6	8.9
U1456D-20R-1 95-103 cm	25.198	207.3	1.806	1.911	0.031	0.1853	0.0025	0.52810	1083	11	1095	13
U1456D-20R-1 95-103 cm	14.288	119	0.750	8.730	0.230	0.4136	0.0088	0.69407	2305	24	2229	40
U1456D-20R-1 95-103 cm	5.301	570	10.000	0.669	0.030	0.0813	0.0023	0.30340	519	18	504	14
U1456D-20R-1 95-103 cm	27.674	175.1	0.737	21.770	0.260	0.6061	0.0065	0.65368	3171	12	3052	26
U1456D-20R-1 95-103 cm	27.674	496	1.275	0.112	0.004	0.0169	0.0004	0.37147	108.4	3.7	107.8	2.4
U1456D-20R-1 95-103 cm	12.086	417.3	0.835	0.048	0.003	0.0070	0.0002	0.05912	47.9	3.3	44.7	1.3
U1456D-20R-1 95-103 cm	27.674	207	1.337	0.067	0.004	0.0107	0.0004	0.19878	65.5	4.1	68.5	2.5
U1456D-20R-1 95-103 cm	20.890	192	0.822	2.470	0.045	0.2215	0.0029	0.64956	1261	13	1289	16
U1456D-20R-1 95-103 cm	18.321	549	0.914	0.031	0.002	0.0048	0.0001	0.08913	31.3	1.8	30.7	0.83
U1456D-20R-1 95-103 cm	24.007	296	1.183	0.086	0.005	0.0131	0.0003	0.27895	83.3	4.4	84	1.9

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-20R-1 95-103 cm	27.674	484	0.687	0.118	0.004	0.0167	0.0002	0.36684	112.8	3.2	106.5	1.5
U1456D-20R-1 95-103 cm	27.674	190.2	13.930	0.103	0.005	0.0144	0.0004	0.35632	98.8	4.8	92	2.6
U1456D-20R-1 95-103 cm	5.851	537	2.060	0.124	0.010	0.0175	0.0010	0.51217	118.5	9.4	111.8	6.2
U1456D-20R-1 95-103 cm	27.674	159.5	1.016	0.048	0.004	0.0075	0.0002	0.02071	47.7	3.4	47.8	1.2
U1456D-20R-1 95-103 cm	20.339	170.1	0.523	1.124	0.024	0.1229	0.0018	0.33711	763	11	747	11
U1456D-20R-1 95-103 cm	27.674	1937	1.990	0.104	0.002	0.0158	0.0003	0.53480	99.9	2.2	101.1	2
U1456D-20R-1 95-103 cm	27.674	323.4	5.030	0.075	0.003	0.0117	0.0002	0.31830	73.7	2.8	75.1	1.3
U1456D-20R-1 95-103 cm	27.675	264.5	1.530	0.045	0.003	0.0071	0.0002	0.04024	44.3	2.6	45.33	0.95
U1456D-20R-1 95-103 cm	3.301	1253	29.100	0.066	0.004	0.0098	0.0004	0.23158	64.7	4.1	62.6	2.3
U1456D-20R-1 95-103 cm	14.653	87.8	1.448	1.200	0.043	0.1304	0.0034	0.55051	804	20	790	19
U1456D-20R-1 95-103 cm	24.399	72.6	2.453	1.309	0.038	0.1411	0.0031	0.46068	845	17	853	18
U1456D-20R-1 95-103 cm	17.143	1465	3.940	1.992	0.036	0.1851	0.0032	0.84431	1111	12	1094	17
U1456D-20R-1 95-103 cm	27.674	688	1.959	0.093	0.005	-0.0002	0.0012	0.04794	90.3	4.2	-1.7	8
U1456D-20R-1 95-103 cm	27.675	716	1.734	0.114	0.003	0.0172	0.0003	0.30541	109	2.5	110	1.6
U1456D-20R-1 95-103 cm	27.674	157	0.668	2.118	0.052	0.1983	0.0040	0.65919	1149	17	1165	21
U1456D-20R-1 95-103 cm	27.674	600	1.942	0.255	0.006	0.0359	0.0005	0.57653	230.4	4.6	227.4	3.3
U1456D-20R-1 95-103 cm	17.143	258	1.991	0.111	0.007	0.0167	0.0004	0.30838	106.8	5.9	106.7	2.7
U1456D-20R-1 95-103 cm	27.675	45.6	2.164	0.113	0.010	0.0164	0.0006	0.11722	107.3	9.2	104.6	3.7
U1456D-20R-1 95-103 cm	15.973	167	1.214	0.330	0.016	0.0444	0.0012	0.32983	288	12	280.2	7.5
U1456D-20R-1 95-103 cm	27.674	1568	1.668	0.017	0.001	0.0026	0.0001	0.18171	16.76	0.73	16.45	0.35
U1456D-20R-1 95-103 cm	27.674	423	2.060	0.075	0.004	0.0115	0.0005	0.49541	73.3	4.1	73.4	2.8
U1456D-20R-1 95-103 cm	8.251	1780	18.300	0.610	0.022	0.0791	0.0025	0.43598	482	14	490	15
U1456D-20R-1 95-103 cm	15.446	417	1.880	1.113	0.030	0.1254	0.0031	0.58534	758	14	761	18
U1456D-20R-1 95-103 cm	27.674	424	1.584	1.892	0.041	0.1851	0.0035	0.70711	1076	14	1094	19
U1456D-20R-1 95-103 cm	27.674	227.4	0.776	2.096	0.038	0.1935	0.0024	0.66202	1145	12	1140	13
U1456D-20R-1 95-103 cm	10.297	121.6	1.299	0.060	0.008	0.0096	0.0006	0.32305	60.2	7.9	61.5	4.1
U1456D-20R-1 95-103 cm	14.101	193.7	1.930	1.901	0.072	0.1866	0.0064	0.83242	1075	26	1101	35
U1456D-20R-1 95-103 cm	11.293	64.4	1.330	0.753	0.046	0.0887	0.0026	0.53161	565	26	547	16
U1456D-20R-1 95-103 cm	19.015	662	2.390	0.548	0.018	0.0713	0.0021	0.60186	442	12	444	13
U1456D-20R-1 95-103 cm	27.674	451	15.220	0.723	0.013	0.0900	0.0014	0.65928	551.2	7.4	556.1	8.2
U1456D-20R-1 95-103 cm	18.079	485	0.753	0.086	0.004	0.0121	0.0003	0.32494	83.3	3.8	77.3	1.6
U1456D-20R-1 95-103 cm	26.036	598	1.131	0.058	0.003	0.0080	0.0002	0.33571	57.3	2.5	51.4	1.1
U1456D-20R-1 95-103 cm	13.632	1210	3.630	0.591	0.011	-0.0041	0.0001	0.54251	470.8	6.9	-26.7	0.43
U1456D-20R-1 95-103 cm	17.845	1358	1.920	0.112	0.004	0.0168	0.0005	0.64223	107.4	3.7	107.1	2.9
U1456D-20R-1 95-103 cm	13.165	164.8	1.088	0.030	0.004	0.0039	0.0002	0.12506	29.5	4	24.7	1.3
U1456D-20R-1 95-103 cm	6.612	968	1.806	0.125	0.008	0.0180	0.0006	0.53863	119.1	7.5	114.9	3.9
U1456D-20R-1 95-103 cm	17.612	265.3	0.851	0.174	0.007	0.0251	0.0005	0.33886	162.8	6	160	2.9
U1456D-20R-1 95-103 cm	27.674	149	1.021	0.634	0.017	0.0798	0.0012	0.42909	497	10	494.6	7.1
U1456D-20R-1 95-103 cm	27.674	38.4	1.412	0.137	0.013	0.0193	0.0007	0.00350	130	11	123.3	4.3
U1456D-20R-1 95-103 cm	11.292	161	0.606	1.232	0.071	0.1342	0.0058	0.62054	807	32	811	33
U1457C-51R-4 80-88 cm	27.674	481.6	0.667	0.051	0.002	0.0077	0.0001	0.10289	50.4	2.2	49.69	0.76

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-51R-4 80-88 cm	27.674	696	18.360	1.305	0.018	0.1398	0.0019	0.72643	846.8	8	843	11
U1457C-51R-4 80-88 cm	20.298	309	0.605	0.057	0.004	0.0086	0.0002	0.19831	55.8	3.6	55.2	1.1
U1457C-51R-4 80-88 cm	27.674	343	0.576	0.050	0.003	0.0078	0.0001	0.05352	49.2	2.7	49.84	0.88
U1457C-51R-4 80-88 cm	27.674	405.2	1.183	1.520	0.019	0.1536	0.0018	0.55525	937.2	7.6	922	10
U1457C-51R-4 80-88 cm	19.887	415	27.600	7.180	0.180	0.3687	0.0053	0.80315	2127	22	2022	25
U1457C-51R-4 80-88 cm	27.675	208	0.906	0.173	0.007	0.0255	0.0004	0.00478	161.7	5.7	162.2	2.3
U1457C-51R-4 80-88 cm	20.502	124.6	1.054	0.335	0.018	0.0469	0.0008	0.76911	294	14	295.4	5
U1457C-51R-4 80-88 cm	6.558	126.2	1.110	1.267	0.049	0.1051	0.0025	0.53915	829	22	644	15
U1457C-51R-4 80-88 cm	16.609	155	0.870	10.610	0.120	0.4628	0.0037	0.61496	2489	10	2454	17
U1457C-51R-4 80-88 cm	5.338	2493	1.950	0.603	0.015	0.0639	0.0016	0.40237	479	9.5	399.1	9.9
U1457C-51R-4 80-88 cm	27.674	141.1	0.582	1.107	0.016	0.1265	0.0009	0.19420	756.4	8.1	768	5.1
U1457C-51R-4 80-88 cm	6.558	182.2	0.439	1.144	0.041	0.1196	0.0029	0.42112	773	20	728	16
U1457C-51R-4 80-88 cm	13.534	457	3.340	3.376	0.041	0.2519	0.0027	0.69676	1498	9.6	1448	14
U1457C-51R-4 80-88 cm	27.674	487	1.105	0.097	0.003	0.0145	0.0002	0.09192	94.1	2.6	92.8	1.2
U1457C-51R-4 80-88 cm	19.272	408	1.084	1.053	0.017	0.1092	0.0016	0.63750	729.3	8.4	668.2	9.1
U1457C-51R-4 80-88 cm	22.346	444	0.458	3.421	0.053	0.2493	0.0038	0.74836	1509	12	1434	20
U1457C-51R-4 80-88 cm	21.936	181.2	0.566	1.686	0.027	0.1696	0.0016	0.59580	1002	10	1010	9
U1457C-51R-4 80-88 cm	23.371	44.31	0.954	0.144	0.015	0.0202	0.0006	0.06669	134	13	129	4
U1457C-51R-4 80-88 cm	27.674	294	3.570	1.890	0.019	0.1836	0.0015	0.51381	1077	6.8	1087	8.1
U1457C-51R-4 80-88 cm	27.675	103.6	1.132	0.072	0.007	0.0095	0.0002	0.13848	69.9	6.9	61.1	1.3
U1457C-51R-4 80-88 cm	22.346	368	0.538	0.225	0.012	0.0248	0.0003	0.54862	204.7	9.5	157.8	1.9
U1457C-51R-4 80-88 cm	27.674	500	0.953	0.120	0.004	0.0177	0.0002	0.22912	114.8	3.3	113.1	1.4
U1457C-51R-4 80-88 cm	5.132	222.9	1.573	0.110	0.011	0.0160	0.0005	0.16038	105	10	102	3.3
U1457C-51R-4 80-88 cm	8.812	282.6	3.109	0.505	0.018	0.0622	0.0018	0.66552	414	12	389	11
U1457C-51R-4 80-88 cm	21.731	928	0.627	0.048	0.002	0.0073	0.0001	0.24051	48.1	1.7	46.72	0.77
U1457C-51R-4 80-88 cm	26.445	140.6	0.448	9.310	0.100	0.4275	0.0040	0.64140	2367	10	2294	18
U1457C-51R-4 80-88 cm	24.190	83.5	0.433	4.473	0.067	0.3079	0.0039	0.54308	1724	12	1730	19
U1457C-51R-4 80-88 cm	27.674	753	10.400	1.479	0.016	0.1546	0.0015	0.58614	922	6.6	926.3	8.6
U1457C-51R-4 80-88 cm	27.674	581	0.977	0.055	0.002	0.0082	0.0001	0.06952	54	2	52.91	0.67
U1457C-51R-4 80-88 cm	27.674	779	0.562	0.048	0.003	0.0076	0.0001	0.12517	47.9	2.4	48.81	0.78
U1457C-51R-4 80-88 cm	27.674	366.1	1.139	0.067	0.003	0.0098	0.0001	0.01070	65.9	2.6	62.63	0.84
U1457C-51R-4 80-88 cm	27.674	515	2.350	0.110	0.003	0.0163	0.0002	0.12153	105.5	2.7	103.9	1.3
U1457C-51R-4 80-88 cm	20.298	566	0.746	2.960	0.140	0.2060	0.0092	0.97604	1382	33	1202	48
U1457C-51R-4 80-88 cm	27.674	552	0.980	0.022	0.002	0.0027	0.0001	0.14689	22.3	1.6	17.49	0.38
U1457C-51R-4 80-88 cm	12.715	661	3.240	1.463	0.021	0.1536	0.0017	0.66659	916.5	9.3	920.8	9.7
U1457C-51R-4 80-88 cm	23.986	470	2.386	0.208	0.006	0.0301	0.0003	0.27417	191.1	4.7	191.2	1.9
U1457C-51R-4 80-88 cm	23.371	552	0.947	3.977	0.038	0.2748	0.0020	0.72071	1631	8.2	1565	10
U1457C-51R-4 80-88 cm	7.172	497.1	20.400	0.131	0.006	0.0191	0.0003	0.27816	124.7	5.7	121.7	2
U1457C-51R-4 80-88 cm	27.265	536	0.564	0.046	0.002	0.0070	0.0001	0.11760	45.8	2.3	44.84	0.69
U1457C-51R-4 80-88 cm	22.346	230	2.050	9.430	0.140	0.4393	0.0041	0.85253	2378	14	2347	18
U1457C-51R-4 80-88 cm	14.559	626	0.923	0.116	0.004	0.0171	0.0003	0.08655	111	3.9	109.6	1.7

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-51R-4 80-88 cm	27.674	121	0.947	0.072	0.009	0.0112	0.0003	0.00208	69.2	8	71.9	2
U1457C-51R-4 80-88 cm	14.354	374	2.770	0.866	0.028	0.1031	0.0021	0.70618	631	15	632	12
U1457C-51R-4 80-88 cm	26.855	687	4.120	0.547	0.007	0.0698	0.0007	0.62594	442.3	4.7	434.9	4.2
U1457C-51R-4 80-88 cm	27.674	271.7	0.854	0.064	0.004	0.0084	0.0002	0.15812	62.3	3.6	54.08	0.96
U1457C-51R-4 80-88 cm	27.674	612	0.636	0.051	0.002	0.0076	0.0001	0.12497	50.2	1.9	48.93	0.6
U1457C-51R-4 80-88 cm	7.172	879	29.600	0.201	0.009	0.0291	0.0009	0.64077	185.4	7.3	184.8	5.8
U1457C-51R-4 80-88 cm	12.100	396.4	1.754	0.549	0.011	0.0713	0.0007	0.36916	444	7.4	443.7	4.4
U1457C-51R-4 80-88 cm	27.674	421	1.015	0.654	0.009	0.0816	0.0008	0.43774	510.1	5.6	505.3	4.6
U1457C-51R-4 80-88 cm	17.634	476	44.000	0.771	0.013	0.0942	0.0010	0.61857	579.6	7.4	580.2	5.7
U1457C-51R-4 80-88 cm	27.674	1196	3.250	0.111	0.002	0.0164	0.0001	0.35448	106.7	1.9	105.1	0.9
U1457C-51R-4 80-88 cm	8.616	1830	54.900	0.519	0.011	0.0688	0.0013	0.68148	424.5	7.5	428.7	7.6
U1457C-51R-4 80-88 cm	17.634	494	1.496	5.110	0.190	0.2891	0.0084	0.94385	1825	33	1634	42
U1457C-51R-4 80-88 cm	27.674	387	2.650	0.593	0.009	0.0762	0.0008	0.54726	473.6	6	473	4.6
U1457C-51R-4 80-88 cm	17.829	334	15.800	0.251	0.009	0.0347	0.0005	0.23507	226.8	7.3	219.7	3.3
U1457C-51R-4 80-88 cm	7.592	304.6	2.420	0.469	0.016	0.0604	0.0012	0.35647	390	11	378	7.3
U1457C-51R-4 80-88 cm	27.674	2546	1.810	0.047	0.002	0.0072	0.0002	0.81581	46.6	1.5	46.3	1.3
U1457C-51R-4 80-88 cm	27.675	708	0.636	0.051	0.002	0.0077	0.0001	0.09498	50.8	2	49.59	0.62
U1457C-51R-4 80-88 cm	11.280	390	3.065	0.885	0.023	0.1049	0.0023	0.53282	642	12	643	13
U1457C-51R-4 80-88 cm	18.862	657	0.901	9.851	0.095	0.4298	0.0040	0.77239	2420	9	2304	18
U1457C-51R-4 80-88 cm	27.674	94.2	0.744	0.062	0.007	0.0089	0.0002	0.11235	59.9	6.6	56.9	1.5
U1457C-51R-4 80-88 cm	8.402	594	2.590	0.715	0.031	0.0881	0.0036	0.74516	546	18	544	21
U1457C-51R-4 80-88 cm	16.814	257	3.000	1.108	0.029	0.1231	0.0027	0.52503	755	14	748	16
U1457C-51R-4 80-88 cm	27.674	774	5.050	0.061	0.002	0.0091	0.0002	0.51270	60.4	2.3	58.2	1.5
U1457C-51R-4 80-88 cm	27.675	160.7	0.990	0.069	0.005	0.0093	0.0002	0.16963	67	5.2	59.7	1.5
U1457C-51R-4 80-88 cm	18.247	337	1.280	6.900	0.100	0.3735	0.0058	0.77444	2098	13	2045	27
U1457C-51R-4 80-88 cm	27.675	1112	0.493	0.049	0.001	0.0071	0.0001	0.11542	48.9	1.2	45.53	0.48
U1457C-51R-4 80-88 cm	27.674	227.8	0.810	0.096	0.005	0.0135	0.0003	0.02532	92.7	4.3	86.4	1.6
U1457C-51R-4 80-88 cm	2.639	1352	40.500	0.158	0.021	0.0227	0.0023	0.66105	148	18	145	15
U1457C-51R-4 80-88 cm	12.101	713	1.279	1.517	0.034	0.1366	0.0029	0.76991	936	14	825	17
U1457C-51R-4 80-88 cm	27.674	59.1	0.797	0.075	0.011	0.0109	0.0004	0.03908	71	10	69.6	2.5
U1457C-51R-4 80-88 cm	13.945	573	0.682	0.569	0.013	0.0701	0.0013	0.60721	456.8	8.7	436.4	8
U1457C-51R-4 80-88 cm	27.674	340	1.167	0.175	0.005	0.0259	0.0003	0.02007	163.6	4.3	165	1.9
U1457C-51R-4 80-88 cm	24.395	791	1.699	10.161	0.084	0.4595	0.0032	0.68921	2449	7.7	2437	14
U1457C-51R-4 80-88 cm	11.280	309	1.942	5.180	0.150	0.2736	0.0080	0.78280	1844	26	1557	40
U1457C-51R-4 80-88 cm	18.042	2850	0.814	0.036	0.001	0.0053	0.0001	0.43496	35.9	1	34.19	0.58
U1457C-51R-4 80-88 cm	6.976	210.4	14.000	8.400	0.380	0.3750	0.0180	0.77705	2268	42	2050	84
U1457C-51R-4 80-88 cm	13.944	2570	2.880	0.054	0.003	0.0080	0.0003	0.80329	53.5	2.9	51.5	1.9
U1457C-51R-4 80-88 cm	2.254	1071	30.100	0.258	0.019	0.0336	0.0019	0.87330	233	16	213	12
U1457C-51R-4 80-88 cm	10.041	650	1.940	1.707	0.038	0.1686	0.0038	0.75466	1010	14	1004	21
U1457C-51R-4 80-88 cm	11.895	212	1.843	2.122	0.050	0.1971	0.0027	0.63331	1154	16	1160	15
U1457C-51R-4 80-88 cm	27.675	1368	0.960	0.120	0.002	0.0180	0.0001	0.26926	115	1.9	114.8	0.85

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1457C-51R-4 80-88 cm	27.674	424	1.200	9.806	0.068	0.4378	0.0029	0.70498	2416	6.4	2340	13
U1457C-51R-4 80-88 cm	27.674	1031	2.190	0.225	0.003	0.0322	0.0003	0.28399	206.1	2.6	204.4	1.8
U1457C-51R-4 80-88 cm	18.863	145.8	0.966	0.835	0.023	0.0982	0.0014	0.39993	618	14	603.9	7.9
U1457C-51R-4 80-88 cm	19.272	1058	0.392	0.041	0.002	0.0062	0.0001	0.30884	40.4	1.6	40.11	0.77
U1457C-51R-4 80-88 cm	19.683	29.31	0.596	5.440	0.110	0.3398	0.0045	0.19450	1888	17	1885	21
U1457C-51R-4 80-88 cm	23.371	65.1	0.719	0.098	0.018	0.0110	0.0004	0.00343	93	16	70.6	2.6
U1457C-51R-4 80-88 cm	20.706	1221	1.050	4.075	0.043	0.2680	0.0027	0.65717	1650	8.2	1530	14
U1457C-51R-4 80-88 cm	20.297	367	0.690	0.098	0.004	0.0116	0.0002	0.08473	94.8	4.2	74.6	1.4
U1457C-51R-4 80-88 cm	5.328	295.3	6.800	0.430	0.020	0.0532	0.0019	0.37375	362	14	334	12
U1457C-51R-4 80-88 cm	14.150	437	1.077	0.971	0.016	0.1110	0.0016	0.44760	688.1	8.3	678.2	9
U1457C-51R-4 80-88 cm	27.674	509	0.753	0.072	0.003	0.0107	0.0002	0.11463	70.6	2.5	68.64	0.97
U1457C-51R-4 80-88 cm	27.674	1231	9.430	0.692	0.006	0.0866	0.0005	0.35852	533.7	3.8	535.3	3.1
U1457C-51R-4 80-88 cm	27.674	349	1.023	0.054	0.003	0.0082	0.0001	0.05118	53.4	2.9	52.5	0.73
U1457C-51R-4 80-88 cm	27.675	179	0.783	0.050	0.005	0.0079	0.0002	0.01602	48.7	4.5	50.8	1.2
U1457C-51R-4 80-88 cm	4.279	3680	22.100	0.117	0.004	0.0174	0.0003	0.18733	112.3	3.5	110.9	1.7
U1457C-51R-4 80-88 cm	27.674	144	4.030	1.830	0.028	0.1787	0.0020	0.44320	1056	9.7	1060	11
U1457C-51R-4 80-88 cm	27.675	420	2.657	2.793	0.039	0.1910	0.0023	0.71040	1352	10	1126	13
U1457C-51R-4 80-88 cm	17.634	651	90.000	0.144	0.006	0.0212	0.0006	0.72474	136.2	5.2	135.5	4
U1457C-51R-4 80-88 cm	27.674	920	3.550	0.121	0.002	0.0177	0.0002	0.22787	116.2	2.1	113.1	0.94
U1457C-51R-4 80-88 cm	23.781	333	9.440	0.131	0.006	0.0193	0.0004	0.47054	124.7	4.9	123.3	2.8
U1457C-51R-4 80-88 cm	9.640	2350	0.732	0.040	0.001	0.0058	0.0001	0.25922	39.3	1.3	37.2	0.66
U1457C-51R-4 80-88 cm	27.674	729	2.620	0.774	0.008	0.0948	0.0008	0.44980	582.5	4.2	583.9	4.5
U1457C-51R-4 80-88 cm	3.484	948	2.880	1.312	0.063	0.1346	0.0052	0.79754	849	28	814	30
U1457C-51R-4 80-88 cm	15.173	303.9	2.460	0.540	0.013	0.0630	0.0008	0.33918	437.6	8.5	393.9	4.6
U1457C-51R-4 80-88 cm	27.675	635	0.845	0.102	0.003	0.0151	0.0002	0.17818	98.5	2.5	96.32	0.97
U1457C-51R-4 80-88 cm	1.615	2600	2.290	0.091	0.010	0.0088	0.0008	0.91865	88.1	9.8	56.7	5.4
U1457C-51R-4 80-88 cm	15.378	155.5	1.078	9.110	0.100	0.4151	0.0042	0.61920	2348	10	2237	19
U1457C-51R-4 80-88 cm	27.675	624	0.965	0.881	0.009	0.1040	0.0008	0.32328	641	4.6	638	4.4
U1457C-51R-4 80-88 cm	4.312	1560	4.620	0.022	0.002	0.0033	0.0001	0.65733	22.4	2	21.02	0.76
U1457C-51R-4 80-88 cm	26.035	2020	1.590	0.041	0.001	0.0057	0.0001	0.05866	40.2	1.1	36.4	0.33
U1457C-51R-4 80-88 cm	27.674	357.2	0.484	0.089	0.005	0.0074	0.0001	0.07368	86.3	4.1	47.64	0.75
U1457C-51R-4 80-88 cm	27.674	125.1	0.492	0.114	0.008	0.0161	0.0004	0.07349	108.6	7.5	103.1	2.2
U1457C-51R-4 80-88 cm	4.508	833	2.070	1.008	0.026	0.1131	0.0028	0.68078	707	13	691	16
U1457C-51R-4 80-88 cm	10.870	385	0.887	1.580	0.027	0.1632	0.0021	0.62962	961	10	975	12
U1457C-51R-4 80-88 cm	27.675	4800	1.283	0.043	0.001	0.0064	0.0001	0.59619	42.55	0.81	41.27	0.66
U1457C-51R-4 80-88 cm	27.674	220	0.740	0.068	0.005	0.0099	0.0002	0.14129	66.7	4.7	63.3	1.3
U1457C-51R-4 80-88 cm	27.675	230.9	0.596	0.119	0.005	0.0173	0.0002	0.10271	113.7	4.2	110.6	1.4
U1457C-51R-4 80-88 cm	17.838	761	1.838	0.795	0.019	0.0674	0.0014	0.78778	593	11	420.3	8.7
U1457C-51R-4 80-88 cm	27.675	591	0.587	0.118	0.003	0.0169	0.0002	0.36271	113.1	3.1	108	1.3
U1457C-51R-4 80-88 cm	27.675	40	0.447	11.100	0.130	0.4814	0.0045	0.45254	2529	11	2532	19
U1456D-26R-2 37-43 cm	27.674	111	0.792	1.656	0.035	0.1663	0.0019	0.13113	989	13	991	10

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-26R-2 37-43 cm	25.208	770	2.338	0.755	0.014	0.0876	0.0014	0.63088	571.2	7.9	541.4	8.6
U1456D-26R-2 37-43 cm	24.503	80	4.620	0.102	0.011	0.0158	0.0005	0.05325	96.9	9.7	101	3.4
U1456D-26R-2 37-43 cm	10.406	1630	2.158	0.239	0.015	0.0337	0.0013	0.54804	217	12	213.7	8.1
U1456D-26R-2 37-43 cm	10.407	301	1.335	10.700	0.400	0.4490	0.0120	0.76744	2489	34	2387	52
U1456D-26R-2 37-43 cm	3.877	2510	26.400	0.132	0.006	0.0182	0.0006	0.49947	125.6	5.3	116	3.5
U1456D-26R-2 37-43 cm	5.472	638	3.500	16.940	0.810	0.4700	0.0230	0.91974	2923	47	2480	100
U1456D-26R-2 37-43 cm	27.674	516	1.217	0.232	0.008	0.0334	0.0007	0.53881	211.4	6.5	211.9	4.6
U1456D-26R-2 37-43 cm	27.675	219	0.272	2.049	0.037	0.1903	0.0023	0.58761	1131	12	1124	13
U1456D-26R-2 37-43 cm	27.674	68.4	0.626	0.667	0.027	0.0826	0.0015	0.13878	514	17	511.1	8.8
U1456D-26R-2 37-43 cm	17.454	682	1.748	9.840	0.130	0.4368	0.0052	0.77803	2418	13	2335	23
U1456D-26R-2 37-43 cm	22.035	256.7	0.829	0.099	0.006	0.0111	0.0003	0.01372	95.5	5	71.1	1.6
U1456D-26R-2 37-43 cm	22.741	123	1.378	1.655	0.044	0.1643	0.0026	0.56291	987	17	980	15
U1456D-26R-2 37-43 cm	23.797	461	15.900	2.197	0.028	0.1961	0.0025	0.65308	1179	8.9	1154	14
U1456D-26R-2 37-43 cm	8.644	1071	0.489	0.047	0.004	0.0063	0.0002	0.29538	46.3	3.9	40.5	1.4
U1456D-26R-2 37-43 cm	27.675	388.7	0.588	0.112	0.004	0.0163	0.0003	0.14646	107.4	3.6	104.5	1.8
U1456D-26R-2 37-43 cm	27.675	216	1.035	1.839	0.032	0.1702	0.0020	0.51295	1060	11	1013	11
U1456D-26R-2 37-43 cm	27.674	470	0.759	0.131	0.004	0.0198	0.0003	0.17346	125	3.7	126.4	1.8
U1456D-26R-2 37-43 cm	27.675	498	1.057	0.063	0.003	0.0093	0.0002	0.18061	61.3	3.3	59.4	1.3
U1456D-26R-2 37-43 cm	7.586	576	3.170	0.705	0.030	0.0846	0.0028	0.65634	540	18	523	17
U1456D-26R-2 37-43 cm	27.674	689	7.070	0.684	0.014	0.0829	0.0017	0.62104	527.7	8.3	513	10
U1456D-26R-2 37-43 cm	27.674	163.5	0.575	1.722	0.045	0.1712	0.0029	0.58509	1014	17	1018	16
U1456D-26R-2 37-43 cm	10.759	1390	39.600	0.300	0.021	0.0394	0.0028	0.76214	265	16	249	17
U1456D-26R-2 37-43 cm	24.855	572	0.882	0.017	0.002	0.0024	0.0001	0.19730	16.9	1.6	15.43	0.6
U1456D-26R-2 37-43 cm	19.217	112.5	1.826	0.129	0.012	0.0113	0.0005	0.20621	124	11	72.3	3.3
U1456D-26R-2 37-43 cm	13.225	246	0.405	1.152	0.039	0.1291	0.0029	0.60198	775	18	782	17
U1456D-26R-2 37-43 cm	27.674	1707	6.350	0.215	0.004	0.0308	0.0004	0.42041	197.1	3.4	195.6	2.5
U1456D-26R-2 37-43 cm	18.865	436	2.200	0.108	0.009	0.0148	0.0008	0.62058	103.2	8	94.7	5.2
U1456D-26R-2 37-43 cm	13.226	2800	2.290	0.238	0.008	0.0318	0.0009	0.60566	216.3	6.2	201.7	5.8
U1456D-26R-2 37-43 cm	6.696	711	7.320	0.698	0.027	0.0833	0.0023	0.30512	537	16	516	14
U1456D-26R-2 37-43 cm	14.282	435.4	1.483	8.160	0.130	0.3711	0.0057	0.75278	2246	14	2034	27
U1456D-26R-2 37-43 cm	27.675	377.6	3.920	0.063	0.004	0.0093	0.0002	0.25177	61.6	3.4	59.6	1.2
U1456D-26R-2 37-43 cm	27.674	241	1.485	0.114	0.006	0.0165	0.0003	0.02210	109	5.3	105.5	2
U1456D-26R-2 37-43 cm	20.979	810	3.194	2.972	0.042	0.2436	0.0030	0.77161	1399	11	1405	16
U1456D-26R-2 37-43 cm	27.674	224.8	0.881	0.058	0.005	0.0093	0.0003	0.14126	56.5	4.7	59.9	1.9
U1456D-26R-2 37-43 cm	27.675	75.9	0.754	4.198	0.073	0.2973	0.0035	0.23793	1672	14	1677	17
U1456D-26R-2 37-43 cm	23.094	108.8	1.115	1.176	0.029	0.1295	0.0017	0.22436	788	14	784.9	9.5
U1456D-26R-2 37-43 cm	27.675	153.2	0.692	0.088	0.006	0.0131	0.0003	0.00410	85.8	6	83.6	1.7
U1456D-26R-2 37-43 cm	9.701	398	7.630	0.755	0.034	0.0861	0.0026	0.50427	569	19	532	16
U1456D-26R-2 37-43 cm	14.282	1465	94.000	2.087	0.030	0.1870	0.0021	0.68362	1145	10	1105	12
U1456D-26R-2 37-43 cm	27.674	670	0.977	0.080	0.004	0.0118	0.0002	0.16446	77.5	3.6	75.9	1.3
U1456D-26R-2 37-43 cm	27.675	1071	0.862	0.112	0.003	0.0164	0.0002	0.24221	107.6	2.8	104.6	1.4

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-26R-2 37-43 cm	27.674	1070	3.030	0.108	0.003	0.0166	0.0003	0.38658	104	2.9	106	1.8
U1456D-26R-2 37-43 cm	25.561	72.4	0.696	0.067	0.009	0.0098	0.0004	0.02967	66	8.6	63	2.5
U1456D-26R-2 37-43 cm	19.568	233.3	0.774	0.062	0.005	0.0093	0.0003	0.07415	61.1	5.2	59.4	1.8
U1456D-26R-2 37-43 cm	27.675	438	1.180	0.117	0.005	0.0173	0.0002	0.17836	112.1	4.3	110.5	1.5
U1456D-26R-2 37-43 cm	25.912	362.4	2.017	1.625	0.025	0.1630	0.0021	0.55075	978.2	9.7	973	12
U1456D-26R-2 37-43 cm	24.502	450	0.624	0.177	0.005	0.0256	0.0003	0.08413	165.5	4.7	163.2	2
U1456D-26R-2 37-43 cm	12.520	3770	0.998	0.094	0.003	0.0126	0.0002	0.33434	91.2	2.4	80.6	1
U1456D-26R-2 37-43 cm	19.569	1039	2.143	1.657	0.017	0.1672	0.0015	0.61177	991.5	6.6	996.3	8.2
U1456D-26R-2 37-43 cm	27.322	2869	22.300	4.445	0.079	0.2804	0.0048	0.85069	1719	14	1592	25
U1456D-26R-2 37-43 cm	27.674	119.8	0.850	0.069	0.007	0.0101	0.0003	0.04974	66.9	6.3	64.7	1.9
U1456D-26R-2 37-43 cm	7.401	1599	30.300	0.299	0.010	0.0384	0.0007	0.59191	265	8	243.1	4.5
U1456D-26R-2 37-43 cm	12.873	680.9	12.160	0.623	0.012	0.0696	0.0009	0.31355	491.2	7.6	433.5	5.4
U1456D-26R-2 37-43 cm	27.674	349.3	0.708	0.054	0.003	0.0082	0.0002	0.02424	53.6	3.3	52.6	1.1
U1456D-26R-2 37-43 cm	27.674	670	0.839	0.114	0.004	0.0162	0.0004	0.31492	109.3	3.7	103.2	2.7
U1456D-26R-2 37-43 cm	13.225	576	0.651	1.237	0.030	0.0977	0.0013	0.57482	816	13	600.8	7.5
U1456D-26R-2 37-43 cm	27.674	2390	1.911	0.122	0.003	0.0185	0.0002	0.28087	116.4	2.2	118	1.2
U1456D-26R-2 37-43 cm	11.816	2234	7.200	0.551	0.026	0.0724	0.0036	0.59264	443	17	450	22
U1456D-26R-2 37-43 cm	8.645	1470	7.100	0.106	0.006	0.0155	0.0005	0.37706	102.2	5	99	3
U1456D-26R-2 37-43 cm	22.740	264	3.120	0.904	0.024	0.1066	0.0021	0.48889	651	13	653	12
U1456D-26R-2 37-43 cm	12.521	677	10.210	0.050	0.004	0.0072	0.0002	0.01732	49.3	3.4	46.5	1.3
U1456D-26R-2 37-43 cm	26.617	79.6	1.364	13.700	0.180	0.5223	0.0060	0.65908	2726	12	2707	25
U1456D-26R-2 37-43 cm	5.121	900	1.510	1.325	0.053	0.1329	0.0039	0.84684	855	23	804	22
U1456D-26R-2 37-43 cm	23.093	73.5	0.464	1.179	0.038	0.1303	0.0021	0.24227	786	18	789	12
U1456D-26R-2 37-43 cm	27.675	1420	1.667	0.050	0.002	0.0074	0.0001	0.23257	49.1	1.6	47.21	0.7
U1456D-26R-2 37-43 cm	19.568	711	0.720	0.166	0.005	0.0237	0.0004	0.16966	155.4	4.4	151.1	2.3
U1456D-26R-2 37-43 cm	5.991	424	4.400	0.733	0.029	0.0871	0.0016	0.16884	562	15	538.6	9.3
U1456D-26R-2 37-43 cm	20.274	724	1.718	0.882	0.015	0.1059	0.0010	0.70799	641.2	7.9	648.6	5.7
U1456D-26R-2 37-43 cm	14.282	112.2	0.788	2.673	0.095	0.2039	0.0037	0.39688	1324	27	1196	20
U1456D-26R-2 37-43 cm	9.515	163.3	1.190	0.120	0.013	0.0177	0.0007	0.12500	115	11	112.8	4.5
U1456D-26R-2 37-43 cm	18.511	371.5	1.731	0.263	0.013	0.0335	0.0009	0.60056	236	10	212.3	5.6
U1456D-26R-2 37-43 cm	27.674	1399	11.440	0.275	0.005	0.0382	0.0005	0.41078	246.2	3.9	241.7	2.9
U1456D-26R-2 37-43 cm	27.674	193	1.427	10.570	0.140	0.4751	0.0048	0.71903	2483	12	2505	21
U1456D-26R-2 37-43 cm	27.674	103.7	0.831	0.095	0.008	0.0134	0.0004	0.09430	92.4	7.5	86	2.7
U1456D-26R-2 37-43 cm	27.674	505	1.522	0.111	0.004	0.0165	0.0003	0.24250	106.5	3.6	105.3	1.7
U1456D-26R-2 37-43 cm	27.674	142.7	1.786	2.180	0.064	0.2046	0.0054	0.75548	1169	20	1197	29
U1456D-26R-2 37-43 cm	27.674	393	0.995	1.268	0.027	0.1418	0.0031	0.55792	829	12	854	17
U1456D-26R-2 37-43 cm	27.675	1500	1.270	0.052	0.002	0.0072	0.0001	0.16815	51	2	46.27	0.59
U1456D-26R-2 37-43 cm	5.472	3050	0.907	0.025	0.002	0.0036	0.0003	0.31617	25.4	2.1	23.2	1.6
U1456D-26R-2 37-43 cm	19.569	853	21.600	1.581	0.035	0.1615	0.0035	0.66226	960	14	965	20
U1456D-26R-2 37-43 cm	8.458	366.3	1.588	2.369	0.062	0.2158	0.0046	0.34490	1231	18	1259	24
U1456D-26R-2 37-43 cm	27.674	626	3.090	0.947	0.018	0.1128	0.0018	0.52927	674.9	9.2	689	11

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-26R-2 37-43 cm	16.398	227	1.880	0.762	0.030	0.0894	0.0020	0.25724	572	18	552	12
U1456D-26R-2 37-43 cm	27.674	277.2	1.120	0.045	0.004	0.0071	0.0002	0.06344	44.5	3.6	45.8	1.2
U1456D-26R-2 37-43 cm	27.675	244.9	1.328	0.837	0.023	0.1083	0.0027	0.57545	616	13	662	16
U1456D-26R-2 37-43 cm	11.463	408	0.970	0.106	0.007	0.0156	0.0006	0.30522	101.6	6.4	100	3.9
U1456D-26R-2 37-43 cm	9.702	90.4	0.928	1.355	0.065	0.1360	0.0029	0.37319	865	27	822	17
U1456D-26R-2 37-43 cm	15.339	620	2.262	0.361	0.015	0.0451	0.0015	0.15652	312	11	284	9.5
U1456D-26R-2 37-43 cm	27.674	187	0.851	0.093	0.006	0.0130	0.0004	0.15751	89.7	5.8	83.4	2.7
U1456D-26R-2 37-43 cm	16.044	1770	2.290	0.059	0.004	0.0090	0.0003	0.34906	57.8	3.3	57.5	2
U1456D-26R-2 37-43 cm	27.675	407	1.399	0.056	0.004	0.0085	0.0003	0.21308	55.1	3.3	54.8	1.6
U1456D-26R-2 37-43 cm	20.626	283	4.480	0.703	0.034	0.0814	0.0029	0.54945	538	21	504	17
U1456D-26R-2 37-43 cm	22.389	540	1.514	1.469	0.027	0.1478	0.0024	0.60513	916	11	888	13
U1456D-26R-2 37-43 cm	27.674	212	0.967	0.891	0.035	0.1111	0.0035	0.61815	641	19	678	20
U1456D-26R-2 37-43 cm	27.675	1401	1.217	0.064	0.002	0.0094	0.0001	0.27530	62.5	2	60.46	0.8
U1456D-26R-2 37-43 cm	3.877	2290	69.000	0.198	0.018	0.0297	0.0018	0.75921	183	15	189	11
U1456D-26R-2 37-43 cm	18.159	525	1.617	1.147	0.044	0.1314	0.0046	0.76984	770	21	795	26
U1456D-26R-2 37-43 cm	5.991	678	33.500	0.265	0.025	0.0341	0.0026	0.64457	237	20	216	16
U1456D-26R-2 37-43 cm	17.454	336	2.770	0.831	0.025	0.0980	0.0025	0.58111	614	15	602	14
U1456D-26R-2 37-43 cm	26.265	448	1.256	0.049	0.004	0.0079	0.0003	0.23752	48.7	3.4	50.8	2
U1456D-26R-2 37-43 cm	27.674	613	1.811	0.091	0.004	0.0135	0.0004	0.48546	88.2	3.6	86.4	2.7
U1456D-26R-2 37-43 cm	26.265	54.6	1.170	0.104	0.013	0.0146	0.0006	0.12622	98	12	93.2	3.9
U1456D-26R-2 37-43 cm	24.151	272	0.990	0.056	0.004	0.0084	0.0002	0.18334	55.3	3.9	53.7	1.4
U1456D-26R-2 37-43 cm	27.674	1490	1.318	0.120	0.003	0.0173	0.0002	0.12814	114.7	2.8	110.4	1.2
U1456D-26R-2 37-43 cm	7.586	4460	6.840	0.057	0.002	0.0070	0.0002	0.28023	56.6	1.8	44.7	1
U1456D-26R-2 37-43 cm	27.674	214.9	0.743	5.056	0.065	0.3229	0.0033	0.44249	1826	11	1803	16
U1456D-26R-2 37-43 cm	27.675	126.5	1.021	0.089	0.007	0.0128	0.0005	0.04796	86	6.5	82.2	3
U1456D-26R-2 37-43 cm	23.093	2533	23.400	0.177	0.003	0.0256	0.0004	0.56563	165.1	2.8	163.1	2.3
U1456D-26R-2 37-43 cm	27.675	620	2.306	1.766	0.034	0.1652	0.0029	0.52492	1030	12	985	16
U1456D-26R-2 37-43 cm	27.674	543	3.500	0.831	0.020	0.1030	0.0016	0.61313	612	11	631.4	9.5
U1456D-26R-2 37-43 cm	17.455	675	1.632	1.374	0.023	0.1477	0.0017	0.51602	876.8	9.7	888.1	9.5
U1456D-26R-2 37-43 cm	10.406	644	0.413	0.063	0.005	0.0090	0.0004	0.34621	61.5	4.4	57.7	2.8
U1456D-26R-2 37-43 cm	24.855	846	2.509	1.509	0.021	0.1595	0.0021	0.50640	932.8	8.6	954	12
U1456D-26R-2 37-43 cm	27.674	447	0.917	0.052	0.003	0.0080	0.0002	0.00693	51.3	3.2	51.4	1.2
U1456D-26R-2 37-43 cm	26.969	299	1.173	0.126	0.006	0.0173	0.0003	0.04971	119.4	5.6	110.4	1.8
U1456D-26R-2 37-43 cm	27.675	1603	1.527	0.037	0.001	0.0057	0.0001	0.10064	37.2	1.3	36.39	0.45
U1456D-26R-2 37-43 cm	27.674	237	0.933	0.590	0.015	0.0754	0.0008	0.09810	468.8	9.9	468.7	5.1
U1456D-26R-2 37-43 cm	27.674	1240	0.768	0.155	0.004	0.0248	0.0005	0.42523	146.1	3.9	157.7	3.3
U1456D-26R-2 37-43 cm	7.939	160.9	0.473	0.067	0.009	0.0079	0.0005	0.13453	65.3	8.8	50.9	3
U1456D-26R-2 37-43 cm	23.446	506	1.830	0.799	0.018	0.0983	0.0010	0.23504	595	10	604.2	5.8
U1456D-26R-2 37-43 cm	25.207	820	2.380	0.769	0.013	0.0886	0.0010	0.51758	578	7.7	547.4	6
U1456D-26R-2 37-43 cm	17.455	1130	2.080	0.135	0.005	0.0172	0.0003	0.34349	128.4	4.2	109.7	1.8
U1456D-26R-2 37-43 cm	27.674	1077	0.618	0.078	0.003	0.0109	0.0002	0.05118	75.9	2.5	70.1	1.1

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-27R-2 100-106 cm	27.675	1001	1.407	0.212	0.003	0.0304	0.0003	0.41428	194.8	2.7	192.9	1.6
U1456D-27R-2 100-106 cm	27.675	247.1	0.807	0.667	0.010	0.0822	0.0006	0.13646	518.4	6.2	508.9	3.7
U1456D-27R-2 100-106 cm	27.674	613	1.063	0.051	0.002	0.0077	0.0001	0.16329	50.1	1.6	49.67	0.58
U1456D-27R-2 100-106 cm	27.675	381	1.105	0.104	0.003	0.0156	0.0002	0.10286	100.5	3.1	99.8	1.1
U1456D-27R-2 100-106 cm	27.674	74.4	0.677	1.675	0.040	0.1559	0.0023	0.47089	995	15	934	13
U1456D-27R-2 100-106 cm	11.290	224	0.564	0.073	0.006	0.0079	0.0003	0.06166	71.1	5.6	50.8	1.7
U1456D-27R-2 100-106 cm	27.675	188	1.546	0.895	0.016	0.1054	0.0011	0.25762	647.6	8.7	645.7	6.6
U1456D-27R-2 100-106 cm	6.372	448	0.606	0.113	0.006	0.0116	0.0004	0.04450	108.1	5.7	74.3	2.4
U1456D-27R-2 100-106 cm	15.588	366.7	5.620	0.814	0.014	0.0867	0.0008	0.47248	604	7.6	536.1	5
U1456D-27R-2 100-106 cm	27.674	261	3.076	0.908	0.015	0.1047	0.0009	0.22486	654.8	7.9	641.5	5
U1456D-27R-2 100-106 cm	18.005	308	0.779	0.059	0.003	0.0085	0.0002	0.00692	58.4	3.4	54.8	1.1
U1456D-27R-2 100-106 cm	17.199	731	1.299	0.125	0.004	0.0184	0.0004	0.34794	120.2	3.3	117.7	2.3
U1456D-27R-2 100-106 cm	24.721	350	0.882	1.588	0.022	0.1614	0.0018	0.69795	964.2	8.5	964	10
U1456D-27R-2 100-106 cm	27.674	173.1	1.320	0.858	0.014	0.0990	0.0010	0.27673	629	8	608.2	6.1
U1456D-27R-2 100-106 cm	27.675	588	1.109	0.466	0.009	0.0618	0.0010	0.67211	388	6.2	386.3	6.1
U1456D-27R-2 100-106 cm	27.674	245	1.540	1.560	0.042	0.1636	0.0036	0.66818	949	17	975	20
U1456D-27R-2 100-106 cm	26.601	117.9	0.922	3.955	0.046	0.2921	0.0024	0.40263	1623	9.3	1652	12
U1456D-27R-2 100-106 cm	16.662	216	0.683	0.063	0.006	0.0081	0.0002	0.00714	62	5.3	51.8	1.3
U1456D-27R-2 100-106 cm	21.228	3520	0.564	0.043	0.001	0.0064	0.0001	0.22827	42.8	0.84	41.23	0.47
U1456D-27R-2 100-106 cm	20.692	59.1	1.031	8.320	0.240	0.3740	0.0100	0.87738	2256	28	2043	48
U1456D-27R-2 100-106 cm	18.543	218	1.370	1.267	0.022	0.1352	0.0020	0.66302	830	10	817	11
U1456D-27R-2 100-106 cm	27.674	600	0.615	0.019	0.001	0.0028	0.0001	0.08818	18.7	1.1	18.07	0.4
U1456D-27R-2 100-106 cm	23.108	1033	3.330	0.719	0.012	0.0858	0.0013	0.62977	549.5	6.9	530.3	7.5
U1456D-27R-2 100-106 cm	23.915	869	0.881	0.061	0.002	0.0092	0.0001	0.20368	60.5	1.7	59.22	0.78
U1456D-27R-2 100-106 cm	27.675	123.5	1.164	0.056	0.005	0.0081	0.0002	0.09760	55.3	4.6	51.7	1.3
U1456D-27R-2 100-106 cm	27.674	2360	0.755	0.053	0.001	0.0075	0.0001	0.15525	51.9	1.4	48.08	0.76
U1456D-27R-2 100-106 cm	17.468	363	0.776	0.123	0.005	0.0168	0.0003	0.02902	117.4	4.1	107.7	1.6
U1456D-27R-2 100-106 cm	22.303	208	1.020	9.050	0.150	0.4280	0.0071	0.79767	2339	15	2294	32
U1456D-27R-2 100-106 cm	27.675	305.8	2.518	4.289	0.040	0.2999	0.0025	0.51910	1690	7.6	1690	13
U1456D-27R-2 100-106 cm	19.079	150.2	1.062	0.840	0.020	0.0954	0.0014	0.30360	619	11	587.5	8.3
U1456D-27R-2 100-106 cm	22.302	141.6	0.945	0.649	0.016	0.0830	0.0011	0.38536	508	10	513.7	6.8
U1456D-27R-2 100-106 cm	27.675	95.1	1.375	1.430	0.032	0.1460	0.0026	0.42633	900	14	878	15
U1456D-27R-2 100-106 cm	27.675	74.5	0.786	0.199	0.012	0.0282	0.0006	0.20871	183	10	179.2	3.5
U1456D-27R-2 100-106 cm	27.674	327	0.771	0.054	0.003	0.0079	0.0002	0.09153	53.6	2.8	50.8	1
U1456D-27R-2 100-106 cm	13.439	616	1.038	2.043	0.026	0.1905	0.0016	0.52209	1129	8.7	1124	8.6
U1456D-27R-2 100-106 cm	20.960	2140	2.145	0.111	0.002	0.0162	0.0002	0.54816	106.8	1.8	103.7	1.3
U1456D-27R-2 100-106 cm	27.674	192	0.665	4.481	0.047	0.3082	0.0027	0.54395	1726	8.8	1731	14
U1456D-27R-2 100-106 cm	27.675	1050	1.440	0.099	0.003	0.0147	0.0003	0.50058	95.9	2.7	94	2.1
U1456D-27R-2 100-106 cm	27.674	179	0.531	0.080	0.005	0.0117	0.0002	0.01564	77.5	4.6	75.2	1.4
U1456D-27R-2 100-106 cm	11.559	355	0.716	0.709	0.022	0.0861	0.0018	0.63308	543	13	532	10
U1456D-27R-2 100-106 cm	19.079	376	9.230	1.384	0.030	0.1429	0.0021	0.65272	880	12	861	12

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-27R-2 100-106 cm	27.674	351	1.100	1.915	0.018	0.1805	0.0013	0.47095	1086	6.2	1070	6.9
U1456D-27R-2 100-106 cm	3.760	477	2.860	0.129	0.010	0.0181	0.0008	0.11709	123.2	9	115.5	4.9
U1456D-27R-2 100-106 cm	10.485	266	0.813	0.872	0.021	0.0994	0.0018	0.46604	638	12	611	11
U1456D-27R-2 100-106 cm	27.675	336.9	1.254	0.753	0.015	0.0909	0.0013	0.56977	569.6	8.2	560.8	7.8
U1456D-27R-2 100-106 cm	4.835	1640	25.900	0.293	0.020	0.0376	0.0026	0.80355	260	16	238	16
U1456D-27R-2 100-106 cm	19.885	372	0.245	1.122	0.016	0.1219	0.0011	0.31896	762.9	7.9	741.1	6
U1456D-27R-2 100-106 cm	19.616	322.4	0.917	7.031	0.072	0.3846	0.0034	0.76972	2114	9.2	2097	16
U1456D-27R-2 100-106 cm	27.675	123.7	0.811	0.068	0.006	0.0091	0.0003	0.10188	66.6	5.1	58.3	1.6
U1456D-27R-2 100-106 cm	27.674	156.2	0.488	1.301	0.020	0.1405	0.0013	0.30880	844.4	9.1	847.5	7.4
U1456D-27R-2 100-106 cm	27.674	1117	0.749	0.121	0.002	0.0177	0.0001	0.30210	115.7	2	113	0.82
U1456D-27R-2 100-106 cm	27.674	245.7	1.126	1.444	0.022	0.1572	0.0024	0.43589	906	9	941	13
U1456D-27R-2 100-106 cm	27.675	905	0.460	0.041	0.001	0.0062	0.0001	0.17249	40.8	1.4	39.64	0.5
U1456D-27R-2 100-106 cm	27.674	177.3	1.034	0.079	0.005	0.0126	0.0004	0.30096	76.7	4.5	80.4	2.2
U1456D-27R-2 100-106 cm	27.674	84.5	0.569	10.940	0.120	0.4792	0.0050	0.69598	2516	10	2522	22
U1456D-27R-2 100-106 cm	27.675	380.1	1.293	0.118	0.004	0.0176	0.0003	0.16126	113	3.7	112.5	1.9
U1456D-27R-2 100-106 cm	27.674	260	1.780	0.118	0.005	0.0177	0.0003	0.16535	113.2	4.2	113.2	1.8
U1456D-27R-2 100-106 cm	21.765	162.8	0.887	1.167	0.027	0.1233	0.0022	0.39795	783	12	749	13
U1456D-27R-2 100-106 cm	27.674	258.2	0.968	11.620	0.120	0.4908	0.0046	0.70586	2573	9.4	2573	20
U1456D-27R-2 100-106 cm	12.633	850	0.656	0.054	0.004	0.0081	0.0002	0.13559	54	3.7	51.7	1.1
U1456D-27R-2 100-106 cm	15.857	177	0.644	0.081	0.008	0.0116	0.0005	0.22723	78.7	7.4	74.1	3.1
U1456D-27R-2 100-106 cm	27.674	487	0.484	0.128	0.004	0.0187	0.0002	0.30754	122.4	3.6	119.2	1.2
U1456D-27R-2 100-106 cm	8.874	58.2	0.495	0.607	0.037	0.0778	0.0016	0.13448	478	23	482.9	9.8
U1456D-27R-2 100-106 cm	27.674	59	0.677	0.062	0.010	0.0094	0.0003	0.14323	59.7	9.1	60.4	2
U1456D-27R-2 100-106 cm	24.183	436	1.900	1.144	0.014	0.1258	0.0010	0.48035	773.9	6.4	763.9	5.7
U1456D-27R-2 100-106 cm	27.674	700	1.033	0.884	0.008	0.1040	0.0008	0.48066	642.6	4.4	637.4	4.7
U1456D-27R-2 100-106 cm	27.674	156	1.165	0.124	0.008	0.0183	0.0004	0.10081	117.6	7.5	117.1	2.3
U1456D-27R-2 100-106 cm	27.674	317	7.200	0.985	0.015	0.1114	0.0013	0.55531	695.3	7.5	680.6	7.7
U1456D-27R-2 100-106 cm	27.674	161	0.854	0.088	0.006	0.0124	0.0003	0.13094	84.9	5.4	79.5	1.6
U1456D-27R-2 100-106 cm	8.336	2830	4.000	0.042	0.001	0.0057	0.0002	0.34811	41.2	1.3	36.8	1
U1456D-27R-2 100-106 cm	21.229	460	0.960	0.123	0.004	0.0185	0.0003	0.22832	118.1	3.4	118.2	1.8
U1456D-27R-2 100-106 cm	15.856	502	3.350	1.436	0.024	0.1445	0.0020	0.79670	903	10	870	11
U1456D-27R-2 100-106 cm	12.634	1420	0.889	0.064	0.003	0.0083	0.0002	0.39749	63.3	2.9	53.5	1.2
U1456D-27R-2 100-106 cm	11.559	643	0.501	1.383	0.021	0.1310	0.0012	0.58774	881.3	8.9	793.3	6.8
U1456D-27R-2 100-106 cm	27.675	276	0.723	0.051	0.003	0.0075	0.0001	0.05756	50.7	2.8	48.01	0.88
U1456D-27R-2 100-106 cm	27.675	252.4	1.270	0.805	0.013	0.0952	0.0010	0.43461	598.9	7.1	586.3	5.6
U1456D-27R-2 100-106 cm	27.674	179.8	0.627	0.091	0.005	0.0126	0.0003	0.15077	87.8	4.2	80.5	1.6
U1456D-27R-2 100-106 cm	19.080	2400	62.700	0.121	0.002	0.0180	0.0001	0.35162	115.8	1.6	115.2	0.9
U1456D-27R-2 100-106 cm	27.675	860	3.580	0.099	0.003	0.0150	0.0002	0.45459	95.7	2.3	96.1	1.4
U1456D-27R-2 100-106 cm	24.720	195.6	0.870	0.051	0.004	0.0077	0.0002	0.03699	50.5	4.2	49.5	1.1
U1456D-27R-2 100-106 cm	18.811	244.6	1.262	0.104	0.006	0.0159	0.0004	0.17622	100.4	5.2	101.4	2.6
U1456D-27R-2 100-106 cm	4.029	881	1.738	4.681	0.075	0.3065	0.0067	0.51133	1763	13	1723	33

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-27R-2 100-106 cm	21.229	377	1.070	1.526	0.027	0.1548	0.0029	0.75590	941	10	927	16
U1456D-27R-2 100-106 cm	27.674	334	0.726	0.096	0.004	0.0138	0.0002	0.15526	93	3.4	88.6	1.2
U1456D-27R-2 100-106 cm	7.800	531	10.290	0.529	0.017	0.0661	0.0014	0.55847	430	11	412.6	8.4
U1456D-27R-2 100-106 cm	9.401	70.2	0.781	3.640	0.110	0.2472	0.0051	0.54994	1555	24	1423	26
U1456D-27R-2 100-106 cm	18.542	144.6	1.105	8.620	0.150	0.3880	0.0068	0.74467	2295	16	2112	31
U1456D-27R-2 100-106 cm	18.274	643	0.345	0.047	0.002	0.0072	0.0001	0.02218	46.2	2.1	46.15	0.67
U1456D-27R-2 100-106 cm	13.170	287.4	4.520	0.117	0.006	0.0172	0.0005	0.28730	112.4	5.2	109.6	2.9
U1456D-27R-2 100-106 cm	27.674	263	1.104	0.064	0.004	0.0093	0.0002	0.33745	62.4	3.7	59.7	1.3
U1456D-27R-2 100-106 cm	27.675	872	0.469	0.090	0.002	0.0134	0.0002	0.29577	87.3	1.7	85.8	1.1
U1456D-27R-2 100-106 cm	20.422	152.7	0.886	0.104	0.008	0.0127	0.0003	0.19458	99.8	7.1	81	2.1
U1456D-27R-2 100-106 cm	16.931	613	1.297	3.285	0.050	0.2251	0.0028	0.84107	1476	12	1308	15
U1456D-27R-2 100-106 cm	27.675	465	0.633	0.056	0.002	0.0082	0.0001	0.13526	55.3	2.1	52.3	0.67
U1456D-27R-2 100-106 cm	8.067	478	0.876	1.049	0.037	0.1141	0.0041	0.77479	727	18	696	23
U1456D-27R-2 100-106 cm	18.273	160.9	0.603	1.127	0.025	0.1256	0.0017	0.49389	765	12	762.3	9.5
U1456D-27R-2 100-106 cm	27.674	149.8	0.878	0.113	0.006	0.0166	0.0003	0.04433	108.2	5.2	106.4	1.8
U1456D-27R-2 100-106 cm	27.675	86.4	0.769	0.083	0.007	0.0125	0.0003	0.03846	81.3	6.9	80	1.8
U1456D-27R-2 100-106 cm	27.674	402	0.772	0.049	0.002	0.0074	0.0001	0.02061	48.6	2.4	47.58	0.69
U1456D-27R-2 100-106 cm	27.675	250	7.000	22.250	0.290	0.6323	0.0093	0.61277	3192	13	3159	36
U1456D-27R-2 100-106 cm	9.401	1132	59.000	0.201	0.006	0.0282	0.0008	0.59588	186.1	5.4	179.4	4.9
U1456D-27R-2 100-106 cm	8.605	162.7	1.751	1.069	0.029	0.1156	0.0024	0.52723	741	15	705	14
U1456D-27R-2 100-106 cm	11.022	134.2	1.053	0.084	0.008	0.0120	0.0005	0.19798	81.8	7.6	76.7	3
U1456D-27R-2 100-106 cm	27.675	977	1.540	0.116	0.003	0.0173	0.0003	0.32741	111.6	2.3	110.2	1.6
U1456D-27R-2 100-106 cm	8.604	5110	0.946	0.017	0.001	0.0021	0.0000	0.36653	16.76	0.81	13.63	0.3
U1456D-27R-2 100-106 cm	27.674	169.4	1.064	0.791	0.014	0.0940	0.0009	0.28658	590.5	8.1	579	5.2
U1456D-27R-2 100-106 cm	27.674	130.4	1.018	0.059	0.006	0.0089	0.0002	0.03718	57.3	5.4	57	1.3
U1456D-27R-2 100-106 cm	25.258	265	0.907	0.449	0.011	0.0573	0.0007	0.29752	376.8	7.7	359.3	4.3
U1456D-27R-2 100-106 cm	27.674	1620	2.100	0.093	0.002	0.0137	0.0002	0.47901	90	1.9	87.8	1.1
U1456D-27R-2 100-106 cm	27.674	779	1.153	0.105	0.003	0.0152	0.0002	0.26848	101.5	2.5	97.2	1.2
U1456D-27R-2 100-106 cm	25.794	541	6.840	0.428	0.008	0.0559	0.0009	0.60300	361.6	5.6	350.5	5.5
U1456D-27R-2 100-106 cm	14.246	642	5.440	0.450	0.013	0.0567	0.0012	0.76354	376.6	8.8	355.5	7.6
U1456D-27R-2 100-106 cm	10.216	79.6	0.949	5.620	0.120	0.3525	0.0088	0.73522	1917	18	1945	42
U1456D-27R-2 100-106 cm	15.319	239.8	0.480	1.620	0.034	0.1608	0.0025	0.53356	976	13	961	14
U1456D-27R-2 100-106 cm	15.857	809	1.185	6.431	0.074	0.3486	0.0038	0.80943	2035	10	1927	18
U1456D-27R-2 100-106 cm	13.440	445	0.763	0.062	0.004	0.0088	0.0002	0.06103	60.5	3.9	56.4	1.4
U1456D-27R-2 100-106 cm	21.765	497	2.220	0.120	0.004	0.0176	0.0002	0.06590	114.7	3.8	112.5	1.4
U1456D-27R-2 100-106 cm	27.674	757	0.529	0.059	0.002	0.0088	0.0001	0.09671	57.8	1.8	56.49	0.64
U1456D-27R-2 100-106 cm	25.258	523	1.120	0.668	0.009	0.0831	0.0008	0.52817	519.2	5.2	514.7	5
U1456D-28R-1 40-46 cm	27.674	291	0.998	0.069	0.003	0.0107	0.0002	0.23273	67.7	3.1	68.3	1.4
U1456D-28R-1 40-46 cm	13.649	293.9	0.967	0.114	0.005	0.0160	0.0004	0.26478	109.9	5	102.6	2.6
U1456D-28R-1 40-46 cm	27.674	622	0.981	0.025	0.001	0.0040	0.0001	0.06574	25.1	1.3	25.54	0.51
U1456D-28R-1 40-46 cm	12.840	388	2.368	1.013	0.021	0.1121	0.0019	0.57751	709	10	685	11

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	207/235		206/238	
									Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-28R-1 40-46 cm	28.484	475	1.008	0.053	0.003	0.0072	0.0001	0.06023	52.5	2.4	46.37	0.92
U1456D-28R-1 40-46 cm	16.346	163.3	1.408	1.710	0.045	0.1622	0.0030	0.65584	1009	17	968	17
U1456D-28R-1 40-46 cm	27.674	1782	1.810	0.226	0.004	0.0313	0.0005	0.76303	206.5	3.3	198.5	3
U1456D-28R-1 40-46 cm	12.570	170.2	1.005	2.809	0.074	0.1850	0.0047	0.77898	1355	19	1093	25
U1456D-28R-1 40-46 cm	17.964	1619	2.650	0.108	0.003	0.0155	0.0003	0.41959	104	2.4	99	1.6
U1456D-28R-1 40-46 cm	21.471	544	1.391	0.118	0.005	0.0164	0.0003	0.36443	112.5	4.6	104.6	1.9
U1456D-28R-1 40-46 cm	27.674	176.1	0.620	0.054	0.004	0.0089	0.0002	0.09208	53.3	3.7	56.9	1.5
U1456D-28R-1 40-46 cm	10.952	248.5	0.724	0.058	0.006	0.0083	0.0003	0.16696	56.8	5.8	53.1	2.2
U1456D-28R-1 40-46 cm	14.188	5110	0.486	0.045	0.001	0.0066	0.0001	0.62388	45	1.3	42.29	0.83
U1456D-28R-1 40-46 cm	27.674	1196	0.448	0.047	0.002	0.0066	0.0001	0.46539	46.7	1.6	42.1	0.87
U1456D-28R-1 40-46 cm	19.043	274.8	1.618	3.673	0.087	0.2633	0.0059	0.85138	1561	19	1505	30
U1456D-28R-1 40-46 cm	20.122	488	2.080	7.700	0.140	0.3847	0.0067	0.83404	2193	16	2096	31
U1456D-28R-1 40-46 cm	27.674	1602	0.610	0.092	0.002	0.0136	0.0002	0.40252	89.2	2	87.1	1.3
U1456D-28R-1 40-46 cm	27.674	674	27.540	5.127	0.064	0.3247	0.0043	0.85465	1839	11	1811	21
U1456D-28R-1 40-46 cm	20.932	627	1.530	0.538	0.011	0.0680	0.0011	0.63486	436.2	7.3	424.9	6.6
U1456D-28R-1 40-46 cm	19.852	3180	2.120	0.044	0.001	0.0065	0.0001	0.58240	43.4	1.3	41.79	0.69
U1456D-28R-1 40-46 cm	27.675	139.2	0.625	0.060	0.004	0.0078	0.0002	0.07980	59	4.2	49.8	1.4
U1456D-28R-1 40-46 cm	26.595	663	1.304	0.112	0.003	0.0162	0.0003	0.37086	107.3	3	103.9	1.7
U1456D-28R-1 40-46 cm	25.246	532	0.706	0.058	0.003	0.0090	0.0002	0.28819	57.3	2.6	57.4	1.2
U1456D-28R-1 40-46 cm	27.675	141.5	1.158	1.179	0.027	0.1324	0.0023	0.61975	789	13	801	13
U1456D-28R-1 40-46 cm	25.247	578	2.120	1.406	0.030	0.1479	0.0028	0.73788	889	12	888	16
U1456D-28R-1 40-46 cm	16.615	440	0.490	0.634	0.014	0.0805	0.0014	0.59641	497.4	9	499	8.3
U1456D-28R-1 40-46 cm	18.234	630	0.852	0.117	0.004	0.0169	0.0003	0.18844	112.3	3.4	107.7	1.9
U1456D-28R-1 40-46 cm	19.044	37.93	1.107	0.140	0.017	0.0202	0.0008	0.09439	133	15	128.8	5.1
U1456D-28R-1 40-46 cm	13.110	555	1.496	1.302	0.028	0.1362	0.0025	0.71374	845	12	823	14
U1456D-28R-1 40-46 cm	5.826	135.5	0.446	4.160	0.120	0.2721	0.0071	0.78622	1663	24	1550	36
U1456D-28R-1 40-46 cm	16.347	275.6	2.540	1.006	0.033	0.1055	0.0025	0.72510	704	17	646	14
U1456D-28R-1 40-46 cm	27.674	200.6	1.713	0.270	0.008	0.0386	0.0005	0.24356	242.3	6.3	243.8	3
U1456D-28R-1 40-46 cm	4.478	404	0.891	8.750	0.390	0.4060	0.0150	0.92033	2307	41	2194	70
U1456D-28R-1 40-46 cm	27.675	573	1.019	0.051	0.002	0.0078	0.0002	0.11294	50.8	2.2	50.1	1
U1456D-28R-1 40-46 cm	27.404	2182	1.320	0.049	0.002	0.0068	0.0001	0.48305	48.2	1.7	43.52	0.78
U1456D-28R-1 40-46 cm	27.674	177.1	4.810	0.834	0.018	0.1000	0.0012	0.40813	615	10	614.5	7.2
U1456D-28R-1 40-46 cm	4.479	1161	6.500	0.115	0.008	0.0166	0.0005	0.52930	110.2	7.3	106.3	3.4
U1456D-28R-1 40-46 cm	12.300	129.7	0.540	0.070	0.008	0.0100	0.0004	0.04395	67.9	7.2	64.1	2.4
U1456D-28R-1 40-46 cm	27.674	302.8	1.936	0.901	0.019	0.1057	0.0014	0.13178	650.3	9.7	647.8	8.4
U1456D-28R-1 40-46 cm	27.674	3660	3.740	0.110	0.002	0.0165	0.0002	0.67384	105.9	1.6	105.3	1.4
U1456D-28R-1 40-46 cm	27.135	112.4	0.917	10.210	0.150	0.4574	0.0062	0.76517	2452	13	2426	27
U1456D-28R-1 40-46 cm	11.221	2970	2.380	0.022	0.001	0.0033	0.0001	0.53794	22.1	1.1	20.99	0.7
U1456D-28R-1 40-46 cm	21.740	2150	0.467	0.045	0.001	0.0069	0.0001	0.28673	44.9	1.2	44.28	0.66
U1456D-28R-1 40-46 cm	4.208	302	1.300	0.089	0.010	0.0133	0.0008	0.34555	86.3	9.5	85.2	5.2
U1456D-28R-1 40-46 cm	27.674	210	0.783	1.598	0.027	0.1625	0.0022	0.61931	968	10	970	12

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-28R-1 40-46 cm	22.549	853	17.900	1.426	0.036	0.1416	0.0029	0.79513	897	15	853	16
U1456D-28R-1 40-46 cm	27.674	510	1.815	2.035	0.033	0.1898	0.0029	0.73761	1125	11	1120	16
U1456D-28R-1 40-46 cm	27.674	357	0.614	0.111	0.004	0.0163	0.0003	0.30914	106.9	3.8	104.1	2
U1456D-28R-1 40-46 cm	27.675	1660	0.942	0.570	0.011	0.0733	0.0013	0.79980	456.9	6.8	455.5	7.9
U1456D-28R-1 40-46 cm	27.674	68.8	0.870	0.087	0.007	0.0127	0.0004	0.05340	85.2	7	81.4	2.7
U1456D-28R-1 40-46 cm	27.675	570	0.786	0.107	0.003	0.0164	0.0003	0.31518	102.9	2.7	104.8	2
U1456D-28R-1 40-46 cm	12.839	314	7.500	4.990	0.140	0.3125	0.0091	0.87373	1812	24	1750	45
U1456D-28R-1 40-46 cm	28.214	825	27.900	3.188	0.063	0.2204	0.0039	0.74505	1450	15	1282	20
U1456D-28R-1 40-46 cm	19.582	554	3.180	1.463	0.034	0.1462	0.0027	0.70208	913	14	879	15
U1456D-28R-1 40-46 cm	27.674	137.9	1.860	1.471	0.024	0.1505	0.0019	0.45778	917	10	903	11
U1456D-28R-1 40-46 cm	21.740	2390	1.473	0.043	0.002	0.0059	0.0001	0.37062	42.7	1.4	37.67	0.69
U1456D-28R-1 40-46 cm	11.760	379	3.870	2.353	0.070	0.2056	0.0061	0.88346	1225	21	1204	33
U1456D-28R-1 40-46 cm	27.674	1600	18.900	0.220	0.004	0.0319	0.0005	0.57615	201.9	3.4	202.3	3.1
U1456D-28R-1 40-46 cm	27.674	431	1.830	1.634	0.029	0.1646	0.0025	0.78220	981	11	982	14
U1456D-28R-1 40-46 cm	19.043	617	0.784	0.051	0.002	0.0077	0.0001	0.04667	50.6	2.4	49.7	0.88
U1456D-28R-1 40-46 cm	19.044	1003	6.240	0.459	0.010	0.0571	0.0012	0.75807	383.1	7	357.8	7.2
U1456D-28R-1 40-46 cm	13.648	326	1.681	0.823	0.031	0.0919	0.0025	0.74284	607	18	566	15
U1456D-28R-1 40-46 cm	27.675	178.6	0.796	0.055	0.004	0.0080	0.0002	0.15186	54.3	3.4	51.6	1.3
U1456D-28R-1 40-46 cm	27.674	243	1.025	0.052	0.004	0.0076	0.0002	0.16422	50.8	3.4	48.9	1.1
U1456D-28R-1 40-46 cm	22.819	204.7	0.512	0.067	0.005	0.0093	0.0002	0.14737	65.1	4.2	59.7	1.5
U1456D-28R-1 40-46 cm	15.806	165	2.592	1.095	0.027	0.1219	0.0025	0.37297	749	13	741	14
U1456D-28R-1 40-46 cm	19.852	361.8	0.651	0.304	0.008	0.0424	0.0007	0.40003	268.9	6.4	267.6	4.5
U1456D-28R-1 40-46 cm	17.424	227.6	0.848	0.267	0.010	0.0372	0.0009	0.40616	241.1	8.4	235.6	5.6
U1456D-28R-1 40-46 cm	27.136	1197	9.760	0.150	0.005	0.0224	0.0006	0.74098	141.5	4	142.9	3.8
U1456D-28R-1 40-46 cm	27.674	576	0.816	0.033	0.002	0.0050	0.0001	0.12413	33.3	2	32.17	0.74
U1456D-28R-1 40-46 cm	19.044	489	0.702	1.326	0.027	0.1368	0.0021	0.77323	855	12	827	12
U1456D-28R-1 40-46 cm	27.674	208	1.505	0.121	0.006	0.0185	0.0004	0.15659	115.3	5.5	117.8	2.3
U1456D-28R-1 40-46 cm	27.674	339	2.110	0.754	0.016	0.0898	0.0015	0.68704	569.1	9.3	554	8.7
U1456D-28R-1 40-46 cm	21.740	191.1	0.634	0.239	0.010	0.0340	0.0008	0.30319	216.7	7.8	215.6	5
U1456D-28R-1 40-46 cm	25.246	139.1	1.582	0.289	0.012	0.0386	0.0008	0.29773	255.8	9.6	243.9	4.6
U1456D-28R-1 40-46 cm	19.313	275	0.620	0.038	0.002	0.0058	0.0002	0.04459	38	2.3	37.1	1
U1456D-28R-1 40-46 cm	27.674	82.2	0.754	0.056	0.006	0.0083	0.0003	0.11203	54.3	5.4	53	1.7
U1456D-28R-1 40-46 cm	23.898	664	1.544	8.950	0.150	0.4051	0.0062	0.86805	2329	15	2194	28
U1456D-28R-1 40-46 cm	27.675	1439	8.180	0.035	0.001	0.0053	0.0001	0.40292	35.3	1.2	34.27	0.7
U1456D-28R-1 40-46 cm	16.076	386	2.970	3.795	0.083	0.2526	0.0047	0.82558	1591	18	1451	24
U1456D-28R-1 40-46 cm	7.283	1015	174.000	0.121	0.006	0.0179	0.0007	0.42698	115.9	5	114.2	4.4
U1456D-28R-1 40-46 cm	5.558	168.6	0.685	1.017	0.046	0.1126	0.0031	0.39585	710	23	688	18
U1456D-28R-1 40-46 cm	9.063	323	1.440	0.101	0.008	0.0146	0.0008	0.45735	97.4	7.7	93.3	5.1
U1456D-28R-1 40-46 cm	14.459	1060	1.346	0.054	0.003	0.0076	0.0001	0.06275	53.5	2.4	48.99	0.92
U1456D-28R-1 40-46 cm	27.674	527	2.600	0.067	0.003	0.0101	0.0003	0.19349	65.9	2.9	64.8	1.6
U1456D-28R-1 40-46 cm	9.873	714	0.443	0.200	0.008	0.0219	0.0006	0.62388	185.1	7.1	139.4	3.9

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238	
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error
U1456D-28R-1 40-46 cm	18.235	328	0.851	0.087	0.004	0.0123	0.0003	0.24560	84.5	3.9	79	1.8
U1456D-28R-1 40-46 cm	4.855	1401	91.000	0.819	0.052	0.0949	0.0054	0.76548	605	30	584	32
U1456D-28R-1 40-46 cm	9.064	174.9	2.132	4.350	0.170	0.2887	0.0090	0.75549	1696	32	1633	45
U1456D-28R-1 40-46 cm	27.674	2090	1.510	0.066	0.002	0.0100	0.0001	0.46095	64.6	1.5	63.84	0.82
U1456D-28R-1 40-46 cm	20.122	825	7.760	1.116	0.017	0.1258	0.0017	0.63539	760	8.2	763.9	9.7
U1456D-28R-1 40-46 cm	19.582	958	1.133	0.052	0.002	0.0078	0.0002	0.22374	51.5	2.1	50.3	1.1
U1456D-28R-1 40-46 cm	10.143	384	0.608	0.111	0.008	0.0149	0.0005	0.47444	106.1	7	95.2	2.9
U1456D-28R-1 40-46 cm	27.674	1621	0.940	0.116	0.002	0.0168	0.0002	0.30840	111.2	2.1	107.2	1.3
U1456D-28R-1 40-46 cm	27.674	419	0.864	0.024	0.002	0.0032	0.0001	0.09063	23.7	1.8	20.39	0.65
U1456D-28R-1 40-46 cm	11.491	841	5.930	0.639	0.016	0.0787	0.0018	0.73729	501	10	488	11
U1456D-28R-1 40-46 cm	27.675	1037	5.980	0.605	0.017	0.0777	0.0021	0.81315	479	10	482	12
U1456D-28R-1 40-46 cm	27.674	895	1.232	0.058	0.003	0.0057	0.0001	0.35593	56.9	2.7	36.67	0.67
U1456D-28R-1 40-46 cm	27.674	2760	1.685	0.156	0.003	0.0226	0.0003	0.67602	146.9	2.4	144.2	2.2
U1456D-28R-1 40-46 cm	18.504	972	1.393	0.119	0.004	0.0167	0.0003	0.50764	113.7	3.3	106.4	2
U1456D-28R-1 40-46 cm	27.675	229	1.435	0.669	0.015	0.0821	0.0012	0.43071	518.3	9.3	508.4	7.4
U1456D-28R-1 40-46 cm	27.674	256	0.756	0.049	0.003	0.0076	0.0002	0.12393	48.8	3.2	48.9	1.1
U1456D-28R-1 40-46 cm	27.674	572	3.440	1.099	0.018	0.1206	0.0016	0.72573	751.6	8.8	733.7	9.4
U1456D-28R-1 40-46 cm	27.675	101.3	1.490	1.129	0.028	0.1258	0.0017	0.45947	764	13	763.8	9.7
U1456D-28R-1 40-46 cm	17.694	344.2	1.330	0.900	0.024	0.0999	0.0019	0.62273	654	13	613	11
U1456D-28R-1 40-46 cm	11.760	106.6	16.800	0.883	0.031	0.0998	0.0022	0.51018	640	17	613	13
U1456D-28R-1 40-46 cm	27.674	167.9	1.003	0.144	0.007	0.0203	0.0004	0.23649	136.2	6.1	129.3	2.5
U1456D-28R-1 40-46 cm	27.675	691	1.380	0.123	0.004	0.0180	0.0003	0.35902	117.1	3.8	114.8	1.7
U1456D-28R-1 40-46 cm	13.918	2010	1.450	0.524	0.011	0.0665	0.0012	0.75671	428.4	7.7	415	7.5
U1456D-28R-1 40-46 cm	27.674	1384	0.796	0.053	0.002	0.0081	0.0001	0.33490	52.4	1.4	52.1	0.85
U1456D-28R-1 40-46 cm	27.674	2290	5.110	0.624	0.009	0.0789	0.0011	0.79842	491.8	5.7	489.6	6.6
U1456D-28R-1 40-46 cm	27.674	580	1.120	0.171	0.004	0.0247	0.0004	0.40254	160.4	3.8	157.4	2.8
U1456D-28R-1 40-46 cm	27.675	315	1.030	0.137	0.005	0.0199	0.0003	0.07926	130.2	4.3	126.7	1.8
U1456D-28R-1 40-46 cm	13.648	457	2.153	4.514	0.098	0.2634	0.0059	0.75877	1734	19	1506	30
U1456D-28R-1 40-46 cm	27.674	725	1.490	0.115	0.003	0.0165	0.0002	0.34614	110	3.1	105.6	1.5
U1456D-28R-1 40-46 cm	27.674	210	2.105	1.574	0.027	0.1578	0.0018	0.50664	959	11	944	10
U1456D-28R-1 40-46 cm	27.675	884	1.000	1.464	0.017	0.1499	0.0018	0.71550	914.9	7	900	9.8
U1456D-28R-1 40-46 cm	23.089	216.8	1.210	4.194	0.075	0.2981	0.0052	0.81365	1669	15	1680	26
U1456D-28R-1 40-46 cm	20.931	154.9	4.360	7.390	0.130	0.3713	0.0056	0.78519	2157	15	2038	25
U1456D-28R-1 40-46 cm	13.110	301.7	0.547	0.057	0.005	0.0083	0.0002	0.00368	56.1	4.5	53.5	1.4
U1456D-28R-1 40-46 cm	7.315	554	4.830	2.354	0.093	0.2092	0.0072	0.41816	1225	28	1224	38
U1456D-28R-1 40-46 cm	18.079	337.6	1.708	2.565	0.043	0.2131	0.0036	0.60246	1289	12	1245	19
U1456D-28R-1 40-46 cm	6.085	528	3.580	0.667	0.027	0.0774	0.0026	0.76143	518	17	481	16
U1456D-28R-1 40-46 cm	27.675	2650	3.100	0.074	0.001	0.0112	0.0001	0.50159	72	1.3	71.99	0.87
U1456D-28R-1 40-46 cm	27.674	1531	2.026	0.035	0.001	0.0053	0.0001	0.13381	35.07	0.97	34.09	0.53
U1456D-28R-1 40-46 cm	27.674	262	2.160	10.110	0.200	0.4477	0.0077	0.71603	2448	20	2382	34
U1456D-28R-1 40-46 cm	27.675	1260	2.410	0.102	0.002	0.0156	0.0002	0.15564	98.7	2	100	1.2

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235				RHO	207/235		206/238	
				207/235	2σ error	206/238	2σ error		Age (Ma)	2σ error	Age (Ma)	2σ error
U1456D-28R-1 40-46 cm	27.674	797	3.340	0.110	0.003	0.0167	0.0002	0.22129	106	2.6	106.8	1.4
U1456D-28R-1 40-46 cm	27.674	3190	2.208	0.099	0.002	0.0004	0.0022	0.04662	95.8	2	2	14

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
183	79	83.1	2.3	3.8	Rim Core
2478	18	2478.0	18.0	3.5	
2134	11	2134.0	11.0	13.5	
1858	14	1858.0	14.0	3.1	
458	33	448.6	3.5	0.3	
921	26	921.0	26.0	2.6	
521	56	527.9	5.0	0.2	
604	32	584.0	12.0	0.5	
870	74	870.0	74.0	6.8	
870	25	771.4	6.7	3.0	
510	52	546.5	6.8	1.0	
124	57	94.2	1.7	0.6	
1776	13	DISC	DISC	43.0	
1820	610	DISC	DISC	76.1	
2110	220	DISC	DISC	64.1	
143	75	102.5	1.3	0.5	
160	140	151.7	5.4	0.2	
1847	18	1847.0	18.0	3.8	
3128	13	3128.0	13.0	7.3	
142	76	104.0	1.3	1.0	
1038	23	1038.0	23.0	4.1	Rim Core
124	68	108.5	1.4	0.6	
526	58	567.0	7.9	0.7	
730	250	DISC	DISC	25.2	
2433	22	DISC	DISC	44.7	
894	62	566.8	8.9	11.9	
830	120	726.0	21.0	3.6	
1687	10	DISC	DISC	42.9	
2032	30	2032.0	30.0	21.5	
290	140	305.7	9.0	0.6	
1505	17	1505.0	17.0	21.4	Rim Core
2021	19	DISC	DISC	51.8	
215	97	62.5	1.1	7.4	
519	45	425.8	7.6	3.8	
260	500	98.2	7.3	8.2	
722	55	634.2	9.6	3.6	
360	110	DISC	DISC	15.1	
700	120	DISC	DISC	17.3	
1627	38	DISC	DISC	32.6	Rim Core
951	16	951.0	16.0	3.5	
2362	13	2362.0	13.0	4.4	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
173	76	122.7	2.3	1.7	Rim Core
133	60	124.3	3.1	0.3	
690	95	DISC	DISC	18.5	
2235	34	2235.0	34.0	25.3	
849	42	712.7	7.9	5.0	
829	27	830.0	10.0	0.2	
451	30	456.2	8.9	0.1	
3533	11	3533.0	11.0	9.4	
149	82	49.3	0.9	4.1	
979	21	979.0	21.0	0.3	
1726	35	1726.0	35.0	25.0	
1076	31	1076.0	31.0	19.7	
2556	25	2556.0	25.0	17.1	
2801	16	2801.0	16.0	1.8	
1016	79	837.0	39.0	5.5	
1699	26	1699.0	26.0	21.4	
707	51	747.0	12.0	1.2	
1885	25	1885.0	25.0	19.4	
1700	22	1700.0	22.0	5.9	
1907	22	1907.0	22.0	21.4	
978	27	978.0	27.0	4.3	
588	51	570.6	7.6	1.1	
550	36	461.9	6.1	3.5	
195	93	17.2	0.6	7.0	
805	52	801.8	8.8	0.6	
836	29	829.8	7.9	0.4	
966	31	966.0	31.0	2.5	
2497	20	DISC	DISC	41.5	
367	61	DISC	DISC	105.4	
1069	32	1069.0	32.0	4.4	
830	36	DISC	DISC	106.4	
190	100	21.6	0.5	7.4	
1103	31	1103.0	31.0	6.0	
590	300	DISC	DISC	22.3	
140	120	17.2	0.6	3.2	
1112	55	1112.0	55.0	10.1	
682	58	648.0	14.0	1.4	
2519	22	2519.0	22.0	7.5	
635	71	503.0	11.0	5.5	
267	82	DISC	DISC	113.7	
290	130	81.7	3.7	9.1	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
160	110	82.7	1.9	2.8	Rim
93	75	87.5	2.1	0.1	
1496	41	1496.0	41.0	7.2	Core
500	120	465.0	12.0	1.5	
988	59	988.0	59.0	11.2	Core
1849	56	1849.0	56.0	19.4	
1112	27	1112.0	27.0	5.4	Core
820	31	720.0	14.0	3.5	
193	90	58.6	2.2	7.4	Core
1921	14	1921.0	14.0	6.0	
966	48	966.0	48.0	5.4	Core
791	35	615.0	11.0	6.1	
1020	52	1020.0	52.0	11.8	Core
146	91	22.1	0.6	5.5	
806	31	782.0	14.0	0.8	Core
542	39	514.8	6.8	1.5	
811	25	812.0	10.0	0.2	Core
1023	45	1023.0	45.0	8.9	
152	85	104.7	2.8	2.1	Core
134	63	11.7	0.2	4.5	
966	57	966.0	57.0	8.0	Core
45	70	43.8	0.8	1.5	
773	30	802.0	13.0	1.0	Core
1042	29	694.0	15.0	11.0	
1818	24	1818.0	24.0	4.1	Core
260	160	28.0	2.4	9.4	
103	68	54.4	1.0	0.0	Core
477	27	474.5	7.5	0.2	
668	41	663.0	13.0	0.6	Core
1493	29	1493.0	29.0	12.1	
2732	32	2732.0	32.0	9.5	Core
1765	42	1765.0	42.0	18.5	
489	49	453.0	10.0	1.7	Core
1176	27	1176.0	27.0	0.9	
609	48	517.0	10.0	3.5	Core
1156	30	1156.0	30.0	4.1	
861	39	701.0	19.0	5.8	Core
133	93	62.0	2.9	1.9	
760	56	738.0	14.0	1.9	Core
434	37	DISC	DISC	105.9	
200	130	54.0	1.4	7.1	Core

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
872	28	872.0	28.0	2.3	Rim
2406	30	2406.0	30.0	7.1	
630	120	516.0	31.0	4.8	
964	37	964.0	37.0	7.2	
128	69	107.2	2.3	0.7	Core
1136	38	1136.0	38.0	1.1	
857	22	825.0	12.0	1.7	
1866	12	1866.0	12.0	1.8	
639	52	604.0	12.0	1.9	Rim
981	27	981.0	27.0	2.1	Core
110	41	12.2	0.1	5.2	Rim
1168	38	DISC	DISC	17.7	
85	51	48.2	0.5	0.8	
210	230	135.3	5.5	3.4	
670	110	426.0	27.0	8.6	Rim
737	42	621.4	9.2	3.7	Core
113	48	118.1	1.9	1.5	Rim
173	29	113.6	1.4	1.9	
353	49	272.9	2.9	2.8	
190	50	120.5	1.9	1.9	
164	74	114.6	2.7	1.0	Rim
760	53	837.9	9.8	1.7	
151	49	118.4	1.5	0.4	
150	56	109.6	1.8	1.1	
182	81	122.5	5.1	1.9	Rim
195	96	111.6	1.9	2.2	
50	110	59.5	1.0	2.2	
967	23	726.0	12.0	7.1	
203	36	215.2	3.8	1.0	Rim
1025	27	1025.0	27.0	1.0	
1032	21	1032.0	21.0	0.7	
280	260	DISC	DISC	8.9	
880	27	823.0	13.0	1.8	Core
531	24	446.1	4.8	3.1	Rim
281	45	114.8	2.1	6.9	
190	320	DISC	DISC	5.7	
1024	31	800.0	12.0	7.1	
1025	40	1025.0	40.0	3.2	Rim
1409	18	1409.0	18.0	9.6	Core
2377	15	2377.0	15.0	2.4	Rim
2373	18	2373.0	18.0	2.7	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
701	41	815.0	11.0	2.9	Rim Core
1567	18	1567.0	18.0	2.4	
110	110	82.3	1.6	0.8	
532	33	546.2	4.4	0.0	
120	69	116.0	1.6	0.5	
459	45	505.2	5.4	1.4	
1848	16	1848.0	16.0	6.7	
853	30	853.0	30.0	8.3	
820	25	836.2	4.9	0.6	
995	26	995.0	26.0	6.0	
2049	37	2049.0	37.0	0.6	
1108	76	845.0	29.0	7.9	
539	65	DISC	DISC	18.0	
1129	28	1129.0	28.0	6.2	
879	15	821.9	5.9	2.6	
619	49	619.0	14.0	1.0	
530	27	448.0	10.0	4.4	
135	43	163.1	1.9	1.3	
786	31	752.0	7.3	2.8	
768	24	792.6	7.2	0.9	
1852	36	1852.0	36.0	0.3	
684	28	651.0	11.0	2.4	
2668	9.9	2667.7	9.9	16.5	
1174	24	1174.0	24.0	0.8	
880	100	770.0	24.0	4.2	
97	77	18.9	0.3	2.9	Rim Core
991	22	991.0	22.0	1.5	
804	21	804.0	5.8	2.8	
1087	41	1087.0	41.0	8.3	
1539	20	1539.0	20.0	5.0	
135	65	65.2	1.0	0.5	
964	22	964.0	22.0	8.4	
624	53	624.0	7.6	0.6	
447	26	496.6	3.7	2.2	
135	70	69.2	1.2	1.6	
2419	13	2419.0	13.0	1.9	
478	33	462.5	4.5	0.5	
88	30	82.1	1.1	0.2	
440	300	DISC	DISC	17.6	Rim
1213	30	739.0	12.0	14.9	Core
449	57	391.4	4.6	2.5	

Table 3

207/206					
Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance*	Rim/C ore
892	41	892.0	41.0	9.6	Rim
606	50	577.7	8.1	1.0	
1597	34	1597.0	34.0	23.8	Core
200	100	107.9	3.3	3.7	Rim
1480	25	1480.0	25.0	15.2	Core
570	120	343.0	17.0	9.0	Core
1096	19	1096.0	19.0	1.5	
777	32	721.0	13.0	2.0	
1046	34	1046.0	34.0	7.0	
985	25	985.0	25.0	2.4	
195	47	169.7	1.6	0.6	
228	43	295.4	3.9	2.1	
523	24	507.8	5.6	0.8	
627	23	657.8	8.6	1.1	
120	71	117.6	1.9	0.8	
460	42	347.7	5.2	3.7	
876	20	799.2	8.6	2.2	
129	48	111.1	1.8	0.1	
2686	86	DISC	DISC	67.6	Rim
900	110	DISC	DISC	15.1	Core
113	56	37.6	0.4	2.1	Core
-100	120	69.5	1.6	10.3	
1874	15	1874.0	15.0	3.6	
154	51	68.6	0.9	2.5	
1400	18	1400.0	18.0	5.5	
811	25	645.0	7.2	5.3	
108	62	118.2	1.6	1.6	
496	27	511.0	7.0	0.5	
960	16	702.1	4.2	8.1	
70	130	51.4	1.1	1.2	
103	47	108.8	1.2	1.8	
790	43	790.0	9.2	2.8	
498	31	521.8	5.1	1.8	
567	41	542.7	6.8	0.4	Rim
1120	18	1120.0	18.0	1.1	Core
947	32	947.0	32.0	2.1	Core
2475	14	2475.0	14.0	5.2	
488	38	508.0	19.0	1.6	
50	69	18.5	0.3	0.5	Core
463	56	513.7	9.5	1.9	
150	160	115.3	3.9	1.2	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
2435	34	2435.0	34.0	20.5	Core
103	66	107.4	1.8	0.5	
254	46	286.0	5.9	0.8	
60	120	60.1	1.3	0.7	
162	90	101.2	2.5	1.7	
2532	19	2532.0	19.0	0.9	
186	75	105.1	2.1	3.2	
162	80	109.8	1.8	2.0	
216	81	115.3	2.1	3.8	
567	47	DISC	DISC	105.6	
230	200	54.5	2.3	12.5	
600	46	560.0	10.0	1.9	
1159	51	1159.0	51.0	18.8	
1140	32	1140.0	32.0	1.4	
803	51	661.0	22.0	5.2	
120	120	39.2	1.1	2.7	
2033	26	2033.0	26.0	1.8	
540	140	376.0	25.0	6.5	
1226	30	DISC	DISC	16.3	
959	37	959.0	37.0	5.5	
1809	19	1809.0	19.0	1.3	
1839	21	1839.0	21.0	12.5	
180	110	79.9	2.0	4.3	
1867	17	1867.0	17.0	3.8	
1183	55	DISC	DISC	15.4	
787	30	421.1	8.9	11.8	
985	45	985.0	45.0	11.4	
910	100	735.0	18.0	5.6	
123	72	45.7	1.1	1.3	
266	67	288.0	4.9	1.8	
943	62	783.0	12.0	5.5	
182	40	90.1	2.2	2.8	
120	110	53.1	1.6	1.8	
361	68	107.4	2.1	10.0	
1466	50	1466.0	50.0	16.8	
720	25	672.0	9.3	1.5	
3117	24	3117.0	24.0	6.6	
796	35	739.8	9.2	1.9	
1131	33	1131.0	33.0	4.2	
871	40	824.0	15.0	1.6	Rim
1517	66	1517.0	66.0	1.5	Core

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
2211	17	2211.0	17.0	22.3	
855	26	567.0	13.0	10.0	
749	44	749.0	19.0	6.3	
893	50	659.0	13.0	8.1	
1755	19	1755.0	19.0	1.7	
758	32	788.8	9.5	0.4	
698	53	682.0	15.0	1.0	
3249	54	3249.0	54.0	29.8	
506	55	465.6	8.6	2.0	
590	34	588.9	7.1	0.2	
1052	26	1052.0	26.0	1.0	
2109	45	2109.0	45.0	13.5	
71	90	20.4	0.5	0.5	
260	180	59.2	1.9	10.0	
1029	29	1029.0	29.0	17.3	
2244	24	2244.0	24.0	4.6	
151	58	112.0	2.2	2.2	
922	26	802.0	13.0	4.1	
884	45	793.0	12.0	3.3	
1957	13	1957.0	13.0	10.8	
150	40	113.4	1.7	1.9	
710	100	758.0	19.0	0.4	
1138	25	1138.0	25.0	12.0	
393	46	344.1	8.6	1.9	
904	34	904.0	34.0	2.8	
834	54	699.0	15.0	4.5	
935	52	754.0	19.0	5.5	
752	44	680.0	20.0	1.3	
300	140	76.9	2.5	8.5	
1992	22	1992.0	22.0	13.5	
1007	32	1007.0	32.0	8.3	
168	58	144.0	2.7	0.8	
830	31	838.0	13.0	0.5	
1844	22	1844.0	22.0	4.1	
600	27	561.0	10.0	1.8	
493	23	427.2	5.7	3.1	
900	26	758.0	12.0	4.7	
1858	22	1858.0	22.0	2.0	
796	31	745.0	12.0	2.1	
535	38	486.0	11.0	2.3	
601	65	480.0	21.0	4.2	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
841	39	733.0	15.0	3.0	Rim
170	300	DISC	DISC	4.3	
1490	57	1490.0	57.0	2.3	Core
285	64	34.8	0.6	10.4	
1977	14	1977.0	14.0	13.3	
160	100	44.1	1.0	3.9	
642	36	614.7	8.4	0.2	
157	61	105.3	1.6	1.3	
760	190	DISC	DISC	28.3	
721	47	569.0	13.0	5.6	
533	47	469.0	12.0	3.3	
681	52	504.0	9.4	7.7	
2266	38	2266.0	38.0	11.7	
590	120	DISC	DISC	16.4	
823	32	832.0	19.0	0.2	
1848	19	1848.0	19.0	4.3	
836	17	700.4	9.0	5.0	
206	89	48.3	0.9	6.0	
130	250	69.3	5.4	5.6	
1860	13	1860.0	13.0	2.2	
996	36	996.0	36.0	4.0	
156	62	54.0	1.6	4.1	
1030	38	1030.0	38.0	4.6	
201	66	181.7	3.4	0.7	
996	37	591.0	13.0	13.3	
136	30	95.3	1.3	1.4	
170	120	57.4	1.3	4.0	
138	66	106.0	1.8	0.3	
1864	19	1864.0	19.0	3.8	
210	120	73.7	1.9	4.8	
1067	43	DISC	DISC	19.7	
1875	23	1875.0	23.0	1.0	
78	70	18.3	0.3	0.3	
724	31	561.0	10.0	4.9	
417	42	289.6	4.7	3.5	
187	67	100.7	1.8	1.7	
1871	22	1871.0	22.0	0.3	
580	170	DISC	DISC	24.2	
2565	24	2565.0	24.0	20.4	
95	85	48.4	0.9	1.5	
883	32	837.0	14.0	1.8	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
549	30	496.2	6.7	1.8	
1028	24	1028.0	24.0	4.3	
1857	18	1857.0	18.0	1.4	
847	38	829.0	13.0	0.2	
572	33	600.4	7.0	1.1	
528	52	453.0	12.0	2.8	Rim
1018	47	1018.0	47.0	5.5	Core
1367	31	1367.0	31.0	2.9	
1493	29	1493.0	29.0	5.9	
861	70	861.0	70.0	4.5	Rim
1551	50	1551.0	50.0	4.3	Core
940	25	940.0	25.0	1.4	
464	34	423.6	6.1	1.7	
196	89	66.4	1.3	5.4	
137	67	102.3	1.6	1.3	
919	52	919.0	52.0	7.1	
340	110	74.9	2.4	11.3	
2278	38	2278.0	38.0	5.8	
1064	34	1064.0	34.0	19.5	
1095	54	1095.0	54.0	16.6	
457	58	543.0	11.0	2.6	
925	53	578.0	15.0	11.3	
588	71	567.0	18.0	1.0	Rim
840	28	840.0	9.8	0.9	Core
1958	19	1958.0	19.0	0.9	
968	55	968.0	55.0	7.1	
530	46	486.3	7.4	1.8	
584	65	524.0	16.0	1.9	
20	97	18.2	0.4	1.7	
847	33	847.0	11.0	1.5	
471	66	301.9	9.1	7.2	
120	130	54.8	1.2	3.7	
760	140	524.0	34.0	8.7	Rim
3235	26	3235.0	26.0	4.3	Core
316	62	263.2	6.4	1.7	
895	48	662.0	18.0	7.5	
35	72	100.7	3.5	4.1	
1760	17	1760.0	17.0	2.4	
168	67	103.2	1.5	2.6	
50	250	62.2	4.4	5.2	
2008	29	2008.0	29.0	8.4	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
956	61	956.0	61.0	0.5	Rim Core
826	76	535.0	18.0	10.1	
1103	32	1103.0	32.0	2.0	
1814	46	DISC	DISC	33.8	Rim Core
50	130	58.3	2.2	0.9	
110	240	160.0	15.0	2.6	
865	35	843.0	14.0	0.8	Core
960	25	960.0	25.0	5.3	
1447	31	1447.0	31.0	1.5	
788	26	808.4	8.4	0.7	Core
940	130	783.0	50.0	5.2	
290	250	66.9	4.8	8.9	
1877	34	1877.0	34.0	0.8	Core
985	40	985.0	40.0	9.8	
1468	23	1468.0	23.0	2.6	
170	120	106.4	2.5	1.8	Core
616	55	607.0	14.0	0.7	
2270	16	2270.0	16.0	23.8	
568	72	557.0	11.0	0.9	Core
184	53	36.4	0.4	6.0	
885	44	643.0	14.0	7.9	
320	190	88.7	2.8	10.4	Core
2034	19	2034.0	19.0	11.6	
2044	32	2044.0	32.0	29.9	
1150	120	1150.0	120.0	3.8	Core
786	39	777.0	13.0	0.1	
130	120	57.3	2.4	2.1	
1052	49	1052.0	49.0	4.3	Core
742	69	816.0	25.0	2.3	
1197	44	1197.0	44.0	7.5	
469	56	445.0	13.0	0.5	Core
2258	24	2258.0	24.0	1.7	
1724	27	1724.0	27.0	0.8	
2361	28	2361.0	28.0	18.3	Core
808	63	798.0	11.0	0.6	
2058	20	2058.0	20.0	3.9	
898	32	812.0	12.0	2.5	Core
2060	17	2060.0	17.0	0.8	
59	61	80.7	0.9	1.8	
202	46	160.0	2.1	2.1	Core
1831	20	DISC	DISC	33.9	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
553	50	603.0	11.0	0.8	
100	59	112.1	2.4	0.3	
515	38	509.6	8.8	0.6	
578	85	630.0	24.0	1.6	
380	150	124.2	4.8	11.0	
564	72	587.0	13.0	0.3	
1430	190	DISC	DISC	47.4	
200	200	84.1	3.0	4.8	
334	76	158.1	3.1	8.7	
2646	34	2646.0	34.0	17.1	
158	30	162.0	2.0	0.7	
180	100	111.9	2.9	3.7	
927	61	781.0	16.0	5.9	
90	250	18.5	1.3	2.6	
900	100	DISC	DISC	15.9	
447	62	562.0	14.0	3.5	
358	55	506.3	9.3	4.8	
260	230	132.0	11.0	7.0	
572	24	577.0	5.2	0.3	
145	97	54.7	2.3	4.4	
127	93	23.2	1.1	4.5	
457	60	464.5	8.1	0.5	
740	100	445.0	24.0	10.8	
65	91	21.8	0.6	1.2	
779	69	740.0	25.0	1.1	
695	52	716.0	20.0	0.3	
30	220	46.6	2.3	0.2	
110	200	109.1	5.0	0.5	Rim Core
710	34	638.0	11.0	2.9	
716	36	717.0	11.0	0.1	
124	63	156.1	4.9	1.4	
843	45	830.0	20.0	0.0	
662	36	689.8	9.8	0.6	
858	92	668.0	31.0	6.4	
1507	52	1507.0	52.0	4.2	
167	75	104.7	2.2	2.8	
70	200	52.8	2.1	8.3	
197	75	220.3	4.9	1.3	
439	28	488.8	5.1	1.9	
240	120	140.6	3.4	3.1	
40	180	43.8	1.4	1.9	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
259	72	105.0	2.0	6.6	
795	32	798.0	10.0	0.6	
970	41	970.0	41.0	4.0	
80	130	80.8	2.4	0.6	
199	56	102.7	1.6	4.4	
865	28	865.0	28.0	0.2	
1592	34	1592.0	34.0	4.5	
-40	150	84.3	2.7	8.2	
458	35	487.4	6.7	0.8	
80	100	50.2	1.4	0.6	
85	42	112.9	1.7	1.9	
136	73	32.9	0.6	4.0	
786	36	786.0	16.0	2.3	
1423	25	1423.0	25.0	0.1	
156	40	91.7	1.8	1.9	
82	62	113.0	3.1	1.2	
208	80	63.2	1.2	6.9	
870	24	870.0	24.0	0.0	
92	57	116.3	1.6	2.1	
831	41	743.0	9.3	3.5	
840	33	837.0	10.0	0.2	
105	38	113.0	1.7	0.4	
150	340	DISC	DISC	6.4	Rim
692	37	702.0	16.0	0.3	Core
70	120	61.7	1.6	2.0	
751	36	DISC	DISC	105.8	
152	53	110.9	1.9	1.4	
1012	27	1012.0	27.0	1.0	
906	27	906.0	27.0	1.1	
2444	31	2444.0	31.0	0.0	
615	76	519.0	11.0	4.1	Rim
1611	26	1611.0	26.0	23.0	Core
247	55	114.3	2.1	5.4	
735	42	739.2	8.1	0.1	
30	190	58.6	1.9	1.4	
190	91	19.4	0.3	7.3	
870	41	839.0	14.0	0.9	
611	72	318.0	11.0	11.2	
80	140	36.8	1.0	1.0	
862	35	862.0	35.0	2.2	
992	29	992.0	29.0	2.7	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
884	24	813.6	7.1	2.6	Rim Core
929	30	929.0	30.0	1.8	
128	80	45.1	0.6	3.4	
629	32	581.1	6.2	2.1	
861	26	805.0	10.0	1.9	
869	55	702.0	11.0	5.8	
1052	31	1052.0	31.0	10.7	
72	78	22.7	0.4	0.1	
150	53	222.3	5.8	3.7	
869	39	846.2	8.3	0.4	
152	36	159.8	1.4	0.8	
535	37	505.6	5.0	0.7	
844	25	804.6	7.7	1.1	
177	65	162.8	2.4	0.2	
529	66	531.0	11.0	0.4	
982	42	670.9	8.0	9.9	
1318	41	1318.0	41.0	14.4	
1669	38	1669.0	38.0	16.5	
780	39	765.0	11.0	0.3	
748	95	691.0	16.0	1.6	
1163	65	1163.0	65.0	21.2	
1604	53	DISC	DISC	35.1	
1945	34	1945.0	34.0	13.3	
130	110	104.5	3.0	0.2	
987	21	987.0	21.0	0.3	
1122	41	DISC	DISC	17.4	
1616	33	1616.0	33.0	1.5	
2448	21	2448.0	21.0	19.8	
177	54	124.4	2.0	1.9	
590	75	430.0	20.0	5.7	
860	100	828.0	30.0	1.7	
2373	44	2373.0	44.0	22.9	
810	63	810.0	20.0	1.5	
1856	50	1856.0	50.0	4.4	
144	63	104.2	2.3	1.5	
501	72	507.6	9.6	0.9	
130	180	118.7	5.9	1.1	
280	160	52.3	1.6	11.1	
200	240	50.2	2.3	13.7	
20	120	43.4	1.1	2.6	
1015	52	566.0	17.0	14.8	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
91	71	DISC	DISC	99.4	
263	68	284.1	4.8	1.3	
971	25	971.0	25.0	1.3	
1882	18	1882.0	18.0	10.3	
1368	27	1368.0	27.0	11.0	
259	58	13.1	0.2	9.9	
1966	18	DISC	DISC	105.9	
236	57	111.1	1.4	5.4	
943	27	943.0	27.0	4.7	
520	44	503.3	8.4	0.9	
84	61	20.7	1.7	0.5	
2003	22	DISC	DISC	106.1	
823	52	751.0	15.0	2.6	
2472	13	2472.0	13.0	3.9	
914	51	827.0	14.0	2.8	
727	38	679.0	10.0	2.0	
609	42	601.9	9.9	0.7	
671	62	494.0	11.0	6.1	Rim
846	71	846.0	21.0	1.8	Core
550	170	DISC	DISC	21.1	
310	49	111.8	1.7	7.6	
442	75	395.0	10.0	1.3	Rim
1069	37	1069.0	37.0	17.2	Core
97	45	103.8	1.6	0.9	
157	80	57.7	0.9	3.2	
170	160	62.2	1.9	4.0	
170	110	85.8	2.3	2.2	
364	53	322.3	7.4	2.0	
465	29	443.8	7.8	0.2	
866	38	809.0	13.0	1.3	
800	100	728.0	19.0	2.7	
2298	18	2298.0	18.0	2.3	
2174	17	2174.0	17.0	0.6	
827	33	637.0	12.0	6.3	
752	46	673.0	15.0	3.2	
811	51	DISC	DISC	100.7	
187	33	146.2	9.7	1.3	
200	160	63.9	1.8	6.7	
2006	18	2006.0	18.0	8.1	
672	28	537.8	8.3	5.4	
106	50	45.0	0.7	3.3	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
710	83	592.0	14.0	5.9	
966	27	966.0	27.0	3.0	
536	81	355.0	12.0	7.3	Rim
1019	38	1019.0	38.0	1.5	Core
60	59	96.0	1.7	1.6	
410	150	199.6	8.4	9.3	Rim
2597	30	2597.0	30.0	11.6	Core
636	44	598.0	14.0	2.0	
186	59	23.7	0.4	7.2	
451	69	484.0	16.0	0.2	Rim
1015	54	1015.0	54.0	11.8	Core
590	100	339.0	11.0	10.6	
846	33	717.4	8.9	5.1	
949	29	949.0	29.0	1.9	
1004	43	1004.0	43.0	3.9	
1239	37	1239.0	37.0	27.8	
533	54	483.8	8.0	2.9	
351	39	265.8	4.8	4.3	
210	130	46.7	1.2	8.1	
917	56	917.0	56.0	3.7	
1659	17	1659.0	17.0	8.8	
961	40	961.0	40.0	2.0	
180	130	50.5	1.3	6.7	
1623	20	1623.0	20.0	0.9	
1914	21	1914.0	21.0	8.6	
1710	22	1710.0	22.0	2.1	
894	91	DISC	DISC	15.1	
1680	29	DISC	DISC	36.1	
208	37	199.9	2.7	2.1	
330	150	80.3	2.3	12.7	
180	150	35.0	1.3	7.2	
726	36	703.0	8.7	0.8	
1075	17	1075.0	17.0	4.9	
1006	33	1006.0	33.0	3.2	
2651	14	2651.0	14.0	7.6	
636	30	581.3	5.9	3.1	
130	150	36.7	1.1	7.1	
150	130	48.2	1.2	5.3	
50	110	57.6	1.2	2.1	
40	120	88.9	1.6	2.9	
90	43	48.9	1.0	0.4	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
924	44	924.0	44.0	5.3	Rim
1064	30	1064.0	30.0	2.3	Core
192	99	107.2	3.6	2.2	
155	57	168.3	2.7	1.7	
1903	86	1903.0	86.0	6.9	Rim
2728	17	2728.0	17.0	1.3	Core
230	130	225.6	9.2	0.6	Rim
2438	19	2438.0	19.0	6.4	Core
892	31	639.0	11.0	8.5	
2579	23	2579.0	23.0	6.5	
1000	23	1000.0	23.0	5.4	
1873	23	1873.0	23.0	12.7	
834	29	834.0	9.7	0.5	
497	34	492.8	6.1	1.4	
1730	21	1730.0	21.0	1.2	
931	36	931.0	36.0	5.5	
1735	49	1735.0	49.0	5.6	
2496	19	2496.0	19.0	3.8	
737	42	749.0	15.0	0.5	
555	27	537.1	6.4	1.0	
210	340	23.6	1.8	8.5	
217	48	230.5	2.1	0.3	
1057	12	1057.0	12.0	10.0	
683	40	706.0	12.0	0.3	
1849	14	1849.0	14.0	11.1	
989	24	989.0	24.0	1.0	
788	22	809.6	5.8	0.1	
100	70	40.2	0.7	2.6	
974	25	974.0	25.0	0.0	
1009	54	1009.0	54.0	5.0	
775	55	830.4	9.2	0.7	
20	110	57.8	1.2	4.0	
808	29	808.0	7.0	0.9	
159	98	148.5	6.0	2.3	Rim
898	30	898.0	30.0	4.1	Core
450	23	449.9	3.1	0.9	
117	87	58.8	1.1	2.6	
980	50	980.0	50.0	5.8	
826	33	831.3	9.2	0.2	
937	22	937.0	22.0	3.5	
372	37	390.7	3.0	0.9	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
130	87	84.9	1.4	0.0	Rim
830	100	830.0	44.0	2.8	
2539	27	2539.0	27.0	1.9	Core
869	22	755.3	8.0	2.5	
380	150	DISC	DISC	15.2	
411	62	457.7	4.9	1.9	
43	55	39.2	0.5	1.1	
283	30	235.9	2.4	3.8	
2489	15	2489.0	15.0	11.3	
116	72	108.6	2.2	0.5	
2451	9.9	2451.2	9.9	1.0	
910	260	DISC	DISC	37.8	
1202	31	1202.0	31.0	1.2	
67	56	38.5	0.5	3.5	
562	22	568.6	5.1	1.3	
81	52	93.7	1.0	1.2	
1011	20	1011.0	20.0	10.4	
2538	10	2538.0	10.0	11.4	
110	120	66.8	1.4	1.8	
1203	36	1203.0	36.0	9.6	
110	73	59.4	1.3	0.5	
237	67	40.0	0.5	7.6	
1270	38	1270.0	38.0	21.3	
250	270	61.4	3.0	13.5	
1006	17	1006.0	17.0	2.1	
634	26	664.7	8.3	2.0	
105	65	23.0	0.3	2.0	
786	33	816.0	8.9	1.9	
112	82	113.9	1.9	2.5	
808	35	822.2	6.5	1.3	
107	54	110.5	1.9	1.7	
414	33	458.4	6.0	1.6	
179	59	38.0	0.8	5.0	
843	48	844.0	25.0	0.5	
1674	33	1674.0	33.0	9.0	
1075	19	1075.0	19.0	0.5	
506	43	536.0	10.0	1.9	
140	290	62.0	2.9	3.4	
542	31	378.9	9.3	5.0	
703	33	741.1	5.9	1.9	
796	20	646.0	14.0	4.2	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
506	70	514.7	7.7	0.1	Rim
510	130	457.0	25.0	2.8	
1680	30	1680.0	30.0	9.6	Core
435	88	330.9	9.7	5.5	
781	25	807.0	9.5	0.1	
485	34	461.2	7.6	2.1	
2165	22	2165.0	22.0	4.1	
84	49	105.6	1.6	0.6	
120	140	61.5	1.8	4.9	
390	110	156.5	3.4	11.4	
939	48	939.0	48.0	6.7	
1094	42	1094.0	42.0	5.3	
10	85	48.4	0.9	3.2	
410	190	DISC	DISC	15.6	
998	34	998.0	34.0	4.1	
550	100	577.0	22.0	0.9	
247	63	DISC	DISC	12.6	
139	77	108.5	2.5	0.9	
1065	43	1065.0	43.0	11.7	
2488	31	2488.0	31.0	23.5	
1601	42	1601.0	42.0	4.6	
139	97	DISC	DISC	97.4	
551	69	541.0	11.0	0.6	
882	51	832.0	25.0	1.9	
-60	520	DISC	DISC	6.5	Rim
861	46	861.0	46.0	0.1	Core
2496	29	2496.0	29.0	1.4	
934	47	934.0	47.0	6.4	
147	98	105.3	2.5	1.0	
974	24	974.0	24.0	8.5	
1717	27	1717.0	27.0	0.2	
182	61	196.0	3.0	0.2	
1096	34	1096.0	34.0	8.5	
2563	26	2563.0	26.0	1.3	
190	120	182.4	4.0	1.4	
160	150	123.2	5.1	2.6	
686	30	582.4	7.9	3.6	
49	85	58.9	1.6	0.9	
482	20	443.7	3.6	1.5	
939	51	838.0	13.0	3.5	
1622	25	1622.0	25.0	15.8	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
2372	80	DISC	DISC	62.9	Rim Core
950	80	779.0	12.0	5.6	
2024	24	2024.0	24.0	13.0	
850	30	794.0	10.0	1.8	
585	50	586.0	11.0	0.2	
2453	14	2453.0	14.0	9.5	
1116	62	748.0	20.0	12.4	
1849	25	1849.0	25.0	7.0	
210	140	160.5	3.8	2.7	
2356	17	2356.0	17.0	10.5	
2382	23	2382.0	23.0	10.2	
585	53	550.0	8.9	2.1	
200	130	136.6	3.5	3.4	
1711	22	1711.0	22.0	24.4	
1071	38	1071.0	38.0	7.3	
116	95	84.9	1.8	0.9	
80	110	104.7	2.6	3.3	
536	59	455.0	5.9	3.8	
857	57	648.0	10.0	7.2	
180	160	56.7	1.8	5.7	
60	110	17.8	0.3	0.4	
978	36	978.0	36.0	3.8	
2616	17	2616.0	17.0	5.8	
1106	37	DISC	DISC	21.0	
795	49	701.0	11.0	3.6	
2084	29	2084.0	29.0	19.5	
1038	28	1038.0	28.0	11.0	Rim Core
117	99	57.9	1.5	1.9	
893	44	832.0	22.0	2.1	
350	130	99.5	2.0	12.4	
588	65	436.0	16.0	6.8	
1175	33	770.0	15.0	12.7	
586	31	522.3	7.1	2.3	
490	47	532.8	8.0	1.5	
492	41	449.7	6.1	1.9	
741	27	701.9	6.1	1.5	
438	42	446.2	6.7	0.1	
2495	22	2495.0	22.0	3.6	
710	80	653.0	20.0	2.4	
1639	18	1639.0	18.0	0.8	
1982	21	1982.0	21.0	10.6	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
110	100	107.0	2.2	0.6	Rim Core
370	100	105.3	1.9	11.7	
144	68	74.0	1.6	3.6	
185	67	52.2	1.1	5.8	
120	100	105.3	5.1	1.6	
750	56	474.0	12.0	9.7	
671	93	487.0	25.0	7.1	
716	26	642.4	6.7	2.5	
489	48	489.0	11.0	0.4	
113	75	87.9	1.4	0.6	
522	64	456.6	8.7	3.5	
2730	37	2730.0	37.0	10.0	
817	32	763.0	13.0	2.3	
180	120	114.2	2.4	2.6	
1839	21	1839.0	21.0	0.1	Rim Core
699	76	805.0	18.0	2.5	
491	26	472.1	7.2	1.2	
161	49	102.5	1.3	2.1	
564	48	514.0	10.0	2.1	
1036	47	1036.0	47.0	11.0	
795	63	707.0	31.0	2.6	
60	130	112.5	6.0	4.0	
428	37	448.6	5.5	0.9	
1162	28	1162.0	28.0	12.3	
546	31	473.0	6.5	2.8	
-10	190	53.9	1.8	1.1	
854	32	790.0	11.0	2.3	Rim Core
932	50	932.0	50.0	4.5	
1827	21	1827.0	21.0	3.2	
387	55	286.6	7.5	3.8	
215	42	204.0	3.5	0.4	
543	59	DISC	DISC	105.6	
309	46	295.4	4.9	0.2	
1886	22	1886.0	22.0	2.3	
988	72	691.0	15.0	10.1	
1418	22	1418.0	22.0	17.1	
891	59	845.0	11.0	2.0	
213	95	120.5	3.3	3.0	
1777	55	1777.0	55.0	3.5	
2110	41	2110.0	41.0	0.2	
1869	23	1869.0	23.0	1.2	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
488	38	257.5	6.4	8.7	
870	130	478.0	22.0	13.1	
575	65	516.0	14.0	2.1	
547	67	567.0	19.0	1.1	
224	94	65.8	1.2	6.4	
659	30	384.4	6.2	9.8	
1866	28	DISC	DISC	30.8	
427	48	391.7	7.5	1.4	
120	65	129.4	2.0	0.3	
457	29	467.7	6.5	0.2	
97	44	96.7	1.6	0.4	
775	38	668.5	8.2	4.0	
220	100	74.5	1.2	5.5	
113	93	68.6	1.2	0.7	
1062	25	1062.0	25.0	4.3	
151	96	65.4	1.3	2.4	
628	49	558.0	11.0	1.9	
1071	29	1071.0	29.0	10.8	
215	65	50.8	1.3	5.9	
1140	23	1140.0	23.0	11.8	
-20	250	13.6	0.7	4.1	Rim
220	130	74.6	2.8	5.4	
240	170	103.7	3.1	5.5	Core
974	26	974.0	26.0	9.1	
186	34	196.4	2.5	0.4	
622	61	459.0	13.0	5.6	
524	60	552.4	8.8	0.6	
306	67	152.0	2.5	7.1	
50	150	86.2	3.0	0.6	
154	69	110.2	1.8	2.6	
233	72	245.3	5.8	0.0	
78	61	41.5	0.7	1.5	
210	210	65.6	2.1	8.3	
802	60	702.0	14.0	3.8	
689	49	683.0	14.0	0.7	
230	220	54.5	2.3	11.8	
1831	20	1831.0	20.0	3.1	
151	43	104.2	1.5	1.6	
137	38	108.3	1.6	0.7	
1982	27	1982.0	27.0	16.0	
834	30	743.0	11.0	2.9	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
150	110	108.2	2.2	0.6	Rim Core
179	49	176.5	2.7	0.5	
180	76	31.8	0.7	6.4	
868	54	783.0	12.0	3.1	
200	180	114.5	3.5	2.1	
531	30	478.2	6.6	1.8	
186	60	111.7	2.0	3.4	
158	74	77.6	1.8	3.0	
479	39	483.7	7.0	0.8	
79	98	64.8	1.3	0.3	
550	100	464.0	14.0	3.1	
2625	27	2625.0	27.0	22.4	
94	47	100.1	1.6	0.6	
522	64	DISC	DISC	18.2	
2532	26	2532.0	26.0	7.1	
120	100	38.1	0.9	3.2	
2433	29	2433.0	29.0	20.8	
519	32	521.2	6.3	0.2	
229	75	104.7	1.8	5.0	
180	320	DISC	DISC	15.7	
506	30	447.7	7.6	1.8	
110	120	66.1	1.5	0.9	
856	63	770.0	15.0	3.4	
197	47	112.2	1.5	3.3	
80	120	40.4	1.0	1.9	
210	73	64.1	1.2	6.3	
798	46	737.0	11.0	2.4	
117	56	52.4	0.8	2.4	
210	110	65.7	1.6	4.6	
1168	29	1168.0	29.0	5.1	
103	57	109.7	1.6	0.7	
207	54	100.3	1.3	4.4	
2506	22	2506.0	22.0	27.9	
510	130	DISC	DISC	19.5	
232	71	67.4	1.1	5.5	
1039	30	1039.0	30.0	2.7	
460	140	102.9	5.3	13.2	
1830	39	1830.0	39.0	21.7	
614	75	570.0	16.0	1.2	Rim
1050	37	1050.0	37.0	2.0	Core
125	95	62.6	1.5	1.9	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
140	180	67.3	2.5	4.0	
40	120	17.0	0.4	0.5	
50	160	53.0	1.7	0.4	
756	33	808.5	9.4	0.7	
290	310	49.1	2.5	13.1	
109	91	103.8	2.0	0.8	
93	63	15.0	0.2	3.8	
30	110	76.6	1.7	2.4	
562	65	542.7	9.5	1.9	
459	36	466.2	6.0	0.6	
2665	18	2665.0	18.0	1.4	
65	62	46.4	1.0	0.3	
2254	22	2254.0	22.0	0.5	
300	160	92.1	2.8	10.0	
209	49	114.2	1.7	4.0	
618	63	561.0	11.0	2.4	
220	160	54.3	1.9	7.3	
140	120	87.4	2.0	1.8	
215	43	205.3	3.0	0.0	
966	26	966.0	26.0	0.3	
1544	28	1544.0	28.0	4.1	
1403	32	1403.0	32.0	11.0	
763	56	796.0	12.0	0.8	
122	82	111.8	1.7	0.4	
143	86	84.5	1.6	2.3	
153	34	99.4	2.1	1.5	
45	99	46.4	0.9	1.9	
1041	41	1041.0	41.0	9.2	
430	72	486.0	8.4	1.7	
420	130	104.2	2.9	13.8	
1971	62	DISC	DISC	30.5	
130	160	49.7	1.6	2.9	
350	150	71.0	2.6	11.8	
872	22	762.0	12.0	3.4	
170	49	129.4	2.4	0.8	
20	110	45.3	1.0	3.2	
519	24	503.5	7.7	0.5	
133	46	104.6	1.4	1.3	
814	49	774.0	12.0	2.1	
794	24	710.0	11.0	3.1	
698	41	685.0	17.0	0.9	

Table 3

207/206					Rim/C ore
Age (Ma)	2 σ error	Best age (Ma)	2 σ error	% Discordance*	
1229	37	1229.0	37.0	15.7	Rim
2001	20	2001.0	20.0	6.2	Core
1914	27	1914.0	27.0	26.1	
50	120	63.6	1.5	1.6	
245	48	242.6	4.5	1.1	
110	100	17.8	0.4	3.6	
2242	16	2242.0	16.0	3.7	
110	120	75.3	1.3	0.8	
495	46	488.0	14.0	0.4	Rim
756	18	650.1	7.1	3.6	Core
508	20	351.6	9.2	5.7	
1984	14	1984.0	14.0	9.8	
780	28	791.1	8.8	0.0	
910	30	910.0	30.0	5.9	
1701	16	1701.0	16.0	11.0	
170	170	75.0	1.9	5.7	
158	75	117.9	2.1	0.9	
476	47	439.0	10.0	1.6	
230	92	112.6	4.2	6.1	
1076	39	780.0	11.0	9.7	
120	57	71.0	1.0	1.3	
229	59	119.3	2.2	4.4	
911	26	911.0	26.0	0.9	
749	45	629.0	15.0	4.6	
72	57	71.6	0.9	0.2	
1117	23	1117.0	23.0	0.6	
977	25	977.0	25.0	12.7	
1643	20	1643.0	20.0	5.4	
259	83	74.7	1.0	8.0	
100	66	33.6	0.6	2.6	
651	29	573.0	5.9	2.7	
380	160	DISC	DISC	15.9	
76	57	65.2	0.9	0.6	
210	100	17.3	0.3	8.4	
589	44	472.0	11.0	4.8	
1666	20	1666.0	20.0	2.3	
90	120	102.4	2.2	1.0	
119	44	46.1	0.7	2.7	
432	98	122.8	2.6	13.2	
774	56	719.0	11.0	1.8	
112	70	77.0	1.3	1.4	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
136	85	49.0	0.9	3.0	Rim Core
1112	22	1112.0	22.0	5.4	
496	46	238.8	6.7	9.6	
160	89	51.2	0.8	3.3	
155	48	106.7	1.5	2.1	
884	31	884.0	31.0	1.6	
559	54	522.0	6.7	1.7	
198	77	94.3	2.1	4.4	
322	78	44.6	1.1	11.3	
681	45	578.0	11.0	3.7	
951	31	951.0	31.0	1.9	
700	260	DISC	DISC	30.7	
1250	110	DISC	DISC	42.8	
1387	24	1387.0	24.0	2.5	
1820	19	1820.0	19.0	6.2	
665	40	669.0	11.0	0.0	
176	63	116.7	2.0	2.0	
239	76	120.9	3.7	4.2	
300	100	57.2	1.3	9.9	
217	37	143.4	1.9	4.6	
580	30	539.6	7.9	1.7	
223	70	217.4	4.5	0.2	
142	37	108.9	1.0	2.0	
121	73	73.0	1.0	0.7	
744	24	700.6	9.3	1.6	
248	36	238.4	3.6	1.2	
1169	18	1169.0	18.0	14.9	
198	74	68.2	0.9	6.0	
375	40	295.9	3.5	3.4	
410	190	DISC	DISC	19.0	
280	150	54.0	1.1	10.3	
1001	25	838.3	9.4	5.2	
80	190	50.3	1.3	5.1	
340	100	193.0	16.0	5.4	Rim Core
734	44	558.0	11.0	6.4	
1172	33	1172.0	33.0	9.8	
1281	36	1281.0	36.0	29.2	
262	76	59.6	0.9	8.5	
939	39	721.0	12.0	7.2	
819	37	656.0	12.0	5.1	
185	60	105.8	2.2	3.4	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
902	36	831.3	8.4	2.5	Rim Core
499	25	477.0	4.5	1.1	
260	210	68.3	2.6	6.7	
563	53	567.0	20.0	0.2	
705	35	658.0	12.0	1.6	
240	320	DISC	DISC	3.7	
592	44	356.6	8.4	8.4	
743	45	601.0	13.0	5.1	
1741	32	1741.0	32.0	2.7	
565	55	542.6	5.3	1.5	
229	63	106.7	1.7	4.6	Rim Core
160	180	71.6	2.0	4.7	
957	41	957.0	41.0	7.8	
120	88	65.4	1.2	3.0	
160	130	80.6	1.6	3.1	
421	74	250.3	5.9	6.8	
26	82	48.7	1.0	1.9	
133	81	111.0	2.1	0.3	
220	190	131.4	4.4	6.1	
119	72	21.8	0.5	4.1	
884	38	791.0	11.0	3.2	Rim Core
833	28	649.0	11.0	6.2	
100	110	152.9	7.9	1.9	
1050	39	1050.0	39.0	12.0	
194	77	107.2	2.1	4.2	
120	330	80.7	3.3	9.3	
601	20	579.8	6.6	0.9	
744	28	800.0	10.0	1.9	
656	64	531.0	21.0	4.8	
178	47	65.0	0.8	4.2	
103	87	86.5	1.4	0.5	Rim Core
400	110	269.0	16.0	5.6	
781	20	630.9	8.0	5.2	
280	110	154.3	4.4	5.4	
128	67	112.0	1.4	0.4	
150	100	115.9	3.8	1.2	
1772	34	1772.0	34.0	26.6	
1823	31	DISC	DISC	40.2	
175	43	47.4	0.8	6.7	
810	39	832.0	14.0	1.2	
110	120	114.5	4.3	1.5	

Table 3

207/206					Rim/Co re
Age (Ma)	2 σ error	Best age (Ma)	2 σ error	% Discordance*	
2010	15	2010.0	15.0	2.4	Rim
610	170	DISC	DISC	27.2	
591	35	551.0	11.0	1.5	
1023	46	1023.0	46.0	4.1	Core
1591	30	1591.0	30.0	19.5	
202	35	132.1	1.1	2.9	
160	50	34.1	0.5	4.5	
119	81	49.8	0.7	3.1	
834	43	760.8	7.2	2.8	
200	190	67.3	2.1	8.8	
550	69	500.9	5.4	3.1	
225	68	148.5	2.0	3.9	
167	83	65.9	1.2	4.5	
68	91	49.9	0.8	0.9	
2512	21	2512.0	21.0	2.4	
119	61	36.1	0.4	3.1	
59	62	35.5	0.4	0.4	
140	81	45.4	0.7	2.9	
36	52	52.9	0.8	0.6	
576	57	601.3	9.3	0.0	
160	120	54.8	1.0	4.9	
1191	26	1191.0	26.0	5.5	
170	140	127.9	2.9	1.0	
2340	16	2340.0	16.0	14.8	
139	69	35.2	0.7	3.3	
1685	28	1685.0	28.0	0.7	
546	28	487.9	7.1	1.7	
380	80	272.4	5.5	4.7	
786	54	741.0	12.0	1.6	
376	45	533.3	9.1	6.0	
501	90	267.9	8.1	8.0	
611	31	613.2	6.0	0.2	
1290	120	DISC	DISC	41.2	
109	72	38.2	0.7	0.9	Rim
790	200	DISC	DISC	17.5	
1282	51	1282.0	51.0	8.0	
430	120	102.5	4.9	13.3	Rim
696	59	435.0	11.0	9.0	Core
89	62	102.6	1.3	2.2	
710	100	DISC	DISC	26.1	
260	48	272.9	3.4	0.6	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
70	100	16.7	0.3	0.6	Rim Core
515	60	548.4	8.2	1.0	
206	43	211.9	4.5	0.6	
185	79	47.0	0.7	6.1	
1823	41	1823.0	41.0	13.3	
139	54	106.5	2.0	1.4	
549	69	493.0	14.0	3.0	
886	49	840.0	19.0	1.5	
1763	37	1763.0	37.0	2.9	
966	34	966.0	34.0	8.6	
200	120	88.1	3.3	2.9	
240	160	58.3	2.0	9.6	
930	52	809.0	18.0	4.5	
70	100	65.1	1.6	0.2	Rim Core
549	32	532.8	6.3	1.2	
720	160	412.0	34.0	10.6	
1645	45	1645.0	45.0	16.5	
1072	38	1072.0	38.0	0.7	
89	79	62.4	1.0	1.2	
1386	31	1386.0	31.0	2.8	
180	100	85.4	1.9	4.8	
320	110	15.5	0.5	14.5	
440	250	DISC	DISC	20.4	
805	25	786.5	8.5	0.8	
1464	47	DISC	DISC	48.2	
170	120	86.3	1.7	3.9	
104	93	59.9	1.0	0.2	Rim Core
2340	16	2340.0	16.0	20.1	
1025	18	1025.0	18.0	2.1	
2494	18	2494.0	18.0	5.9	
20	130	50.9	1.3	3.5	
89	94	45.2	0.6	0.9	
114	35	117.0	1.1	1.2	
7	99	65.1	1.3	5.3	
545	69	529.0	11.0	1.3	
863	45	835.0	10.0	0.1	
474	38	476.7	7.9	1.4	
1422	36	DISC	DISC	32.6	
924	36	924.0	36.0	1.2	
2450	19	DISC	DISC	32.7	
70	140	52.7	1.3	4.4	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
0	210	115.2	4.5	8.7	Rim
556	96	474.0	11.0	2.3	Core
102	68	51.4	1.0	0.9	
63	89	77.3	1.2	3.6	
120	120	71.4	1.7	1.1	
890	61	890.0	61.0	2.7	
2497	15	2497.0	15.0	5.9	
143	49	113.8	1.6	0.7	
538	35	511.5	5.1	0.4	
792	29	824.1	8.1	1.4	
210	120	55.3	1.2	6.3	
1794	40	1794.0	40.0	22.6	
876	45	802.0	10.0	2.2	
170	120	47.1	1.0	6.0	
1125	34	1125.0	34.0	19.4	
107	44	113.0	1.9	0.7	
722	66	769.0	24.0	1.2	
672	53	463.0	13.0	6.5	
657	49	270.0	6.4	14.6	
-30	180	DISC	DISC	97.8	
-10	180	91.5	3.5	5.8	
150	100	57.0	1.4	3.4	
482	60	518.0	16.0	0.8	Rim
912	42	912.0	42.0	8.1	Core
741	56	724.0	15.0	1.2	
979	76	979.0	76.0	10.4	
86	51	66.9	1.1	0.6	
944	35	944.0	35.0	4.6	
202	82	50.0	1.0	5.4	
44	66	115.7	3.2	4.4	
190	72	187.6	4.4	0.5	
1360	90	DISC	DISC	34.5	
610	110	547.0	22.0	2.7	
913	35	818.0	23.0	2.9	Rim
1078	38	1078.0	38.0	0.0	Core
110	120	DISC	DISC	0.4	
997	33	997.0	33.0	3.1	
135	53	64.9	0.9	2.6	
1826	47	1826.0	47.0	5.2	
271	62	234.9	4.6	1.7	
238	74	151.6	3.0	2.9	

Table 3

207/206					Rim/C ore
Age (Ma)	2 σ error	Best age (Ma)	2 σ error	% Discordance*	
1803	40	1803.0	40.0	22.5	Rim
130	130	107.6	3.6	1.9	
2155	83	2155.0	83.0	2.1	Core
2737	24	2737.0	24.0	5.4	
205	62	107.3	1.5	4.1	Rim
2061	32	2061.0	32.0	2.7	
130	88	64.0	1.6	2.3	Core
493	29	DISC	DISC	100.2	
270	130	115.9	7.5	7.6	Rim
200	100	109.5	3.1	2.8	
137	67	104.5	2.9	0.3	Core
1220	29	1220.0	29.0	5.2	
201	51	DISC	DISC	101.5	Rim
862	37	848.0	12.0	0.1	
759	56	769.0	11.0	0.1	Core
270	54	155.8	3.1	5.1	
171	79	59.4	1.2	4.8	Rim
165	43	113.7	1.4	1.7	
1155	21	1155.0	21.0	6.3	Core
560	230	478.0	35.0	1.2	
2406	16	2406.0	16.0	14.4	Rim
480	250	DISC	DISC	18.9	
206	82	57.0	0.7	5.8	Core
320	260	133.6	5.8	14.4	
1084	18	1084.0	18.0	1.2	Rim
120	120	84.6	1.7	0.8	
599	72	623.6	8.1	0.1	Core
274	94	54.7	0.8	9.6	
591	96	615.0	11.0	0.5	Rim
2464	20	2464.0	20.0	22.3	
110	120	78.0	1.8	1.3	Core
2470	19	2470.0	19.0	0.3	
892	70	777.0	11.0	4.9	Rim
952	31	952.0	31.0	8.4	
1203	36	1203.0	36.0	3.6	Core
660	34	708.4	9.7	1.1	
129	93	79.1	2.0	3.8	Rim
2292	29	DISC	DISC	47.3	
210	240	58.0	3.1	5.2	Core
1710	200	DISC	DISC	58.0	
260	55	215.0	3.9	3.0	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
1475	31	1475.0	31.0	1.2	
833	99	695.0	15.0	6.5	
921	53	921.0	53.0	3.3	Rim
1405	28	1405.0	28.0	22.8	Core
1300	26	1300.0	26.0	0.7	
190	180	142.0	11.0	2.7	Rim
1862	33	1862.0	33.0	17.3	Core
782	84	752.0	64.0	1.8	Rim
2214	16	2214.0	16.0	25.2	Core
1165	26	1165.0	26.0	0.9	
2407	15	2407.0	15.0	13.3	
4297	39	DISC	DISC	81.0	
940	120	773.0	19.0	8.0	
973	24	849.9	7.6	4.4	
108	85	42.7	0.8	2.3	
250	110	196.6	5.1	3.2	
157	43	115.3	1.1	2.7	
572	49	568.9	7.0	0.9	
2285	25	2285.0	25.0	13.4	
178	74	77.4	1.3	4.1	
171	63	82.2	1.4	4.3	
218	25	198.0	2.0	1.4	
240	39	191.2	2.4	2.3	
949	23	949.0	23.0	0.3	
127	64	48.8	0.6	3.9	
1980	41	1980.0	41.0	18.4	
716	37	745.0	10.0	0.8	
1900	27	1900.0	27.0	0.0	
211	40	192.9	3.4	1.1	
2464	27	2464.0	27.0	6.2	
150	100	126.7	4.9	0.2	Rim
613	52	370.8	9.4	8.7	Core
154	59	110.6	1.5	1.3	
250	110	58.3	2.2	7.9	
100	100	75.8	1.9	0.8	
204	88	110.0	3.7	3.7	Rim
630	100	344.0	12.0	10.2	Core
350	110	81.9	1.6	12.3	
873	64	873.0	64.0	3.9	
769	76	496.0	22.0	9.3	Rim
2158	48	2158.0	48.0	27.8	Core

Table 3

207/206					Rim/C ore
Age (Ma)	2 σ error	Best age (Ma)	2 σ error	% Discordance*	
1430	41	1430.0	41.0	10.9	Rim
759	39	741.8	7.8	0.6	
80	150	121.0	5.3	3.3	
2340	25	DISC	DISC	59.9	
2593	17	2593.0	17.0	4.3	
1316	41	1316.0	41.0	15.7	Core
1903	60	1903.0	60.0	25.3	
168	38	103.5	1.3	2.5	
931	24	931.0	24.0	4.6	
759	85	753.0	30.0	0.7	
1490	81	1490.0	81.0	24.4	Rim
222	89	69.3	1.5	5.8	
340	130	58.1	1.7	13.5	
1718	16	1718.0	16.0	6.5	
483	32	464.5	4.0	0.6	
393	98	112.5	1.7	12.4	Core
692	53	440.1	7.4	9.3	
206	67	78.6	1.0	5.0	
80	130	125.5	8.1	4.0	
634	65	546.0	14.0	3.2	
400	190	DISC	DISC	5.9	Rim
610	90	474.0	21.0	4.4	
1052	36	1052.0	36.0	13.3	
380	59	304.4	9.7	2.9	
50	260	35.1	2.3	6.0	
1300	100	DISC	DISC	40.5	Core
1051	58	1051.0	58.0	3.3	
2509	45	2509.0	45.0	7.0	
157	73	94.0	1.4	2.1	
144	48	37.0	0.6	4.1	
170	280	72.1	5.6	5.1	Rim
220	170	86.3	3.4	6.5	
117	50	107.1	1.7	0.7	
622	25	605.1	7.1	0.1	
669	53	636.0	15.0	0.5	
255	63	215.9	6.1	1.5	Core
1117	19	1117.0	19.0	2.2	
138	71	15.9	0.4	4.3	
243	51	50.9	0.9	6.9	
2145	20	2145.0	20.0	2.8	
2675	19	2675.0	19.0	17.3	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
289	78	195.2	3.5	2.7	
2157	45	2157.0	45.0	28.1	
159	56	115.6	2.2	0.7	
376	53	229.5	5.1	4.7	
891	39	DISC	DISC	18.2	
857	25	786.3	8.8	2.0	
304	53	146.5	3.0	6.6	
250	130	58.4	1.4	7.6	
553	22	520.6	4.6	1.1	
180	130	78.2	2.8	2.4	
814	96	791.0	41.0	0.8	
148	62	45.0	0.9	3.5	
797	44	805.5	9.7	0.2	
832	48	832.0	14.0	2.7	
887	24	689.0	12.0	6.3	
162	49	106.2	2.1	1.7	
165	79	91.2	1.8	2.8	
189	77	59.4	1.4	5.0	
30	140	17.5	0.5	2.3	
380	160	DISC	DISC	16.1	
710	69	DISC	DISC	25.9	
30	110	47.1	1.0	2.2	
547	38	552.8	7.5	0.1	Rim
2109	77	2109.0	77.0	8.9	Core
436	32	497.7	6.8	2.0	
460	48	498.0	11.0	1.0	
524	38	511.5	5.1	0.6	
40	170	81.5	2.3	4.0	
2034	26	2034.0	26.0	3.6	Rim
2618	18	2618.0	18.0	4.8	Core
145	74	65.5	1.5	3.2	
718	38	644.0	11.0	2.7	
163	71	117.5	1.5	1.5	
454	66	490.0	13.0	0.8	
130	100	17.0	0.4	3.5	
724	59	709.4	8.8	0.2	
55	65	53.4	0.7	2.1	
537	54	521.0	5.0	0.6	
914	80	914.0	80.0	3.3	
140	170	80.8	2.0	0.0	
690	130	DISC	DISC	27.7	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
80	110	86.8	1.7	0.1	Rim Core
330	66	273.7	4.5	2.3	
350	150	34.1	0.9	13.9	
1811	50	DISC	DISC	54.5	
1695	20	1695.0	20.0	0.6	
108	80	76.9	1.4	0.5	
1390	31	DISC	DISC	16.7	
1477	38	1477.0	38.0	11.9	
250	110	49.1	1.1	7.9	
275	33	199.8	1.7	1.5	
200	180	86.8	2.7	4.0	Rim Core
420	130	DISC	DISC	15.3	
1016	27	1016.0	27.0	6.2	
1543	22	DISC	DISC	41.3	
323	34	251.8	2.0	3.8	
546	72	556.7	7.6	1.3	
906	19	827.6	8.3	3.5	
572	65	476.0	18.0	4.0	
1265	26	1265.0	26.0	7.7	
200	110	72.9	1.5	5.9	
103	54	83.3	1.3	0.4	Rim Core
64	80	106.2	1.6	2.5	
1047	29	1047.0	29.0	5.2	
94	21	78.5	0.5	0.1	
1105	17	1105.0	17.0	0.1	
907	33	907.0	33.0	0.7	
620	170	DISC	DISC	20.3	
62	61	16.9	0.3	0.1	
1576	16	DISC	DISC	32.4	
179	77	199.2	2.5	1.0	
608	22	623.7	5.2	0.1	Rim Core
1040	36	774.0	16.0	8.3	
916	26	916.0	26.0	4.1	
289	64	275.5	4.2	0.3	
866	55	848.0	16.0	0.6	
1119	22	DISC	DISC	17.1	
210	180	50.1	1.8	9.1	
1066	73	1066.0	73.0	16.5	
40	120	104.7	2.2	3.7	
1563	19	1563.0	19.0	17.3	
2511	12	2511.0	12.0	3.5	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
90	110	49.6	1.1	0.8	Rim Core
150	150	74.6	2.2	3.9	
1012	48	1012.0	48.0	0.9	
95	84	104.1	1.6	0.4	
170	120	55.5	1.3	4.8	
781	28	789.4	6.3	0.1	
1135	26	774.0	23.0	10.9	
110	110	48.0	1.0	0.4	
1985	22	1985.0	22.0	0.3	
1864	15	1864.0	15.0	1.4	
190	180	113.0	3.8	3.3	
240	44	191.2	2.8	2.2	
60	120	126.4	2.9	4.0	
220	150	47.5	1.6	5.4	
1260	28	1260.0	28.0	11.0	
168	63	160.9	3.1	0.8	
880	690	DISC	DISC	63.4	
140	90	108.1	1.7	0.8	
236	96	59.0	1.2	7.4	
208	66	147.2	4.4	3.0	
605	44	593.3	7.1	0.3	
147	85	112.3	2.9	1.4	
526	25	481.9	5.3	1.6	
210	130	45.0	1.0	6.8	
187	80	146.4	3.5	0.8	
158	72	84.9	1.8	3.4	
140	140	86.0	2.9	0.7	
144	95	51.4	1.2	3.6	
57	95	55.7	1.2	2.6	
486	25	457.7	6.2	1.5	
578	54	606.6	8.9	0.8	
1064	32	1064.0	32.0	2.9	
2374	32	2374.0	32.0	6.1	
610	110	504.0	14.0	2.9	
3243	15	3243.0	15.0	5.9	
123	65	107.8	2.4	0.6	
210	150	44.7	1.3	6.7	
50	120	68.5	2.5	4.6	
1207	28	1207.0	28.0	6.8	
120	120	30.7	0.8	1.9	
74	98	84.0	1.9	0.8	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
240	61	106.5	1.5	5.6	Rim Core
266	97	92.0	2.6	6.9	
260	150	111.8	6.2	5.7	
90	140	47.8	1.2	0.2	
811	45	747.0	11.0	2.1	
101	44	101.1	2.0	1.2	
64	74	75.1	1.3	1.9	
40	110	45.3	1.0	2.3	
170	140	62.6	2.3	3.2	
843	66	790.0	19.0	1.7	
812	61	812.0	18.0	0.9	
1153	20	1153.0	20.0	5.1	
218	73	DISC	DISC	101.9	
119	50	110.0	1.6	0.9	
1137	39	1137.0	39.0	2.5	
273	41	227.4	3.3	1.3	
140	110	106.7	2.7	0.1	
170	160	104.6	3.7	2.5	
357	95	280.2	7.5	2.7	Rim Core
103	85	16.5	0.4	1.8	
116	91	73.4	2.8	0.1	
465	80	490.0	15.0	1.7	
780	51	761.0	18.0	0.4	
1057	30	1057.0	30.0	3.5	
1172	27	1172.0	27.0	2.7	
70	230	61.5	4.1	2.2	
1058	38	1058.0	38.0	4.1	
630	110	547.0	16.0	3.2	
473	64	444.0	13.0	0.5	
555	31	556.1	8.2	0.9	
255	92	77.3	1.6	7.2	
289	84	51.4	1.1	10.3	
514	34	DISC	DISC	105.7	
139	61	107.1	2.9	0.3	
320	260	DISC	DISC	16.3	
200	110	114.9	3.9	3.5	
213	77	160.0	2.9	1.7	
535	58	494.6	7.1	0.5	
240	170	123.3	4.3	5.2	
820	100	811.0	33.0	0.5	
99	87	49.7	0.8	1.4	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
863	21	843.0	11.0	0.4	
80	120	55.2	1.1	1.1	
50	100	49.8	0.9	1.3	
980	23	980.0	23.0	5.9	
2240	27	2240.0	27.0	9.7	
175	80	162.2	2.3	0.3	
274	94	295.4	5.0	0.5	Rim
1375	64	DISC	DISC	22.3	Core
2528	15	2528.0	15.0	2.9	
896	58	DISC	DISC	16.7	
727	33	768.0	5.1	1.5	
912	70	728.0	16.0	5.8	Rim
1582	18	1582.0	18.0	8.5	Core
147	61	92.8	1.2	1.4	
927	28	668.2	9.1	8.4	
1628	21	1628.0	21.0	11.9	
988	27	988.0	27.0	2.2	
220	190	129.0	4.0	3.7	
1067	18	1067.0	18.0	1.8	
270	190	61.1	1.3	12.6	
752	91	DISC	DISC	22.9	
161	60	113.1	1.4	1.5	
160	200	102.0	3.3	2.9	Rim
566	61	389.0	11.0	6.0	Core
131	70	46.7	0.8	2.9	
2443	15	2443.0	15.0	6.1	
1726	24	1726.0	24.0	0.2	
920	20	920.0	20.0	0.7	
125	78	52.9	0.7	2.0	
43	88	48.8	0.8	1.9	
203	84	62.6	0.8	5.0	
164	58	103.9	1.3	1.5	
1713	17	1713.0	17.0	29.8	
470	140	DISC	DISC	21.6	
916	26	916.0	26.0	0.5	
210	55	191.2	1.9	0.1	
1727	13	1727.0	13.0	9.4	
182	98	121.7	2.0	2.4	
129	96	44.8	0.7	2.1	
2418	14	2418.0	14.0	2.9	
161	79	109.6	1.7	1.3	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
10	190	71.9	2.0	3.9	
634	50	632.0	12.0	0.2	
503	23	434.9	4.2	1.7	
360	120	54.1	1.0	13.2	
135	82	48.9	0.6	2.5	
214	74	184.8	5.8	0.3	Rim
467	46	443.7	4.4	0.1	Core
553	29	505.3	4.6	0.9	
588	30	580.2	5.7	0.1	
168	38	105.1	0.9	1.5	
430	35	428.7	7.6	1.0	
2074	25	2074.0	25.0	21.2	
492	30	473.0	4.6	0.1	
299	74	219.7	3.3	3.1	Rim
471	70	378.0	7.3	3.1	Core
88	41	46.3	1.3	0.6	
132	79	49.6	0.6	2.4	
649	49	643.0	13.0	0.2	
2528	10	2528.0	10.0	8.9	
110	190	56.9	1.5	5.0	
541	69	544.0	21.0	0.4	Rim
787	52	748.0	16.0	0.9	Core
157	71	58.2	1.5	3.6	
320	150	59.7	1.5	10.9	
2151	18	2151.0	18.0	4.9	
223	58	45.5	0.5	6.9	
240	100	86.4	1.6	6.8	
200	210	DISC	DISC	2.0	Rim
1209	31	825.0	17.0	11.9	Core
50	250	69.6	2.5	2.0	
562	41	436.4	8.0	4.5	
144	61	165.0	1.9	0.9	
2458	10	2458.0	10.0	0.9	
2193	33	2193.0	33.0	29.0	
166	62	34.2	0.6	4.8	
2495	47	2495.0	47.0	17.8	
169	68	51.5	1.9	3.7	
437	90	213.0	12.0	8.6	Rim
1015	35	1015.0	35.0	1.1	Core
1141	37	1141.0	37.0	1.7	Core
131	36	114.8	0.9	0.2	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
2483	8.9	2483.3	8.9	5.8	Rim Core
226	32	204.4	1.8	0.8	
664	59	603.9	7.9	2.3	
88	82	40.1	0.8	0.7	
1890	40	1890.0	40.0	0.3	
490	300	DISC	DISC	24.1	
1803	15	1803.0	15.0	15.1	
590	100	DISC	DISC	21.3	
540	100	334.0	12.0	7.7	
720	35	678.2	9.0	1.4	
143	73	68.6	1.0	2.8	
519	20	535.3	3.1	0.3	
110	110	52.5	0.7	1.7	
-30	160	50.8	1.2	4.3	
139	72	110.9	1.7	1.2	
1032	29	1032.0	29.0	2.7	
1719	19	DISC	DISC	34.5	
152	61	135.5	4.0	0.5	
175	41	113.1	0.9	2.7	
144	73	123.3	2.8	1.1	
175	78	37.2	0.7	5.3	
563	20	583.9	4.5	0.2	Rim Core
937	61	814.0	30.0	4.1	
651	49	393.9	4.6	10.0	
137	56	96.3	1.0	2.2	
1037	98	DISC	DISC	35.6	
2436	16	2436.0	16.0	8.2	
644	22	638.0	4.4	0.5	
190	170	21.0	0.8	6.2	
250	60	36.4	0.3	9.5	
1260	100	DISC	DISC	44.8	
250	130	103.1	2.2	5.1	Rim Core
756	41	691.0	16.0	2.3	
927	29	927.0	29.0	5.2	
125	36	41.3	0.7	3.0	
200	130	63.3	1.3	5.1	
190	83	110.6	1.4	2.7	
1308	30	DISC	DISC	29.1	
205	56	108.0	1.3	4.5	
2514	20	2514.0	20.0	0.7	
971	47	971.0	47.0	2.1	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
678	34	541.4	8.6	5.2	Rim Core
60	180	101.0	3.4	4.2	
260	110	213.7	8.1	1.5	
2566	39	2566.0	39.0	7.0	
296	87	116.0	3.5	7.6	
3253	35	3253.0	35.0	23.8	
208	59	211.9	4.6	0.2	
1142	30	1142.0	30.0	1.6	
523	91	511.1	8.8	0.6	
2490	14	2490.0	14.0	6.2	
700	120	DISC	DISC	25.5	
1014	47	1014.0	47.0	3.4	
1222	22	1222.0	22.0	5.6	
310	160	40.5	1.4	12.5	
185	75	104.5	1.8	2.7	
1156	30	1156.0	30.0	12.4	
105	63	126.4	1.8	1.1	
140	100	59.4	1.3	3.1	
602	72	523.0	17.0	3.1	
585	40	513.0	10.0	2.8	
992	43	992.0	43.0	2.6	
419	99	249.0	17.0	6.0	
160	170	15.4	0.6	8.7	
1070	190	DISC	DISC	41.7	
747	59	782.0	17.0	0.9	
212	39	195.6	2.5	0.8	
290	120	94.7	5.2	8.2	
371	58	201.7	5.8	6.7	
614	86	516.0	14.0	3.9	Rim
2448	19	2448.0	19.0	16.9	Core
130	100	59.6	1.2	3.2	Rim Core
170	100	105.5	2.0	3.2	
1387	17	1387.0	17.0	1.3	
-20	140	59.9	1.9	6.0	
1657	35	1657.0	35.0	1.2	
777	53	784.9	9.5	0.4	
170	140	83.6	1.7	2.6	
722	76	532.0	16.0	6.5	
1214	22	1214.0	22.0	9.0	
128	91	75.9	1.3	2.1	
177	55	104.6	1.4	2.8	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
82	56	106.0	1.8	1.9	
110	230	63.0	2.5	4.5	
140	160	59.4	1.8	2.8	
157	79	110.5	1.5	1.4	
988	29	988.0	29.0	1.5	
205	66	163.2	2.0	1.4	
359	56	80.6	1.0	11.6	
982	17	982.0	17.0	1.5	
1862	17	1862.0	17.0	14.5	
90	170	64.7	1.9	3.3	
434	64	243.1	4.5	8.3	Rim
766	41	433.5	5.4	11.7	Core
100	110	52.6	1.1	1.9	
260	74	103.2	2.7	5.6	
1454	37	DISC	DISC	26.4	
83	40	118.0	1.2	1.4	
418	98	450.0	22.0	1.6	
170	100	99.0	3.0	3.1	
660	52	653.0	12.0	0.3	
190	140	46.5	1.3	5.7	
2739	17	2739.0	17.0	1.2	
982	46	804.0	22.0	6.0	
751	71	789.0	12.0	0.4	
142	66	47.2	0.7	3.8	
217	66	151.1	2.3	2.8	
648	72	538.6	9.3	4.2	Rim
614	31	648.6	5.7	1.2	Core
1530	63	1530.0	63.0	21.8	
160	200	112.8	4.5	1.9	Rim
436	83	212.3	5.6	10.0	Core
280	38	241.7	2.9	1.8	
2466	16	2466.0	16.0	1.6	
220	160	86.0	2.7	6.9	
142	70	105.3	1.7	1.1	
1112	40	1112.0	40.0	7.6	
772	44	772.0	17.0	3.0	
256	79	46.3	0.6	9.3	
300	200	23.2	1.6	8.7	
952	36	952.0	36.0	1.4	Rim
1182	51	1182.0	51.0	6.5	Core
623	38	689.0	11.0	2.1	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
631	89	552.0	12.0	3.5	
0	140	45.8	1.2	2.9	
459	53	662.0	16.0	7.5	
160	120	100.0	3.9	1.6	
957	90	822.0	17.0	5.0	
535	85	284.0	9.5	9.0	
250	130	83.4	2.7	7.0	
100	110	57.5	2.0	0.5	
80	110	54.8	1.6	0.5	
645	92	504.0	17.0	6.3	
983	32	983.0	32.0	9.7	
507	65	678.0	20.0	5.8	
145	64	60.5	0.8	3.3	
110	130	189.0	11.0	3.3	Rim
691	54	795.0	26.0	3.2	Core
430	150	216.0	16.0	8.9	Rim
654	56	602.0	14.0	2.0	Core
10	120	50.8	2.0	4.3	
163	74	86.4	2.7	2.0	
100	210	93.2	3.9	4.9	
150	140	53.7	1.4	2.9	
202	54	110.4	1.2	3.7	
580	75	DISC	DISC	21.0	
1857	21	1857.0	21.0	2.9	
210	160	82.2	3.0	4.4	
195	36	163.1	2.3	1.2	
1119	36	1119.0	36.0	12.0	
515	41	631.4	9.5	3.2	
850	30	850.0	30.0	1.3	
230	150	57.7	2.8	6.2	
884	28	884.0	28.0	7.9	
80	120	51.4	1.2	0.2	
280	100	110.4	1.8	7.5	
100	70	36.4	0.5	2.2	
459	60	468.7	5.1	0.0	
12	52	157.7	3.3	7.9	
510	270	DISC	DISC	22.1	
553	49	604.2	5.8	1.5	
706	33	547.4	6.0	5.3	
467	71	109.7	1.8	14.6	
255	73	70.1	1.1	7.6	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
210	31	192.9	1.6	1.0	
548	36	508.9	3.7	1.8	
90	67	49.7	0.6	0.9	
128	66	99.8	1.1	0.7	
1134	44	1134.0	44.0	17.6	
770	190	DISC	DISC	28.6	
644	40	645.7	6.6	0.3	
910	130	DISC	DISC	31.3	
787	31	536.1	5.0	11.2	
694	35	641.5	5.0	2.0	
200	120	54.8	1.1	6.2	
156	57	117.7	2.3	2.1	
960	23	960.0	23.0	0.4	
696	37	608.2	6.1	3.3	
386	34	386.3	6.1	0.4	
890	43	890.0	43.0	9.6	
1585	21	1585.0	21.0	4.2	
380	180	DISC	DISC	16.5	
108	42	41.2	0.5	3.7	
2467	27	2467.0	27.0	17.2	
858	29	817.0	11.0	1.6	
110	110	18.1	0.4	3.4	
627	28	530.3	7.5	3.5	
112	60	59.2	0.8	2.1	
190	160	51.7	1.3	6.5	
217	57	48.1	0.8	7.4	
303	82	107.7	1.6	8.3	
2382	17	2382.0	17.0	3.7	
1691	16	1691.0	16.0	0.1	
740	51	587.5	8.3	5.1	
482	54	513.7	6.8	1.1	
948	47	948.0	47.0	7.4	
210	110	179.2	3.5	2.1	
180	100	50.8	1.0	5.2	
1140	22	1140.0	22.0	1.4	
176	33	103.7	1.3	2.9	
1715	17	1715.0	17.0	0.9	
156	52	94.0	2.1	2.0	
140	120	75.2	1.4	3.0	
578	55	532.0	10.0	2.0	
933	30	933.0	30.0	7.7	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
1112	18	1112.0	18.0	3.8	
260	170	115.5	4.9	6.3	Rim
731	51	611.0	11.0	4.2	Core
596	34	560.8	7.8	1.5	
460	100	238.0	16.0	8.5	Rim
831	32	741.1	6.0	2.9	Core
2129	13	2129.0	13.0	1.5	
280	140	58.3	1.6	12.5	
833	34	847.5	7.4	0.4	
175	37	113.0	0.8	2.3	
818	34	818.0	13.0	3.9	
119	68	39.6	0.5	2.8	
20	110	80.4	2.2	4.8	
2514	15	2514.0	15.0	0.3	
149	72	112.5	1.9	0.4	
131	77	113.2	1.8	0.0	
875	48	749.0	13.0	4.3	
2571	14	2571.0	14.0	0.1	
160	120	51.7	1.1	4.3	
210	170	74.1	3.1	5.8	
189	59	119.2	1.2	2.6	
430	130	482.9	9.8	1.0	
10	240	60.4	2.0	1.2	
800	23	763.9	5.7	1.3	
658	19	637.4	4.7	0.8	
120	120	117.1	2.3	0.4	
753	29	680.6	7.7	2.1	
220	130	79.5	1.6	6.4	
323	77	36.8	1.0	10.7	
120	66	118.2	1.8	0.1	
971	22	971.0	22.0	10.4	
422	92	DISC	DISC	15.5	
1109	25	793.3	6.8	10.0	
180	110	48.0	0.9	5.3	
640	31	586.3	5.6	2.1	
270	100	80.5	1.6	8.3	
134	31	115.2	0.9	0.6	
95	46	96.1	1.4	0.4	
70	140	49.5	1.1	2.0	
100	100	101.4	2.6	1.0	
1808	36	1808.0	36.0	4.7	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
971	26	971.0	26.0	4.5	Rim Core
202	76	88.6	1.2	4.7	
519	56	412.6	8.4	4.0	
1734	48	1734.0	48.0	17.9	
2470	20	2470.0	20.0	14.5	
88	95	46.2	0.7	0.1	
175	97	109.6	2.9	2.5	
180	110	59.7	1.3	4.3	
141	43	85.8	1.1	1.7	
480	140	DISC	DISC	18.8	
1720	15	1720.0	15.0	24.0	
172	78	52.3	0.7	5.4	
825	50	696.0	23.0	4.3	
780	40	762.3	9.5	0.4	
154	99	106.4	1.8	1.7	
80	150	80.0	1.8	1.6	
108	96	47.6	0.7	2.1	Rim Core
3217	18	3217.0	18.0	1.8	
270	62	179.4	4.9	3.6	
842	54	705.0	14.0	4.9	
220	180	76.7	3.0	6.2	
151	46	110.2	1.6	1.3	
450	100	DISC	DISC	18.7	
629	40	579.0	5.2	1.9	
50	160	57.0	1.3	0.5	
482	54	359.3	4.3	4.6	
121	39	87.8	1.1	2.4	
206	54	97.2	1.2	4.2	
427	34	350.5	5.5	3.1	
505	40	355.5	7.6	5.6	
1876	39	1876.0	39.0	3.7	
1010	37	1010.0	37.0	4.9	
2147	12	2147.0	12.0	10.2	
260	140	56.4	1.4	6.8	
166	76	112.5	1.4	1.9	
128	65	56.5	0.6	2.3	
537	25	514.7	5.0	0.9	
43	84	68.3	1.4	0.9	
248	96	102.6	2.6	6.6	
0	100	25.5	0.5	1.8	
788	36	685.0	11.0	3.4	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
328	99	46.4	0.9	11.7	
1100	39	1100.0	39.0	12.0	
294	27	198.5	3.0	3.9	
1808	31	DISC	DISC	39.5	
222	48	99.0	1.6	4.8	
289	82	104.6	1.9	7.0	
-20	120	56.9	1.5	6.8	
210	190	53.1	2.2	6.5	
236	58	42.3	0.8	6.0	
300	66	42.1	0.9	9.9	
1648	23	1648.0	23.0	8.7	
2291	18	2291.0	18.0	8.5	
152	45	87.1	1.3	2.4	
1870	13	1870.0	13.0	3.2	
490	36	424.9	6.6	2.6	
126	52	41.8	0.7	3.7	
370	150	DISC	DISC	15.6	
174	55	103.9	1.7	3.2	
66	80	57.4	1.2	0.2	
739	42	801.0	13.0	1.5	
893	30	893.0	30.0	0.6	
490	41	499.0	8.3	0.3	
213	68	107.7	1.9	4.1	
170	210	128.8	5.1	3.2	
914	31	823.0	14.0	2.6	
1816	34	1816.0	34.0	14.6	
897	47	646.0	14.0	8.2	
223	58	243.8	3.0	0.6	
2420	28	2420.0	28.0	9.3	
93	79	50.1	1.0	1.4	
276	60	43.5	0.8	9.7	
605	44	614.5	7.2	0.1	
190	120	106.3	3.4	3.5	
160	200	64.1	2.4	5.6	
650	37	647.8	8.4	0.4	
119	27	105.3	1.4	0.6	
2466	17	2466.0	17.0	1.6	
157	85	21.0	0.7	5.0	
93	52	44.3	0.7	1.4	
120	200	85.2	5.2	1.3	
964	28	964.0	28.0	0.6	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
1029	34	1029.0	34.0	17.1	
1143	22	1143.0	22.0	2.0	
189	72	104.1	2.0	2.6	
480	25	455.5	7.9	0.3	
200	160	81.4	2.7	4.5	
79	53	104.8	2.0	1.8	
1886	25	1886.0	25.0	7.2	
1702	18	1702.0	18.0	24.7	
998	29	998.0	29.0	11.9	
928	32	928.0	32.0	2.7	
316	70	37.7	0.7	11.8	
1257	29	1257.0	29.0	4.2	
187	34	202.3	3.1	0.2	
968	22	968.0	22.0	1.4	
97	97	49.7	0.9	1.8	
537	35	357.8	7.2	6.6	
748	56	566.0	15.0	6.8	
190	130	51.6	1.3	5.0	
130	120	48.9	1.1	3.7	
250	130	59.7	1.5	8.3	
761	58	741.0	14.0	1.1	
279	55	267.6	4.5	0.5	
293	74	235.6	5.6	2.3	
137	43	142.9	3.8	1.0	
160	110	32.2	0.7	3.4	
929	26	827.0	12.0	3.3	
86	95	117.8	2.3	2.2	
622	34	554.0	8.7	2.7	
216	80	215.6	5.0	0.5	
336	83	243.9	4.6	4.7	
140	130	37.1	1.0	2.4	
60	170	53.0	1.7	2.4	
2447	13	2447.0	13.0	10.3	
103	64	34.3	0.7	2.9	
1769	23	1769.0	23.0	18.0	
150	91	114.2	4.4	1.5	Rim Core
756	90	688.0	18.0	3.1	
190	150	93.3	5.1	4.2	
250	100	49.0	0.9	8.4	
121	89	64.8	1.6	1.7	
794	70	DISC	DISC	24.7	

Table 3

207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
Age (Ma)	2 σ error				
227	95	79.0	1.8	6.5	Rim
690	93	584.0	32.0	3.5	
1791	41	1791.0	41.0	8.8	Core
102	42	63.8	0.8	1.2	
753	26	763.9	9.7	0.5	
139	86	50.3	1.1	2.3	
330	120	95.2	2.9	10.3	
209	44	107.2	1.3	3.6	
320	140	20.4	0.7	14.0	
564	39	488.0	11.0	2.6	
472	36	482.0	12.0	0.6	
952	90	DISC	DISC	35.6	
198	31	144.2	2.2	1.8	
286	59	106.4	2.0	6.4	
573	46	508.4	7.4	1.9	
110	120	48.9	1.1	0.2	
827	24	733.7	9.4	2.4	
773	48	763.8	9.7	0.0	
803	45	613.0	11.0	6.3	
754	71	613.0	13.0	4.2	
246	88	129.3	2.5	5.1	
185	65	114.8	1.7	2.0	
502	31	415.0	7.5	3.1	
87	54	52.1	0.9	0.6	
502	20	489.6	6.6	0.4	
208	51	157.4	2.8	1.9	
208	76	126.7	1.8	2.7	
2023	28	2023.0	28.0	25.6	
200	58	105.6	1.5	4.0	
983	30	983.0	30.0	4.0	
943	17	943.0	17.0	4.6	
1648	24	1648.0	24.0	1.9	
2266	18	2266.0	18.0	10.1	
140	150	53.5	1.4	4.6	
1274	52	1274.0	52.0	3.9	
1381	27	1381.0	27.0	9.8	
706	49	481.0	16.0	7.1	
89	34	72.0	0.9	0.0	
127	62	34.1	0.5	2.8	
2498	26	2498.0	26.0	4.6	
80	44	100.0	1.2	1.3	

Table 3

207/206					Rim/C ore
Age (Ma)	2 σ error	Best age (Ma)	2 σ error	% Discordance*	
102	50	106.8	1.4	0.8	
123	37	DISC	DISC	97.9	

Table 4

Sample Names	Cross-correlation						
	Tethyan and Greater Himalaya			Lesser Himalaya		Karakoram	
	Age (Ma)	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation
Modern River	0.00	0.390	0.176	0.358	0.147	0.206	0.081
U1456A-11H-6 60-69 cm	0.93	0.918	0.054	0.027	0.031	0.031	0.034
U1456A-26F-3 50-58 cm	1.32	0.689	0.078	0.196	0.068	0.052	0.043
U1456A-51F-3 100-110 cm	1.56	0.540	0.097	0.274	0.081	0.114	0.064
U1456A-61F-3 40-50 cm	1.92	0.646	0.072	0.069	0.054	0.200	0.068
U1456A-70F-2 10-16 cm	3.02	0.635	0.123	0.055	0.053	0.262	0.109
U1457C-31R-1 94-100 cm	3.17	0.464	0.150	0.035	0.039	0.460	0.152
U1457C-33R-3 10-17 cm	3.39	0.585	0.080	0.053	0.050	0.295	0.088
U1456C-45X-3 45-51 cm	3.57	0.421	0.160	0.035	0.038	0.499	0.174
U1456D-5R-1 12-20 cm	5.72	0.480	0.117	0.030	0.032	0.425	0.122
U1457C-41R-2 20-26 cm	5.77	0.576	0.085	0.037	0.030	0.301	0.096
U1457C-42R-1 80-88 cm	5.82	0.660	0.067	0.032	0.031	0.207	0.092
U1457C-43R-1 55-63 cm	5.87	0.440	0.156	0.052	0.059	0.475	0.164
U1456D-12R-1 30-36 cm	7	0.118	0.130	0.018	0.023	0.844	0.141
U1456D-13R-1 30-38 cm	7.07	0.226	0.180	0.018	0.020	0.728	0.200
U1456D-15R-1 55-61 cm	7.27	0.365	0.109	0.035	0.030	0.512	0.116
U1456D-19R-2 20-26 cm	7.66	0.192	0.149	0.026	0.028	0.759	0.168
U1456D-20R-1 95-103 cm	7.72	0.190	0.144	0.017	0.019	0.769	0.163
U1457C-51R-4 80-88 cm	7.77	0.262	0.110	0.028	0.027	0.617	0.118
U1456D-22R-1 73-83 cm	7.84	0.395	0.097	0.034	0.029	0.508	0.113
U1457C-61R-1 8-18 cm	7.98	0.119	0.129	0.017	0.019	0.842	0.139
U1456D-26R-2 37-43 cm	8.08	0.279	0.161	0.025	0.030	0.668	0.179
U1456D-27R-2 100-106 cm	8.15	0.196	0.168	0.023	0.026	0.752	0.184
U1456D-28R-1 40-46 cm	8.2	0.181	0.125	0.024	0.028	0.760	0.146
U1456D-29R-2 24-34 cm	8.27	0.313	0.119	0.028	0.025	0.590	0.131
U1456E-19R-3 10-20 cm	15.57	0.337	0.109	0.029	0.024	0.577	0.116
TH10-8	6.6 ka	0.336	0.181	0.119	0.103	0.526	0.134
KB40	15 ka	0.295	0.204	0.051	0.050	0.554	0.173

Sample Names	Kuiper V value						
	Tethyan and Greater Himalaya			Lesser Himalaya		Karakoram	
	Age (Ma)	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation
Modern River	0.00	0.695	0.053	0.103	0.044	0.098	0.064
U1456A-11H-6 60-69 cm	0.93	0.911	0.039	0.028	0.026	0.020	0.021
U1456A-26F-3 50-58 cm	1.32	0.806	0.052	0.030	0.030	0.097	0.060
U1456A-51F-3 100-110 cm	1.56	0.770	0.054	0.041	0.041	0.110	0.064
U1456A-61F-3 40-50 cm	1.92	0.683	0.072	0.027	0.026	0.202	0.091
U1456A-70F-2 10-16 cm	3.02	0.624	0.091	0.029	0.033	0.273	0.096
U1457C-31R-1 94-100 cm	3.17	0.635	0.122	0.024	0.027	0.283	0.127
U1457C-33R-3 10-17 cm	3.39	0.604	0.073	0.034	0.036	0.292	0.078

Table 4

U1456C-45X-3 45-51 cm	3.57	0.500	0.097	0.034	0.035	0.396	0.093
U1456D-5R-1 12-20 cm	5.72	0.543	0.079	0.027	0.027	0.343	0.090
U1457C-41R-2 20-26 cm	5.77	0.619	0.086	0.032	0.030	0.258	0.106
U1457C-42R-1 80-88 cm	5.82	0.694	0.078	0.022	0.023	0.181	0.117
U1457C-43R-1 55-63 cm	5.87	0.536	0.134	0.031	0.031	0.380	0.133
U1456D-12R-1 30-36 cm	7.00	0.230	0.069	0.037	0.040	0.662	0.076
U1456D-13R-1 30-38 cm	7.07	0.397	0.099	0.024	0.023	0.503	0.111
U1456D-15R-1 55-61 cm	7.27	0.384	0.080	0.035	0.033	0.490	0.108
U1456D-19R-2 20-26 cm	7.66	0.440	0.084	0.033	0.032	0.446	0.092
U1456D-20R-1 95-103 cm	7.72	0.366	0.085	0.028	0.026	0.535	0.102
U1457C-51R-4 80-88 cm	7.77	0.358	0.065	0.036	0.030	0.510	0.098
U1456D-22R-1 73-83 cm	7.84	0.464	0.068	0.032	0.032	0.400	0.108
U1457C-61R-1 8-18 cm	7.98	0.281	0.094	0.027	0.024	0.626	0.083
U1456D-26R-2 37-43 cm	8.08	0.364	0.077	0.033	0.034	0.539	0.095
U1456D-27R-2 100-106 cm	8.15	0.320	0.082	0.033	0.031	0.559	0.100
U1456D-28R-1 40-46 cm	8.20	0.317	0.081	0.031	0.032	0.564	0.099
U1456D-29R-2 24-34 cm	8.27	0.331	0.088	0.028	0.028	0.543	0.126
U1456E-19R-3 10-20 cm	15.57	0.356	0.092	0.030	0.028	0.549	0.094
TH10-8	6.6 ka	0.493	0.086	0.057	0.058	0.393	0.070
KB40	15 ka	0.437	0.087	0.023	0.024	0.455	0.116

Sample Names	KS D value						
	Tethyan and Greater Himalaya			Lesser Himalaya		Karakoram	
	Age (Ma)	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation
Modern River	0.00	0.727	0.082	0.062	0.035	0.094	0.073
U1456A-11H-6 60-69 cm	0.93	0.874	0.058	0.021	0.021	0.038	0.036
U1456A-26F-3 50-58 cm	1.32	0.779	0.065	0.045	0.051	0.083	0.058
U1456A-51F-3 100-110 cm	1.56	0.758	0.062	0.046	0.041	0.096	0.071
U1456A-61F-3 40-50 cm	1.92	0.651	0.067	0.050	0.046	0.161	0.087
U1456A-70F-2 10-16 cm	3.02	0.603	0.072	0.047	0.040	0.207	0.104
U1457C-31R-1 94-100 cm	3.17	0.543	0.064	0.058	0.045	0.225	0.108
U1457C-33R-3 10-17 cm	3.39	0.566	0.068	0.052	0.051	0.246	0.099
U1456C-45X-3 45-51 cm	3.57	0.433	0.083	0.072	0.060	0.357	0.097
U1456D-5R-1 12-20 cm	5.72	0.489	0.067	0.049	0.044	0.309	0.102
U1457C-41R-2 20-26 cm	5.77	0.536	0.061	0.038	0.035	0.252	0.122
U1457C-42R-1 80-88 cm	5.82	0.584	0.065	0.036	0.034	0.208	0.125
U1457C-43R-1 55-63 cm	5.87	0.502	0.100	0.081	0.078	0.293	0.097
U1456D-12R-1 30-36 cm	7.00	0.249	0.090	0.080	0.064	0.565	0.090
U1456D-13R-1 30-38 cm	7.07	0.363	0.074	0.058	0.051	0.432	0.114
U1456D-15R-1 55-61 cm	7.27	0.381	0.071	0.061	0.047	0.387	0.141
U1456D-19R-2 20-26 cm	7.66	0.442	0.097	0.076	0.071	0.352	0.098
U1456D-20R-1 95-103 cm	7.72	0.340	0.072	0.042	0.035	0.509	0.107
U1457C-51R-4 80-88 cm	7.77	0.361	0.075	0.072	0.059	0.423	0.117
U1456D-22R-1 73-83 cm	7.84	0.466	0.067	0.057	0.051	0.335	0.107
U1457C-61R-1 8-18 cm	7.98	0.300	0.087	0.077	0.069	0.504	0.085

Table 4

U1456D-26R-2 37-43 cm	8.08	0.367	0.061	0.045	0.040	0.479	0.091
U1456D-27R-2 100-106 cm	8.15	0.336	0.082	0.068	0.055	0.460	0.098
U1456D-28R-1 40-46 cm	8.20	0.327	0.078	0.061	0.052	0.461	0.128
U1456D-29R-2 24-34 cm	8.27	0.315	0.066	0.051	0.041	0.454	0.117
U1456E-19R-3 10-20 cm	15.57	0.331	0.083	0.074	0.063	0.466	0.102
TH10-8	6.6 ka	0.522	0.103	0.103	0.089	0.293	0.085
KB40	15 ka	0.412	0.074	0.049	0.047	0.396	0.115

Table 4

Ladakh and Kohistan		Nanga Parbat	
Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation
0.024	0.018	0.021	0.016
0.013	0.013	0.011	0.011
0.039	0.032	0.025	0.022
0.041	0.032	0.031	0.023
0.052	0.041	0.033	0.025
0.017	0.015	0.031	0.024
0.020	0.018	0.021	0.022
0.053	0.043	0.014	0.014
0.025	0.026	0.020	0.020
0.039	0.044	0.025	0.024
0.047	0.037	0.040	0.030
0.074	0.060	0.026	0.023
0.016	0.015	0.017	0.017
0.013	0.017	0.007	0.007
0.018	0.019	0.010	0.012
0.076	0.056	0.013	0.012
0.015	0.018	0.007	0.008
0.016	0.020	0.008	0.008
0.081	0.053	0.012	0.010
0.045	0.040	0.018	0.017
0.013	0.011	0.010	0.009
0.019	0.021	0.009	0.010
0.021	0.025	0.007	0.008
0.023	0.025	0.012	0.012
0.048	0.043	0.021	0.020
0.037	0.037	0.020	0.020
0.011	0.010	0.008	0.007
0.090	0.046	0.010	0.008

Ladakh and Kohistan		Nanga Parbat	
Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation
0.067	0.046	0.037	0.031
0.017	0.018	0.023	0.027
0.035	0.036	0.032	0.030
0.046	0.042	0.032	0.030
0.060	0.049	0.028	0.029
0.045	0.044	0.030	0.033
0.028	0.026	0.029	0.031
0.042	0.038	0.028	0.030

Table 4

0.032	0.032	0.038	0.040
0.051	0.051	0.036	0.035
0.060	0.053	0.030	0.031
0.082	0.071	0.021	0.023
0.023	0.023	0.030	0.028
0.038	0.041	0.034	0.034
0.044	0.041	0.032	0.033
0.060	0.054	0.032	0.032
0.047	0.044	0.033	0.031
0.045	0.037	0.026	0.025
0.064	0.053	0.031	0.033
0.072	0.063	0.032	0.035
0.036	0.035	0.029	0.033
0.034	0.034	0.030	0.033
0.051	0.041	0.037	0.034
0.052	0.050	0.036	0.033
0.065	0.057	0.032	0.032
0.033	0.035	0.032	0.035
0.029	0.033	0.028	0.033
0.061	0.063	0.025	0.028

Ladakh and Kohistan		Nanga Parbat	
Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation
0.070	0.055	0.047	0.037
0.035	0.032	0.032	0.033
0.048	0.044	0.044	0.036
0.052	0.045	0.049	0.039
0.086	0.063	0.052	0.041
0.088	0.073	0.055	0.050
0.093	0.082	0.081	0.062
0.088	0.074	0.049	0.043
0.074	0.065	0.064	0.055
0.087	0.075	0.065	0.054
0.106	0.092	0.068	0.068
0.110	0.090	0.062	0.052
0.065	0.064	0.058	0.053
0.070	0.064	0.037	0.034
0.083	0.076	0.064	0.051
0.120	0.104	0.051	0.042
0.075	0.059	0.055	0.047
0.059	0.051	0.050	0.048
0.102	0.083	0.042	0.033
0.099	0.076	0.044	0.035
0.068	0.054	0.052	0.044

Table 4

0.060	0.055	0.050	0.041
0.088	0.070	0.048	0.039
0.099	0.090	0.052	0.041
0.119	0.082	0.060	0.049
0.068	0.067	0.062	0.057
0.047	0.042	0.034	0.035
0.091	0.077	0.052	0.042

Table 4

Sample Names	Cross-correlation										
	Tethyan and Greater Himalaya			Lesser Himalaya		Karakoram		Ladakh and Kohistan		Nanga Parbat	
	Age (Ma)	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation
Modern River	0.00	0.390	0.176	0.358	0.147	0.206	0.081	0.024	0.018	0.021	0.016
U1456A-11H-6 60-69 cm	0.93	0.918	0.054	0.027	0.031	0.031	0.034	0.013	0.013	0.011	0.011
U1456A-26F-3 50-58 cm	1.32	0.689	0.078	0.196	0.068	0.052	0.043	0.039	0.032	0.025	0.022
U1456A-51F-3 100-110 cm	1.56	0.540	0.097	0.274	0.081	0.114	0.064	0.041	0.032	0.031	0.023
U1456A-61F-3 40-50 cm	1.92	0.646	0.072	0.069	0.054	0.200	0.068	0.052	0.041	0.033	0.025
U1456A-70F-2 10-16 cm	3.02	0.635	0.123	0.055	0.053	0.262	0.109	0.017	0.015	0.031	0.024
U1457C-31R-1 94-100 cm	3.17	0.464	0.150	0.035	0.039	0.460	0.152	0.020	0.018	0.021	0.022
U1457C-33R-3 10-17 cm	3.39	0.585	0.080	0.053	0.050	0.295	0.088	0.053	0.043	0.014	0.014
U1456C-45X-3 45-51 cm	3.57	0.421	0.160	0.035	0.038	0.499	0.174	0.025	0.026	0.020	0.020
U1456D-5R-1 12-20 cm	5.72	0.480	0.117	0.030	0.032	0.425	0.122	0.039	0.044	0.025	0.024
U1457C-41R-2 20-26 cm	5.77	0.576	0.085	0.037	0.030	0.301	0.096	0.047	0.037	0.040	0.030
U1457C-42R-1 80-88 cm	5.82	0.660	0.067	0.032	0.031	0.207	0.092	0.074	0.060	0.026	0.023
U1457C-43R-1 55-63 cm	5.87	0.440	0.156	0.052	0.059	0.475	0.164	0.016	0.015	0.017	0.017
U1456D-12R-1 30-36 cm	7	0.118	0.130	0.018	0.023	0.844	0.141	0.013	0.017	0.007	0.007
U1456D-13R-1 30-38 cm	7.07	0.226	0.180	0.018	0.020	0.728	0.200	0.018	0.019	0.010	0.012
U1456D-15R-1 55-61 cm	7.27	0.365	0.109	0.035	0.030	0.512	0.116	0.076	0.056	0.013	0.012
U1456D-19R-2 20-26 cm	7.66	0.192	0.149	0.026	0.028	0.759	0.168	0.015	0.018	0.007	0.008
U1456D-20R-1 95-103 cm	7.72	0.190	0.144	0.017	0.019	0.769	0.163	0.016	0.020	0.008	0.008
U1457C-51R-4 80-88 cm	7.77	0.262	0.110	0.028	0.027	0.617	0.118	0.081	0.053	0.012	0.010
U1456D-22R-1 73-83 cm	7.84	0.395	0.097	0.034	0.029	0.508	0.113	0.045	0.040	0.018	0.017
U1457C-61R-1 8-18 cm	7.98	0.119	0.129	0.017	0.019	0.842	0.139	0.013	0.011	0.010	0.009
U1456D-26R-2 37-43 cm	8.08	0.279	0.161	0.025	0.030	0.668	0.179	0.019	0.021	0.009	0.010
U1456D-27R-2 100-106 cm	8.15	0.196	0.168	0.023	0.026	0.752	0.184	0.021	0.025	0.007	0.008
U1456D-28R-1 40-46 cm	8.2	0.181	0.125	0.024	0.028	0.760	0.146	0.023	0.025	0.012	0.012
U1456D-29R-2 24-34 cm	8.27	0.313	0.119	0.028	0.025	0.590	0.131	0.048	0.043	0.021	0.020
U1456E-19R-3 10-20 cm	15.57	0.337	0.109	0.029	0.024	0.577	0.116	0.037	0.037	0.020	0.020
TH10-8	6.6 ka	0.336	0.181	0.119	0.103	0.526	0.134	0.011	0.010	0.008	0.007
KB40	15 ka	0.295	0.204	0.051	0.050	0.554	0.173	0.090	0.046	0.010	0.008

Table 4

Sample Names	Kuiper V value										
	Tethyan and Greater Himalaya			Lesser Himalaya		Karakoram		Ladakh and Kohistan		Nanga Parbat	
	Age (Ma)	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation
Modern River	0.00	0.695	0.053	0.103	0.044	0.098	0.064	0.067	0.046	0.037	0.031
U1456A-11H-6 60-69 cm	0.93	0.911	0.039	0.028	0.026	0.020	0.021	0.017	0.018	0.023	0.027
U1456A-26F-3 50-58 cm	1.32	0.806	0.052	0.030	0.030	0.097	0.060	0.035	0.036	0.032	0.030
U1456A-51F-3 100-110 cm	1.56	0.770	0.054	0.041	0.041	0.110	0.064	0.046	0.042	0.032	0.030
U1456A-61F-3 40-50 cm	1.92	0.683	0.072	0.027	0.026	0.202	0.091	0.060	0.049	0.028	0.029
U1456A-70F-2 10-16 cm	3.02	0.624	0.091	0.029	0.033	0.273	0.096	0.045	0.044	0.030	0.033
U1457C-31R-1 94-100 cm	3.17	0.635	0.122	0.024	0.027	0.283	0.127	0.028	0.026	0.029	0.031
U1457C-33R-3 10-17 cm	3.39	0.604	0.073	0.034	0.036	0.292	0.078	0.042	0.038	0.028	0.030
U1456C-45X-3 45-51 cm	3.57	0.500	0.097	0.034	0.035	0.396	0.093	0.032	0.032	0.038	0.040
U1456D-5R-1 12-20 cm	5.72	0.543	0.079	0.027	0.027	0.343	0.090	0.051	0.051	0.036	0.035
U1457C-41R-2 20-26 cm	5.77	0.619	0.086	0.032	0.030	0.258	0.106	0.060	0.053	0.030	0.031
U1457C-42R-1 80-88 cm	5.82	0.694	0.078	0.022	0.023	0.181	0.117	0.082	0.071	0.021	0.023
U1457C-43R-1 55-63 cm	5.87	0.536	0.134	0.031	0.031	0.380	0.133	0.023	0.023	0.030	0.028
U1456D-12R-1 30-36 cm	7.00	0.230	0.069	0.037	0.040	0.662	0.076	0.038	0.041	0.034	0.034
U1456D-13R-1 30-38 cm	7.07	0.397	0.099	0.024	0.023	0.503	0.111	0.044	0.041	0.032	0.033
U1456D-15R-1 55-61 cm	7.27	0.384	0.080	0.035	0.033	0.490	0.108	0.060	0.054	0.032	0.032
U1456D-19R-2 20-26 cm	7.66	0.440	0.084	0.033	0.032	0.446	0.092	0.047	0.044	0.033	0.031
U1456D-20R-1 95-103 cm	7.72	0.366	0.085	0.028	0.026	0.535	0.102	0.045	0.037	0.026	0.025
U1457C-51R-4 80-88 cm	7.77	0.358	0.065	0.036	0.030	0.510	0.098	0.064	0.053	0.031	0.033
U1456D-22R-1 73-83 cm	7.84	0.464	0.068	0.032	0.032	0.400	0.108	0.072	0.063	0.032	0.035
U1457C-61R-1 8-18 cm	7.98	0.281	0.094	0.027	0.024	0.626	0.083	0.036	0.035	0.029	0.033
U1456D-26R-2 37-43 cm	8.08	0.364	0.077	0.033	0.034	0.539	0.095	0.034	0.034	0.030	0.033
U1456D-27R-2 100-106 cm	8.15	0.320	0.082	0.033	0.031	0.559	0.100	0.051	0.041	0.037	0.034
U1456D-28R-1 40-46 cm	8.20	0.317	0.081	0.031	0.032	0.564	0.099	0.052	0.050	0.036	0.033
U1456D-29R-2 24-34 cm	8.27	0.331	0.088	0.028	0.028	0.543	0.126	0.065	0.057	0.032	0.032
U1456E-19R-3 10-20 cm	15.57	0.356	0.092	0.030	0.028	0.549	0.094	0.033	0.035	0.032	0.035
TH10-8	6.6 ka	0.493	0.086	0.057	0.058	0.393	0.070	0.029	0.033	0.028	0.033
KB40	15 ka	0.437	0.087	0.023	0.024	0.455	0.116	0.061	0.063	0.025	0.028

Table 4

Sample Names	KS D value										
	Tethyan and Greater Himalaya			Lesser Himalaya		Karakoram		Ladakh and Kohistan		Nanga Parbat	
	Age (Ma)	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation	Relative Contribution	Standard Deviation
Modern River	0.00	0.727	0.082	0.062	0.035	0.094	0.073	0.070	0.055	0.047	0.037
U1456A-11H-6 60-69 cm	0.93	0.874	0.058	0.021	0.021	0.038	0.036	0.035	0.032	0.032	0.033
U1456A-26F-3 50-58 cm	1.32	0.779	0.065	0.045	0.051	0.083	0.058	0.048	0.044	0.044	0.036
U1456A-51F-3 100-110 cm	1.56	0.758	0.062	0.046	0.041	0.096	0.071	0.052	0.045	0.049	0.039
U1456A-61F-3 40-50 cm	1.92	0.651	0.067	0.050	0.046	0.161	0.087	0.086	0.063	0.052	0.041
U1456A-70F-2 10-16 cm	3.02	0.603	0.072	0.047	0.040	0.207	0.104	0.088	0.073	0.055	0.050
U1457C-31R-1 94-100 cm	3.17	0.543	0.064	0.058	0.045	0.225	0.108	0.093	0.082	0.081	0.062
U1457C-33R-3 10-17 cm	3.39	0.566	0.068	0.052	0.051	0.246	0.099	0.088	0.074	0.049	0.043
U1456C-45X-3 45-51 cm	3.57	0.433	0.083	0.072	0.060	0.357	0.097	0.074	0.065	0.064	0.055
U1456D-5R-1 12-20 cm	5.72	0.489	0.067	0.049	0.044	0.309	0.102	0.087	0.075	0.065	0.054
U1457C-41R-2 20-26 cm	5.77	0.536	0.061	0.038	0.035	0.252	0.122	0.106	0.092	0.068	0.068
U1457C-42R-1 80-88 cm	5.82	0.584	0.065	0.036	0.034	0.208	0.125	0.110	0.090	0.062	0.052
U1457C-43R-1 55-63 cm	5.87	0.502	0.100	0.081	0.078	0.293	0.097	0.065	0.064	0.058	0.053
U1456D-12R-1 30-36 cm	7.00	0.249	0.090	0.080	0.064	0.565	0.090	0.070	0.064	0.037	0.034
U1456D-13R-1 30-38 cm	7.07	0.363	0.074	0.058	0.051	0.432	0.114	0.083	0.076	0.064	0.051
U1456D-15R-1 55-61 cm	7.27	0.381	0.071	0.061	0.047	0.387	0.141	0.120	0.104	0.051	0.042
U1456D-19R-2 20-26 cm	7.66	0.442	0.097	0.076	0.071	0.352	0.098	0.075	0.059	0.055	0.047
U1456D-20R-1 95-103 cm	7.72	0.340	0.072	0.042	0.035	0.509	0.107	0.059	0.051	0.050	0.048
U1457C-51R-4 80-88 cm	7.77	0.361	0.075	0.072	0.059	0.423	0.117	0.102	0.083	0.042	0.033
U1456D-22R-1 73-83 cm	7.84	0.466	0.067	0.057	0.051	0.335	0.107	0.099	0.076	0.044	0.035
U1457C-61R-1 8-18 cm	7.98	0.300	0.087	0.077	0.069	0.504	0.085	0.068	0.054	0.052	0.044
U1456D-26R-2 37-43 cm	8.08	0.367	0.061	0.045	0.040	0.479	0.091	0.060	0.055	0.050	0.041
U1456D-27R-2 100-106 cm	8.15	0.336	0.082	0.068	0.055	0.460	0.098	0.088	0.070	0.048	0.039
U1456D-28R-1 40-46 cm	8.20	0.327	0.078	0.061	0.052	0.461	0.128	0.099	0.090	0.052	0.041
U1456D-29R-2 24-34 cm	8.27	0.315	0.066	0.051	0.041	0.454	0.117	0.119	0.082	0.060	0.049
U1456E-19R-3 10-20 cm	15.57	0.331	0.083	0.074	0.063	0.466	0.102	0.068	0.067	0.062	0.057
TH10-8	6.6 ka	0.522	0.103	0.103	0.089	0.293	0.085	0.047	0.042	0.034	0.035
KB40	15 ka	0.412	0.074	0.049	0.047	0.396	0.115	0.091	0.077	0.052	0.042

Table 2

Sample Name	in Chit et al. (2019)	Top depth CSF-A	Age (Ma)	Mean Grain Size (μm)	Median Grain Size (μm)	D(0,0)	Mean/ Median ratio	Mode (μm)	S.D.	Variance	C.V.	Skewness	Kurtosis
U1456A-11H-6, 60-69 cm	Yes	97.60	0.93	31.9	26.1	0.748775	1.2211	41.7	27.4	752.3	85.9	1.014	0.626
U1456A-26F-3, 50-58 cm		185.10	1.32	125.1	101.6	0.726618	1.2319	168.9	110.3	12155.6	88.1	1.492	2.960
U1456A-51F-3 100-110 cm	Yes	298.88	1.56	137.4	117.8	0.697362	1.1661	153.8	101.6	10316.3	73.9	1.451	3.090
U1456A-61F-3 40-50 cm	Yes	345.32	1.92	142.2	122.4	0.703043	1.1618	140.1	100.8	10158.4	70.9	1.594	3.970
U1456A-70F-2 10-16 cm	Yes	386.40	3.02	13.5	8.4	0.747176	1.6077	10.3	14.6	214.5	108.5	2.054	4.920
U1457C-31R-1 94-100 cm		473.80	3.17	46.5	27.9	0.745233	1.6623	140.1	48.5	2356.9	104.5	1.199	0.510
U1457C-33R-3 10-17 cm		495.20	3.39	132.1	110.9	0.714413	1.1904	168.9	106.5	11334.6	80.6	1.354	2.435
U1456C-45X-3 45-51 cm		458.96	3.57	60.3	38.8	0.735115	1.5549	153.8	58.4	3412.7	96.9	1.081	0.200
U1456D-5R-1 12-20 cm	Yes	487.98	5.72	29.8	16.5	0.74227	1.8052	28.7	33.0	1086.1	110.4	1.424	1.197
U1457C-41R-2 20-26 cm		571.50	5.77	47.1	24.9	0.745785	1.8956	140.1	51.2	2623.7	108.7	1.190	0.350
U1457C-42R-1 80-88 cm		580.40	5.82	69.1	49.9	0.738038	1.3828	80.1	62.5	3910.5	90.5	1.051	0.361
U1457C-43R-2 52-60 cm	Yes	591.21	5.87	103.5	58.4	0.738705	1.7721	168.9	123.9	15344.9	119.7	2.094	5.028
U1456D-12R-1 30-36 cm		556.10	7.00	94.6	64.5	0.718672	1.4673	153.8	98.5	9701.4	104.1	2.191	6.827
U1456D-13R-1 30-38 cm	Yes	565.80	7.07	99.1	61.3	0.726906	1.6166	168.9	109.4	11958.0	110.3	2.070	5.421
U1456D-15R-1 55-61 cm		585.45	7.27	43.3	25.8	0.738324	1.6743	31.5	45.4	2060.4	104.9	1.328	0.870
U1456D-19R-2 20-26 cm		625.40	7.66	64.0	41.0	0.754242	1.5614	168.9	62.9	3953.2	98.3	0.958	-0.153
U1456D-20R-1 95-103 cm		634.35	7.72	32.3	15.7	0.759177	2.0601	96.5	36.1	1300.5	111.8	1.254	0.523
U1457C-51R-4 80-88 cm		672.20	7.77	63.0	41.1	0.743426	1.5341	168.9	61.7	3804.3	97.9	1.126	0.396
U1456D-22R-1 73-83 cm	Yes	653.50	7.84	27.2	14.5	0.764352	1.8784	80.1	29.4	864.1	108.1	1.190	0.417
U1457C-61R-1 8-18 cm		763.98	7.98	75.3	51.2	0.75421	1.4717	185.4	71.3	5078.1	94.6	0.939	-0.149
U1456D-26R-2 37-43 cm		693.45	8.08	71.8	48.8	0.738158	1.4704	66.4	69.5	4831.0	96.9	1.197	0.749
U1456D-27R-2 100-106 cm		703.80	8.15	23.4	14.3	0.748952	1.6411	19.8	26.2	686.7	111.8	1.799	3.048
U1456D-28R-1 40-46 cm		711.40	8.20	23.5	10.1	0.777716	2.3172	80.1	28.1	791.7	119.7	1.471	1.198
U1456D-29R-2 24-34 cm	Yes	722.60	8.27	25.5	12.6	0.756036	2.0301	80.1	28.5	811.4	111.8	1.311	0.768
U1456E-19R-3 10-20 cm	Yes	1102.53	15.57	53.1	37.1	0.71942	1.4311	80.1	48.8	2379.7	91.8	1.036	0.251

Table 2

Sample Name	Folk and Ward Statistics									Channel Diameter (Lower) (μm)				
	d10 (μm)	d50 (μm)	d90 (μm)	Specific Surf. Area:	Mean (φ)	Median (φ)	Deviation	Skewness	Kurtosis	0.38	0.41	0.45	0.50	0.54
U1456A-11H-6, 60-69 cm	2.3	26.1	71.6	3314.62	5.755	5.257	1.871	0.402	0.987	0.036	0.064	0.096	0.142	0.189
U1456A-26F-3, 50-58 cm	11.2	101.6	264.4	1148.7	3.673	3.299	1.777	0.387	1.181	0.012	0.021	0.031	0.046	0.059
U1456A-51F-3 100-110 cm	31.6	117.8	265.2	560.325	3.247	3.086	1.228	0.251	1.101	0.005	0.009	0.013	0.019	0.024
U1456A-61F-3 40-50 cm	37.8	122.4	266.0	499.418	3.132	3.030	1.129	0.218	1.242	0.004	0.007	0.011	0.015	0.020
U1456A-70F-2 10-16 cm	1.5	8.4	32.2	5718.56	7.031	6.896	1.705	0.115	0.911	0.065	0.116	0.174	0.259	0.345
U1457C-31R-1 94-100 cm	2.5	27.9	127.0	3243.92	5.459	5.161	2.168	0.235	0.857	0.036	0.063	0.095	0.141	0.188
U1457C-33R-3 10-17 cm	18.9	110.9	269.1	879.111	3.427	3.172	1.541	0.345	1.208	0.009	0.016	0.024	0.035	0.045
U1456C-45X-3 45-51 cm	4.1	38.8	156.0	2286.99	4.912	4.688	2.022	0.238	0.956	0.024	0.043	0.065	0.095	0.125
U1456D-5R-1 12-20 cm	1.9	16.5	84.8	4154.76	6.083	5.918	2.076	0.143	0.883	0.048	0.085	0.127	0.189	0.252
U1457C-41R-2 20-26 cm	2.3	24.9	133.7	3437.36	5.516	5.330	2.239	0.171	0.830	0.038	0.067	0.101	0.151	0.202
U1457C-42R-1 80-88 cm	5.6	49.9	166.8	1840	4.612	4.323	1.894	0.295	1.013	0.018	0.032	0.048	0.071	0.092
U1457C-43R-2 52-60 cm	4.6	58.4	251.5	2034.07	4.427	4.097	2.248	0.252	1.014	0.022	0.039	0.059	0.087	0.115
U1456D-12R-1 30-36 cm	8.2	64.5	209.2	1526.84	4.175	3.955	1.849	0.269	1.114	0.017	0.031	0.046	0.067	0.087
U1456D-13R-1 30-38 cm	6.3	61.3	231.9	1725.3	4.264	4.027	2.032	0.249	1.094	0.019	0.034	0.051	0.075	0.099
U1456D-15R-1 55-61 cm	2.7	25.8	120.0	3070.27	5.465	5.274	2.061	0.191	0.976	0.034	0.061	0.091	0.135	0.180
U1456D-19R-2 20-26 cm	2.8	41.0	165.8	2801.54	5.016	4.609	2.249	0.309	0.871	0.029	0.052	0.078	0.118	0.159
U1456D-20R-1 95-103 cm	1.7	15.7	93.1	4406.46	6.096	5.996	2.200	0.103	0.792	0.046	0.082	0.125	0.189	0.256
U1457C-51R-4 80-88 cm	3.2	41.1	163.4	2543.49	4.939	4.606	2.136	0.289	1.003	0.028	0.049	0.074	0.111	0.148
U1456D-22R-1 73-83 cm	1.6	14.5	75.9	4874.98	6.305	6.111	2.145	0.147	0.752	0.051	0.091	0.138	0.209	0.284
U1457C-61R-1 8-18 cm	3.7	51.2	190.0	2289.61	4.671	4.288	2.163	0.325	0.958	0.023	0.041	0.062	0.092	0.124
U1456D-26R-2 37-43 cm	4.0	48.8	181.5	2218.96	4.707	4.357	2.092	0.307	1.052	0.024	0.043	0.065	0.096	0.127
U1456D-27R-2 100-106 cm	1.8	14.3	61.9	4453.23	6.372	6.129	1.940	0.177	0.956	0.049	0.087	0.131	0.196	0.262
U1456D-28R-1 40-46 cm	1.5	10.1	71.4	5327.17	6.573	6.623	2.126	-0.006	0.778	0.051	0.091	0.138	0.211	0.290
U1456D-29R-2 24-34 cm	1.6	12.6	72.9	5016.22	6.412	6.316	2.126	0.089	0.775	0.055	0.098	0.149	0.224	0.303
U1456E-19R-3 10-20 cm	5.2	37.1	129.4	2043.54	4.985	4.751	1.820	0.240	0.881	0.021	0.037	0.055	0.080	0.104

Table 2

Channel Diameter (Lower) (μm)

Sample Name	0.60	0.66	0.72	0.79	0.87	0.95	1.05	1.15	1.26	1.38	1.52	1.67	1.83	2.01	2.21	2.42	2.66
U1456A-11H-6, 60-69 cm	0.238	0.291	0.350	0.414	0.481	0.550	0.619	0.688	0.754	0.814	0.867	0.911	0.946	0.972	0.989	0.999	1.004
U1456A-26F-3, 50-58 cm	0.073	0.086	0.101	0.117	0.132	0.147	0.162	0.177	0.192	0.205	0.218	0.231	0.243	0.255	0.267	0.279	0.293
U1456A-51F-3 100-110 cm	0.029	0.033	0.038	0.042	0.047	0.051	0.054	0.058	0.062	0.065	0.068	0.071	0.075	0.078	0.082	0.086	0.091
U1456A-61F-3 40-50 cm	0.023	0.027	0.031	0.035	0.039	0.042	0.045	0.049	0.052	0.055	0.058	0.062	0.065	0.069	0.073	0.078	0.083
U1456A-70F-2 10-16 cm	0.434	0.529	0.635	0.748	0.864	0.981	1.097	1.210	1.315	1.410	1.493	1.567	1.631	1.690	1.746	1.803	1.869
U1457C-31R-1 94-100 cm	0.236	0.288	0.345	0.406	0.468	0.531	0.593	0.653	0.708	0.758	0.802	0.840	0.873	0.902	0.931	0.960	0.993
U1457C-33R-3 10-17 cm	0.054	0.064	0.074	0.085	0.095	0.105	0.115	0.124	0.134	0.142	0.151	0.159	0.167	0.175	0.183	0.191	0.200
U1456C-45X-3 45-51 cm	0.155	0.187	0.221	0.257	0.293	0.329	0.365	0.399	0.432	0.462	0.489	0.514	0.537	0.559	0.581	0.605	0.632
U1456D-5R-1 12-20 cm	0.317	0.387	0.464	0.546	0.630	0.714	0.795	0.873	0.945	1.007	1.059	1.102	1.137	1.167	1.193	1.220	1.252
U1457C-41R-2 20-26 cm	0.256	0.313	0.377	0.445	0.515	0.585	0.653	0.718	0.777	0.828	0.870	0.904	0.931	0.953	0.972	0.992	1.017
U1457C-42R-1 80-88 cm	0.115	0.138	0.163	0.189	0.215	0.242	0.269	0.295	0.320	0.344	0.366	0.388	0.408	0.428	0.449	0.471	0.496
U1457C-43R-2 52-60 cm	0.144	0.175	0.208	0.244	0.281	0.317	0.353	0.387	0.418	0.446	0.470	0.490	0.507	0.521	0.534	0.547	0.562
U1456D-12R-1 30-36 cm	0.108	0.129	0.151	0.174	0.197	0.219	0.240	0.261	0.279	0.295	0.309	0.320	0.329	0.337	0.344	0.350	0.358
U1456D-13R-1 30-38 cm	0.123	0.148	0.174	0.202	0.230	0.258	0.285	0.311	0.334	0.355	0.372	0.386	0.399	0.409	0.418	0.427	0.437
U1456D-15R-1 55-61 cm	0.225	0.274	0.328	0.384	0.442	0.500	0.556	0.609	0.658	0.700	0.735	0.763	0.786	0.804	0.818	0.833	0.849
U1456D-19R-2 20-26 cm	0.203	0.251	0.304	0.362	0.423	0.484	0.544	0.601	0.653	0.698	0.735	0.763	0.784	0.800	0.811	0.820	0.831
U1456D-20R-1 95-103 cm	0.330	0.411	0.502	0.601	0.704	0.808	0.910	1.006	1.093	1.165	1.223	1.266	1.294	1.312	1.324	1.333	1.347
U1457C-51R-4 80-88 cm	0.187	0.229	0.275	0.324	0.375	0.426	0.476	0.524	0.568	0.606	0.637	0.662	0.681	0.695	0.705	0.713	0.721
U1456D-22R-1 73-83 cm	0.367	0.459	0.562	0.676	0.795	0.916	1.036	1.151	1.256	1.346	1.420	1.477	1.518	1.546	1.566	1.580	1.596
U1457C-61R-1 8-18 cm	0.157	0.194	0.234	0.278	0.324	0.371	0.417	0.463	0.505	0.542	0.574	0.600	0.622	0.638	0.651	0.662	0.673
U1456D-26R-2 37-43 cm	0.159	0.193	0.230	0.270	0.310	0.350	0.390	0.428	0.464	0.496	0.523	0.547	0.567	0.584	0.599	0.614	0.630
U1456D-27R-2 100-106 cm	0.332	0.408	0.493	0.584	0.678	0.773	0.866	0.956	1.038	1.109	1.169	1.216	1.253	1.280	1.300	1.318	1.337
U1456D-28R-1 40-46 cm	0.379	0.478	0.591	0.715	0.848	0.985	1.121	1.253	1.374	1.481	1.570	1.641	1.695	1.736	1.766	1.793	1.821
U1456D-29R-2 24-34 cm	0.389	0.483	0.588	0.702	0.821	0.941	1.058	1.169	1.269	1.354	1.423	1.474	1.511	1.536	1.553	1.568	1.588
U1456E-19R-3 10-20 cm	0.126	0.148	0.171	0.194	0.216	0.237	0.257	0.276	0.294	0.311	0.328	0.346	0.366	0.390	0.418	0.454	0.499

Table 2

Channel Diameter (Lower) (μm)

Sample Name	2.92	3.21	3.52	3.86	4.24	4.66	5.11	5.61	6.16	6.76	7.42	8.15	8.94	9.82	10.78	11.83	12.99
U1456A-11H-6, 60-69 cm	1.005	1.007	1.011	1.018	1.031	1.050	1.076	1.110	1.150	1.197	1.254	1.319	1.393	1.475	1.568	1.677	1.806
U1456A-26F-3, 50-58 cm	0.308	0.324	0.342	0.362	0.384	0.407	0.432	0.457	0.484	0.512	0.540	0.570	0.602	0.635	0.671	0.712	0.758
U1456A-51F-3 100-110 cm	0.096	0.102	0.108	0.116	0.124	0.133	0.143	0.153	0.165	0.177	0.190	0.205	0.221	0.239	0.261	0.286	0.317
U1456A-61F-3 40-50 cm	0.088	0.094	0.101	0.108	0.116	0.124	0.133	0.143	0.153	0.164	0.175	0.188	0.201	0.216	0.234	0.253	0.277
U1456A-70F-2 10-16 cm	1.945	2.033	2.134	2.244	2.361	2.479	2.594	2.698	2.791	2.872	2.940	2.994	3.026	3.034	3.024	3.008	3.000
U1457C-31R-1 94-100 cm	1.032	1.078	1.130	1.186	1.246	1.306	1.363	1.415	1.459	1.498	1.531	1.557	1.576	1.586	1.594	1.612	1.650
U1457C-33R-3 10-17 cm	0.209	0.220	0.231	0.244	0.257	0.272	0.288	0.305	0.323	0.342	0.361	0.382	0.405	0.430	0.458	0.489	0.527
U1456C-45X-3 45-51 cm	0.664	0.701	0.744	0.792	0.844	0.901	0.961	1.022	1.084	1.145	1.207	1.269	1.330	1.390	1.450	1.515	1.589
U1456D-5R-1 12-20 cm	1.292	1.342	1.401	1.470	1.546	1.627	1.708	1.787	1.861	1.930	1.995	2.052	2.100	2.136	2.165	2.195	2.236
U1457C-41R-2 20-26 cm	1.050	1.091	1.142	1.202	1.269	1.340	1.412	1.481	1.546	1.607	1.663	1.713	1.754	1.783	1.805	1.828	1.861
U1457C-42R-1 80-88 cm	0.524	0.557	0.593	0.634	0.679	0.727	0.778	0.831	0.886	0.941	0.998	1.056	1.115	1.175	1.236	1.302	1.376
U1457C-43R-2 52-60 cm	0.581	0.604	0.631	0.662	0.697	0.736	0.776	0.817	0.858	0.899	0.941	0.983	1.026	1.069	1.114	1.166	1.229
U1456D-12R-1 30-36 cm	0.367	0.379	0.394	0.413	0.435	0.462	0.493	0.528	0.566	0.608	0.655	0.706	0.763	0.826	0.896	0.974	1.064
U1456D-13R-1 30-38 cm	0.450	0.467	0.486	0.510	0.539	0.571	0.606	0.644	0.685	0.728	0.773	0.821	0.870	0.920	0.973	1.030	1.094
U1456D-15R-1 55-61 cm	0.871	0.899	0.935	0.980	1.032	1.092	1.158	1.228	1.303	1.381	1.464	1.551	1.642	1.735	1.833	1.940	2.061
U1456D-19R-2 20-26 cm	0.845	0.865	0.890	0.920	0.954	0.990	1.027	1.061	1.094	1.124	1.154	1.183	1.211	1.239	1.269	1.310	1.368
U1456D-20R-1 95-103 cm	1.370	1.404	1.452	1.512	1.582	1.657	1.733	1.806	1.872	1.933	1.988	2.032	2.061	2.071	2.066	2.053	2.039
U1457C-51R-4 80-88 cm	0.732	0.747	0.765	0.788	0.815	0.846	0.877	0.910	0.943	0.976	1.010	1.046	1.083	1.122	1.167	1.224	1.300
U1456D-22R-1 73-83 cm	1.618	1.647	1.682	1.723	1.765	1.803	1.832	1.848	1.850	1.841	1.823	1.798	1.762	1.717	1.672	1.649	1.666
U1457C-61R-1 8-18 cm	0.686	0.701	0.720	0.742	0.768	0.797	0.828	0.860	0.893	0.927	0.962	1.000	1.038	1.077	1.120	1.171	1.233
U1456D-26R-2 37-43 cm	0.649	0.670	0.695	0.723	0.754	0.786	0.819	0.852	0.883	0.914	0.944	0.973	1.002	1.031	1.063	1.103	1.157
U1456D-27R-2 100-106 cm	1.362	1.395	1.437	1.489	1.552	1.623	1.701	1.784	1.872	1.966	2.066	2.173	2.286	2.404	2.527	2.660	2.806
U1456D-28R-1 40-46 cm	1.856	1.899	1.951	2.008	2.068	2.124	2.170	2.201	2.217	2.220	2.212	2.190	2.150	2.091	2.023	1.967	1.940
U1456D-29R-2 24-34 cm	1.617	1.657	1.707	1.767	1.831	1.895	1.952	1.996	2.028	2.047	2.056	2.052	2.030	1.989	1.939	1.898	1.885
U1456E-19R-3 10-20 cm	0.554	0.621	0.698	0.787	0.885	0.992	1.105	1.220	1.336	1.450	1.559	1.660	1.750	1.824	1.881	1.920	1.947

Table 2

Channel Diameter (Lower) (μm)

Sample Name	14.26	15.65	17.18	18.86	20.71	22.73	24.95	27.39	30.07	33.01	36.24	39.78	43.67	47.94	52.62	57.77	63.41
U1456A-11H-6, 60-69 cm	1.961	2.141	2.341	2.557	2.789	3.037	3.299	3.566	3.811	4.006	4.121	4.137	4.051	3.873	3.625	3.334	3.019
U1456A-26F-3, 50-58 cm	0.810	0.870	0.937	1.010	1.090	1.176	1.268	1.363	1.457	1.550	1.642	1.737	1.844	1.972	2.128	2.311	2.517
U1456A-51F-3 100-110 cm	0.355	0.404	0.466	0.545	0.644	0.766	0.914	1.087	1.282	1.494	1.713	1.933	2.146	2.350	2.548	2.743	2.946
U1456A-61F-3 40-50 cm	0.305	0.339	0.381	0.431	0.492	0.564	0.649	0.748	0.864	0.999	1.159	1.350	1.579	1.851	2.171	2.537	2.942
U1456A-70F-2 10-16 cm	2.998	2.987	2.939	2.840	2.691	2.511	2.322	2.130	1.928	1.706	1.466	1.227	1.019	0.868	0.774	0.712	0.647
U1457C-31R-1 94-100 cm	1.713	1.795	1.886	1.978	2.071	2.168	2.272	2.375	2.461	2.513	2.525	2.507	2.484	2.479	2.502	2.538	2.561
U1457C-33R-3 10-17 cm	0.572	0.627	0.695	0.778	0.876	0.993	1.127	1.275	1.433	1.593	1.751	1.902	2.048	2.192	2.341	2.500	2.672
U1456C-45X-3 45-51 cm	1.678	1.779	1.891	2.009	2.133	2.263	2.398	2.528	2.641	2.719	2.752	2.743	2.708	2.669	2.647	2.648	2.664
U1456D-5R-1 12-20 cm	2.290	2.354	2.417	2.470	2.510	2.538	2.555	2.556	2.534	2.479	2.392	2.282	2.162	2.048	1.955	1.900	1.902
U1457C-41R-2 20-26 cm	1.904	1.949	1.984	2.003	2.011	2.021	2.045	2.084	2.124	2.148	2.143	2.118	2.094	2.094	2.133	2.197	2.258
U1457C-42R-1 80-88 cm	1.460	1.553	1.655	1.763	1.879	2.002	2.133	2.268	2.400	2.521	2.628	2.721	2.807	2.895	2.990	3.090	3.183
U1457C-43R-2 52-60 cm	1.304	1.389	1.479	1.567	1.655	1.743	1.834	1.926	2.013	2.086	2.139	2.176	2.203	2.233	2.273	2.326	2.387
U1456D-12R-1 30-36 cm	1.166	1.279	1.405	1.541	1.688	1.845	2.009	2.172	2.324	2.453	2.555	2.633	2.698	2.764	2.841	2.931	3.028
U1456D-13R-1 30-38 cm	1.167	1.250	1.343	1.448	1.571	1.716	1.885	2.070	2.256	2.424	2.557	2.648	2.702	2.734	2.758	2.782	2.806
U1456D-15R-1 55-61 cm	2.193	2.331	2.466	2.591	2.703	2.800	2.878	2.925	2.927	2.874	2.770	2.635	2.499	2.388	2.317	2.273	2.237
U1456D-19R-2 20-26 cm	1.444	1.531	1.620	1.702	1.777	1.849	1.925	2.008	2.089	2.157	2.204	2.229	2.246	2.275	2.332	2.423	2.539
U1456D-20R-1 95-103 cm	2.026	2.008	1.980	1.944	1.912	1.899	1.916	1.960	2.017	2.067	2.095	2.099	2.083	2.060	2.045	2.061	2.132
U1457C-51R-4 80-88 cm	1.400	1.522	1.662	1.815	1.980	2.154	2.331	2.499	2.639	2.735	2.776	2.770	2.736	2.702	2.691	2.714	2.763
U1456D-22R-1 73-83 cm	1.731	1.828	1.925	1.994	2.027	2.048	2.093	2.184	2.318	2.461	2.562	2.584	2.522	2.419	2.343	2.349	2.459
U1457C-61R-1 8-18 cm	1.308	1.395	1.487	1.581	1.678	1.779	1.887	2.002	2.115	2.216	2.299	2.361	2.411	2.458	2.518	2.596	2.687
U1456D-26R-2 37-43 cm	1.230	1.322	1.432	1.556	1.696	1.852	2.026	2.212	2.399	2.570	2.711	2.820	2.899	2.959	3.009	3.053	3.082
U1456D-27R-2 100-106 cm	2.958	3.097	3.196	3.228	3.186	3.077	2.923	2.748	2.568	2.390	2.217	2.049	1.892	1.753	1.642	1.567	1.527
U1456D-28R-1 40-46 cm	1.946	1.966	1.968	1.931	1.858	1.782	1.741	1.755	1.820	1.903	1.960	1.964	1.913	1.849	1.825	1.882	2.028
U1456D-29R-2 24-34 cm	1.907	1.949	1.986	1.996	1.983	1.971	1.995	2.069	2.184	2.304	2.380	2.382	2.313	2.215	2.152	2.165	2.267
U1456E-19R-3 10-20 cm	1.967	1.984	2.004	2.033	2.079	2.149	2.242	2.351	2.459	2.553	2.624	2.679	2.733	2.803	2.900	3.019	3.139

Table 2

Channel Diameter (Lower) (μm)

Sample Name	69.61	76.42	83.89	92.09	101.1	111.0	121.8	133.7	146.8	161.2	176.9	194.2	213.2	234.1	256.9	282.1	309.6
U1456A-11H-6, 60-69 cm	2.690	2.345	1.968	1.551	1.108	0.677	0.318	0.099	0.016	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456A-26F-3, 50-58 cm	2.736	2.960	3.183	3.407	3.637	3.882	4.133	4.361	4.511	4.514	4.321	3.932	3.401	2.818	2.272	1.824	1.485
U1456A-51F-3 100-110 cm	3.166	3.413	3.691	4.000	4.330	4.662	4.963	5.189	5.291	5.224	4.965	4.525	3.946	3.296	2.651	2.071	1.592
U1456A-61F-3 40-50 cm	3.376	3.823	4.269	4.694	5.079	5.401	5.632	5.742	5.700	5.483	5.092	4.552	3.912	3.240	2.599	2.037	1.579
U1456A-70F-2 10-16 cm	0.539	0.350	0.157	0.034	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-31R-1 94-100 cm	2.536	2.449	2.338	2.267	2.311	2.484	2.689	2.747	2.472	1.832	1.001	0.355	0.062	0.004	0.000	0.000	0.000
U1457C-33R-3 10-17 cm	2.860	3.066	3.290	3.534	3.798	4.081	4.368	4.623	4.796	4.827	4.671	4.321	3.812	3.218	2.619	2.084	1.648
U1456C-45X-3 45-51 cm	2.674	2.653	2.590	2.504	2.457	2.514	2.713	2.997	3.196	3.106	2.616	1.815	0.938	0.321	0.055	0.004	0.000
U1456D-5R-1 12-20 cm	1.967	2.089	2.228	2.289	2.173	1.804	1.143	0.497	0.104	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-41R-2 20-26 cm	2.281	2.245	2.181	2.160	2.263	2.521	2.844	3.028	2.848	2.226	1.289	0.494	0.093	0.007	0.000	0.000	0.000
U1457C-42R-1 80-88 cm	3.254	3.285	3.265	3.197	3.103	3.014	2.968	2.970	2.987	2.933	2.705	2.256	1.632	0.962	0.420	0.116	0.016
U1457C-43R-2 52-60 cm	2.444	2.487	2.514	2.535	2.568	2.634	2.743	2.874	2.976	2.980	2.835	2.534	2.131	1.711	1.360	1.124	1.007
U1456D-12R-1 30-36 cm	3.114	3.175	3.203	3.205	3.203	3.223	3.276	3.341	3.367	3.282	3.033	2.618	2.098	1.571	1.133	0.832	0.665
U1456D-13R-1 30-38 cm	2.821	2.816	2.787	2.746	2.719	2.736	2.812	2.929	3.038	3.066	2.952	2.683	2.297	1.870	1.478	1.173	0.964
U1456D-15R-1 55-61 cm	2.180	2.093	2.014	1.998	2.107	2.329	2.542	2.559	2.210	1.456	0.661	0.157	0.017	0.000	0.000	0.000	0.000
U1456D-19R-2 20-26 cm	2.654	2.732	2.750	2.707	2.655	2.679	2.844	3.148	3.450	3.517	3.159	2.378	1.347	0.517	0.099	0.008	0.000
U1456D-20R-1 95-103 cm	2.270	2.473	2.695	2.819	2.718	2.294	1.529	0.724	0.193	0.024	0.001	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-51R-4 80-88 cm	2.815	2.839	2.807	2.713	2.582	2.484	2.484	2.611	2.802	2.902	2.743	2.243	1.500	0.742	0.238	0.038	0.002
U1456D-22R-1 73-83 cm	2.628	2.733	2.635	2.224	1.427	0.626	0.132	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1457C-61R-1 8-18 cm	2.779	2.850	2.877	2.847	2.766	2.673	2.656	2.781	3.072	3.425	3.617	3.426	2.768	1.790	0.841	0.245	0.036
U1456D-26R-2 37-43 cm	3.082	3.039	2.953	2.838	2.719	2.629	2.586	2.596	2.638	2.672	2.638	2.469	2.128	1.633	1.068	0.537	0.185
U1456D-27R-2 100-106 cm	1.510	1.490	1.429	1.288	1.048	0.729	0.387	0.138	0.025	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-28R-1 40-46 cm	2.216	2.335	2.262	1.908	1.221	0.533	0.112	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456D-29R-2 24-34 cm	2.413	2.489	2.374	1.980	1.257	0.545	0.114	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U1456E-19R-3 10-20 cm	3.230	3.262	3.221	3.137	3.050	2.993	2.938	2.787	2.442	1.869	1.154	0.519	0.142	0.019	0.001	0.000	0.000

Table 2

Channel Diameter (Lower) (μm)

Sample Name	339.9	373.1	409.6	449.7	493.6	541.9	594.9	653.0	716.8	786.9	863.9	948.3	1041.0	1142.8	% <30 μm
U1456A-11H-6, 60-69 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	55.2
U1456A-26F-3, 50-58 cm	1.238	1.048	0.880	0.712	0.537	0.362	0.203	0.085	0.022	0.003	0.000	0.000	0.000	0.000	20.4
U1456A-51F-3 100-110 cm	1.225	0.958	0.761	0.603	0.457	0.311	0.166	0.061	0.011	0.001	0.000	0.000	0.000	0.000	9.3
U1456A-61F-3 40-50 cm	1.226	0.963	0.766	0.609	0.469	0.336	0.209	0.100	0.032	0.005	0.000	0.000	0.000	0.000	7.6
U1456A-70F-2 10-16 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	88.6
U1457C-31R-1 94-100 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	51.9
U1457C-33R-3 10-17 cm	1.314	1.063	0.860	0.676	0.492	0.310	0.150	0.048	0.008	0.000	0.000	0.000	0.000	0.000	15.0
U1456C-45X-3 45-51 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	42.7
U1456D-5R-1 12-20 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	66.0
U1457C-41R-2 20-26 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	54.2
U1457C-42R-1 80-88 cm	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	35.7
U1457C-43R-2 52-60 cm	0.975	0.981	0.974	0.916	0.790	0.619	0.444	0.261	0.113	0.024	0.002	0.000	0.000	0.000	34.6
U1456D-12R-1 30-36 cm	0.593	0.568	0.542	0.484	0.383	0.269	0.172	0.095	0.040	0.009	0.001	0.000	0.000	0.000	28.3
U1456D-13R-1 30-38 cm	0.834	0.754	0.692	0.621	0.525	0.403	0.266	0.134	0.045	0.008	0.001	0.000	0.000	0.000	30.2
U1456D-15R-1 55-61 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	54.8
U1456D-19R-2 20-26 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	42.9
U1456D-20R-1 95-103 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	63.6
U1457C-51R-4 80-88 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	40.9
U1456D-22R-1 73-83 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	65.6
U1457C-61R-1 8-18 cm	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	36.9
U1456D-26R-2 37-43 cm	0.033	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	36.1
U1456D-27R-2 100-106 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	74.3
U1456D-28R-1 40-46 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	72.3
U1456D-29R-2 24-34 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	68.5
U1456E-19R-3 10-20 cm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	44.3

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1456A-70F-2, 10-16 cm	10.968	1371	0.615	0.089	0.004	0.0130	0.0004	0.48513	86.4	3.5	83.1	2.3	183	79	83.1	2.3	3.8	Rim Core
U1456A-70F-2, 10-16 cm	8.234	1240	2.830	10.030	0.160	0.4491	0.0055	0.75103	2436	15	2391	24	2478	18	2478.0	18.0	3.5	
U1456A-70F-2, 10-16 cm	24.333	1097	2.850	6.065	0.053	0.3315	0.0022	0.69287	1984	7.6	1845	11	2134	11	2134.0	11.0	13.5	
U1456A-70F-2, 10-16 cm	27.674	369	1.296	5.047	0.064	0.3223	0.0035	0.83832	1825	11	1800	17	1858	14	1858.0	14.0	3.1	
U1456A-70F-2, 10-16 cm	27.675	491.8	3.632	0.559	0.008	0.0721	0.0006	0.30503	450.1	5.5	448.6	3.5	458	33	448.6	3.5	0.3	
U1456A-70F-2, 10-16 cm	13.701	570.1	1.606	1.435	0.023	0.1493	0.0013	0.59779	904.3	8.9	896.7	7.3	921	26	921.0	26.0	2.6	
U1456A-70F-2, 10-16 cm	27.674	141.1	0.388	0.687	0.017	0.0854	0.0008	0.06321	529	10	527.9	5	521	56	527.9	5.0	0.2	
U1456A-70F-2, 10-16 cm	8.841	1256	13.800	0.783	0.015	0.0949	0.0020	0.75361	587	8.7	584	12	604	32	584.0	12.0	0.5	
U1456A-70F-2, 10-16 cm	15.795	57	2.000	1.476	0.050	0.1550	0.0025	0.20042	916	21	929	14	870	74	870.0	74.0	6.8	
U1456A-70F-2, 10-16 cm	20.992	570	0.795	1.190	0.019	0.1271	0.0012	0.61310	794.9	8.8	771.4	6.7	870	25	771.4	6.7	3.0	
U1456A-70F-2, 10-16 cm	14.309	235	1.463	0.706	0.017	0.0885	0.0011	0.35931	541	10	546.5	6.8	510	52	546.5	6.8	1.0	
U1456A-70F-2, 10-16 cm	15.828	1219	1.433	0.098	0.003	0.0147	0.0003	0.31254	94.8	2.5	94.2	1.7	124	57	94.2	1.7	0.6	
U1456A-70F-2, 10-16 cm	19.777	2431	35.500	2.555	0.031	0.1702	0.0018	0.81372	1287	8.9	1013	10	1776	13	DISC	DISC	43.0	
U1456A-70F-2, 10-16 cm	21.903	19.83	-7.800	0.135	0.026	0.0045	0.0006	0.30015	121	23	28.9	3.6	1820	610	DISC	DISC	76.1	
U1456A-70F-2, 10-16 cm	14.006	90	1.122	0.257	0.024	0.0129	0.0006	0.01731	229	20	82.3	3.6	2110	220	DISC	DISC	64.1	
U1456A-70F-2, 10-16 cm	27.674	460	1.708	0.107	0.004	0.0160	0.0002	0.04384	103	3.5	102.5	1.3	143	75	102.5	1.3	0.5	
U1456A-70F-2, 10-16 cm	9.145	150.9	0.591	0.162	0.012	0.0238	0.0009	0.15317	152	11	151.7	5.4	160	140	151.7	5.4	0.2	
U1456A-70F-2, 10-16 cm	22.206	190.2	1.088	4.957	0.068	0.3174	0.0034	0.70295	1810	12	1776	17	1847	18	1847.0	18.0	3.8	
U1456A-70F-2, 10-16 cm	26.155	235.6	55.100	18.850	0.180	0.5687	0.0053	0.62521	3035	9.1	2901	22	3128	13	3128.0	13.0	7.3	
U1456A-70F-2, 10-16 cm	27.674	414	0.989	0.109	0.004	0.0163	0.0002	0.03393	105	3.6	104	1.3	142	76	104.0	1.3	1.0	
U1456A-70F-2, 10-16 cm	20.992	439.2	0.872	1.708	0.020	0.1670	0.0016	0.45167	1011	7.6	995.5	8.6	1038	23	1038.0	23.0	4.1	
U1456A-70F-2, 10-16 cm	27.674	354	1.318	0.114	0.004	0.0170	0.0002	0.19911	109.2	3.6	108.5	1.4	124	68	108.5	1.4	0.6	
U1456A-70F-2, 10-16 cm	22.206	182	1.178	0.744	0.019	0.0920	0.0013	0.36591	563	11	567	7.9	526	58	567.0	7.9	0.7	
U1456A-70F-2, 10-16 cm	7.931	55.6	-5.000	0.200	0.024	0.0214	0.0010	0.04703	183	20	136.8	6.6	730	250	DISC	DISC	25.2	
U1456A-70F-2, 10-16 cm	8.841	666	3.080	5.090	0.220	0.2327	0.0092	0.96407	1835	36	1346	49	2433	22	DISC	DISC	44.7	
U1456A-70F-2, 10-16 cm	26.459	128.9	2.640	0.888	0.026	0.0919	0.0015	0.33295	643	15	566.8	8.9	894	62	566.8	8.9	11.9	
U1456A-70F-2, 10-16 cm	2.160	787	7.160	1.103	0.066	0.1191	0.0037	0.49482	753	32	726	21	830	120	726.0	21.0	3.6	
U1456A-70F-2, 10-16 cm	24.940	3370	15.580	2.309	0.025	0.1611	0.0015	0.85092	1214	7.6	962.7	8.1	1687	10	DISC	DISC	42.9	
U1456A-70F-2, 10-16 cm	9.146	226.7	1.698	4.900	0.110	0.2811	0.0054	0.60898	1801	19	1596	27	2032	30	2032.0	30.0	21.5	
U1456A-70F-2, 10-16 cm	12.790	56.4	0.704	0.352	0.023	0.0486	0.0015	0.09230	304	17	305.7	9	290	140	305.7	9.0	0.6	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456A-70F-2, 10-16 cm	15.524	1578	2.060	2.623	0.048	0.2015	0.0030	0.88654	1305	14	1183	16	1505	17	1505.0	17.0	21.4	
U1456A-70F-2, 10-16 cm	17.954	1531	3.230	2.817	0.050	0.1632	0.0019	0.80048	1358	14	974	11	2021	19	DISC	DISC	51.8	
U1456A-70F-2, 10-16 cm	19.169	671	0.860	0.069	0.003	0.0097	0.0002	0.14198	67.5	3.2	62.5	1.1	215	97	62.5	1.1	7.4	
U1456A-70F-2, 10-16 cm	7.020	1219	5.020	0.547	0.012	0.0683	0.0013	0.44241	442.5	7.8	425.8	7.6	519	45	425.8	7.6	3.8	
U1456A-70F-2, 10-16 cm	3.038	171	1.610	0.112	0.027	0.0154	0.0011	0.06240	107	25	98.2	7.3	260	500	98.2	7.3	8.2	Rim
U1456A-70F-2, 10-16 cm	14.309	196.6	1.453	0.915	0.024	0.1034	0.0016	0.39042	658	13	634.2	9.6	722	55	634.2	9.6	3.6	Core
U1456A-70F-2, 10-16 cm	27.674	653	1.050	0.049	0.003	0.0064	0.0001	0.14859	48.3	2.5	41.02	0.73	360	110	DISC	DISC	15.1	
U1456A-70F-2, 10-16 cm	7.594	266	13.500	0.323	0.016	0.0369	0.0017	0.45426	283	12	234	11	700	120	DISC	DISC	17.3	Rim
U1456A-70F-2, 10-16 cm	10.664	501	4.560	1.236	0.041	0.0889	0.0022	0.79192	814	19	549	13	1627	38	DISC	DISC	32.6	Core
U1456A-70F-2, 10-16 cm	27.675	1005	2.880	1.499	0.015	0.1531	0.0014	0.66391	929.4	6.3	917.9	7.6	951	16	951.0	16.0	3.5	
U1456A-70F-2, 10-16 cm	27.674	336.8	1.308	8.782	0.096	0.4191	0.0042	0.75652	2315	9.7	2258	18	2362	13	2362.0	13.0	4.4	
U1456A-70F-2, 10-16 cm	27.674	306	0.968	0.131	0.005	0.0192	0.0004	0.13944	124.8	4.2	122.7	2.3	173	76	122.7	2.3	1.7	
U1456A-70F-2, 10-16 cm	11.272	1920	2.921	0.131	0.005	0.0195	0.0005	0.64528	124.7	4.4	124.3	3.1	133	60	124.3	3.1	0.3	
U1456A-70F-2, 10-16 cm	8.841	913	20.070	0.294	0.016	0.0335	0.0010	0.63080	261	13	212.6	6.5	690	95	DISC	DISC	18.5	
U1456A-70F-2, 10-16 cm	7.931	347	1.420	5.760	0.150	0.2958	0.0067	0.70168	1938	24	1669	33	2235	34	2235.0	34.0	25.3	
U1456A-70F-2, 10-16 cm	23.421	225.2	0.346	1.097	0.021	0.1169	0.0014	0.45003	750	10	712.7	7.9	849	42	712.7	7.9	5.0	
U1456A-70F-2, 10-16 cm	23.725	493	2.990	1.264	0.021	0.1375	0.0018	0.61339	828.5	9.5	830	10	829	27	830.0	10.0	0.2	
U1456A-70F-2, 10-16 cm	9.753	2970	3.487	0.567	0.011	0.0733	0.0015	0.77012	455.8	7.2	456.2	8.9	451	30	456.2	8.9	0.1	
U1456A-70F-2, 10-16 cm	11.272	270	2.200	27.830	0.380	0.6436	0.0091	0.86088	3414	13	3201	36	3533	11	3533.0	11.0	9.4	
U1456A-70F-2, 10-16 cm	10.056	2149	2.680	0.052	0.002	0.0077	0.0002	0.32953	51.4	2.1	49.29	0.93	149	82	49.3	0.9	4.1	
U1456A-70F-2, 10-16 cm	25.549	481	0.785	1.637	0.020	0.1646	0.0017	0.62417	983.6	7.8	982.3	9.6	979	21	979.0	21.0	0.3	
U1456A-70F-2, 10-16 cm	8.539	346	1.529	3.290	0.110	0.2226	0.0062	0.71339	1474	26	1295	33	1726	35	1726.0	35.0	25.0	
U1456A-70F-2, 10-16 cm	18.258	248.4	1.459	1.504	0.035	0.1435	0.0024	0.71534	929	14	864	13	1076	31	1076.0	31.0	19.7	
U1456A-70F-2, 10-16 cm	15.220	335	1.209	9.140	0.310	0.3897	0.0094	0.92528	2353	32	2119	43	2556	25	2556.0	25.0	17.1	
U1456A-70F-2, 10-16 cm	18.865	126	0.988	14.510	0.190	0.5327	0.0068	0.70447	2782	13	2751	28	2801	16	2801.0	16.0	1.8	
U1456A-70F-2, 10-16 cm	4.860	450	16.200	1.401	0.078	0.1388	0.0069	0.72968	886	33	837	39	1016	79	837.0	39.0	5.5	Rim
U1456A-70F-2, 10-16 cm	21.904	552	1.457	3.340	0.080	0.2305	0.0042	0.82575	1491	19	1336	22	1699	26	1699.0	26.0	21.4	Core
U1456A-70F-2, 10-16 cm	25.548	125.2	0.705	1.074	0.028	0.1229	0.0022	0.38809	738	14	747	12	707	51	747.0	12.0	1.2	
U1456A-70F-2, 10-16 cm	10.057	381	5.750	4.234	0.084	0.2658	0.0048	0.70374	1679	16	1519	25	1885	25	1885.0	25.0	19.4	
U1456A-70F-2, 10-16 cm	17.955	792	1.860	4.054	0.054	0.2818	0.0038	0.61180	1644	11	1600	19	1700	22	1700.0	22.0	5.9	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1456A-70F-2, 10-16 cm	17.043	547	3.510	4.213	0.067	0.2617	0.0036	0.65124	1675	13	1498	19	1907	22	1907.0	22.0	21.4	
U1456A-70F-2, 10-16 cm	24.940	358	3.780	1.552	0.029	0.1563	0.0023	0.72432	949	12	936	13	978	27	978.0	27.0	4.3	
U1456A-70F-2, 10-16 cm	27.674	156.2	2.232	0.770	0.019	0.0926	0.0013	0.38843	577	11	570.6	7.6	588	51	570.6	7.6	1.1	
U1456A-70F-2, 10-16 cm	27.675	1070	5.160	0.604	0.011	0.0743	0.0010	0.49912	478.8	6.8	461.9	6.1	550	36	461.9	6.1	3.5	
U1456A-70F-2, 10-16 cm	23.726	2060	4.710	0.018	0.001	0.0027	0.0001	0.57940	18.5	1	17.2	0.57	195	93	17.2	0.6	7.0	
U1456A-70F-2, 10-16 cm	19.473	172.1	1.004	1.219	0.026	0.1325	0.0016	0.08938	807	12	801.8	8.8	805	52	801.8	8.8	0.6	
U1456A-70F-2, 10-16 cm	27.675	279	1.629	1.275	0.019	0.1374	0.0014	0.44370	833.2	8.5	829.8	7.9	836	29	829.8	7.9	0.4	
U1456A-70F-2, 10-16 cm	24.329	242.7	1.355	1.552	0.031	0.1575	0.0024	0.65466	949	12	942	14	966	31	966.0	31.0	2.5	
U1456A-70F-2, 10-16 cm	29.499	955	0.575	5.690	0.170	0.2544	0.0076	0.85503	1923	27	1461	40	2497	20	DISC	DISC	41.5	
U1456A-70F-2, 10-16 cm	12.773	993	1.946	0.306	0.011	-0.0023	0.0001	0.64905	270.8	8.2	-14.72	0.37	367	61	DISC	DISC	105.4	
U1456A-70F-2, 10-16 cm	22.504	1283	39.200	1.776	0.047	0.1719	0.0039	0.81476	1032	17	1022	21	1069	32	1069.0	32.0	4.4	
U1456A-70F-2, 10-16 cm	23.114	1036	1.890	1.060	0.029	-0.0073	0.0005	0.01725	733	14	-47	3.2	830	36	DISC	DISC	106.4	
U1456A-70F-2, 10-16 cm	27.674	552	1.201	0.023	0.001	0.0034	0.0001	0.04980	23.3	1.2	21.57	0.48	190	100	21.6	0.5	7.4	
U1456A-70F-2, 10-16 cm	27.674	342	1.081	1.846	0.038	0.1746	0.0028	0.66613	1058	14	1037	15	1103	31	1103.0	31.0	6.0	
U1456A-70F-2, 10-16 cm	3.193	670	1.324	0.058	0.008	0.0069	0.0004	0.28078	57.3	7.3	44.5	2.8	590	300	DISC	DISC	22.3	
U1456A-70F-2, 10-16 cm	11.494	1720	0.933	0.018	0.001	0.0027	0.0001	0.42070	17.8	1.2	17.23	0.61	140	120	17.2	0.6	3.2	
U1456A-70F-2, 10-16 cm	11.769	183	1.531	1.770	0.057	0.1680	0.0046	0.59560	1031	21	1000	25	1112	55	1112.0	55.0	10.1	
U1456A-70F-2, 10-16 cm	13.377	109.8	3.920	0.917	0.035	0.1058	0.0025	0.67750	657	18	648	14	682	58	648.0	14.0	1.4	
U1456A-70F-2, 10-16 cm	23.944	839	1.520	9.980	0.260	0.4370	0.0100	0.86163	2423	25	2330	47	2519	22	2519.0	22.0	7.5	
U1456A-70F-2, 10-16 cm	27.674	74.1	0.542	0.693	0.026	0.0812	0.0018	0.48915	532	16	503	11	635	71	503.0	11.0	5.5	
U1456A-70F-2, 10-16 cm	24.980	442	1.255	0.094	0.004	-0.0019	0.0009	0.02950	90.6	3.9	-12.4	5.7	267	82	DISC	DISC	113.7	
U1456A-70F-2, 10-16 cm	12.548	405	1.518	0.093	0.007	0.0128	0.0006	0.49120	89.9	6.6	81.7	3.7	290	130	81.7	3.7	9.1	
U1456A-70F-2, 10-16 cm	25.395	165.4	1.513	0.088	0.005	0.0129	0.0003	0.10736	85.1	4.4	82.7	1.9	160	110	82.7	1.9	2.8	
U1456A-70F-2, 10-16 cm	28.297	348	0.814	0.090	0.004	0.0137	0.0003	0.41472	87.4	3.5	87.5	2.1	93	75	87.5	2.1	0.1	
U1456A-70F-2, 10-16 cm	19.178	150.8	0.404	3.112	0.074	0.2406	0.0050	0.56939	1431	18	1388	26	1496	41	1496.0	41.0	7.2	
U1456A-70F-2, 10-16 cm	2.280	450	1.268	0.592	0.033	0.0749	0.0019	0.31529	472	21	465	12	500	120	465.0	12.0	1.5	
U1456A-70F-2, 10-16 cm	9.024	665	1.010	1.488	0.069	0.1458	0.0031	0.40534	921	26	877	18	988	59	988.0	59.0	11.2	
U1456A-70F-2, 10-16 cm	3.223	770	1.664	4.090	0.270	0.2610	0.0150	0.90647	1646	54	1491	78	1849	56	1849.0	56.0	19.4	
U1456A-70F-2, 10-16 cm	27.674	280	1.142	1.878	0.031	0.1774	0.0027	0.62620	1071	11	1052	15	1112	27	1112.0	27.0	5.4	
U1456A-70F-2, 10-16 cm	26.224	285	0.998	1.090	0.024	0.1183	0.0024	0.82728	746	12	720	14	820	31	720.0	14.0	3.5	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456A-70F-2, 10-16 cm	27.939	362	25.800	0.065	0.004	0.0091	0.0003	0.49675	63.3	3.5	58.6	2.2	193	90	58.6	2.2	7.4	
U1456A-70F-2, 10-16 cm	27.674	242	2.030	5.278	0.070	0.3232	0.0037	0.79974	1864	11	1805	18	1921	14	1921.0	14.0	6.0	
U1456A-70F-2, 10-16 cm	14.620	169	1.007	1.510	0.040	0.1525	0.0030	0.55306	935	17	914	17	966	48	966.0	48.0	5.4	
U1456A-70F-2, 10-16 cm	16.069	262	1.285	0.905	0.018	0.1001	0.0018	0.59386	655	10	615	11	791	35	615.0	11.0	6.1	
U1456A-70F-2, 10-16 cm	15.862	833	1.330	1.530	0.057	0.1493	0.0042	0.71790	937	22	900	25	1020	52	1020.0	52.0	11.8	
U1456A-70F-2, 10-16 cm	10.268	2019	0.707	0.023	0.001	0.0034	0.0001	0.28679	23.4	1.1	22.12	0.57	146	91	22.1	0.6	5.5	
U1456A-70F-2, 10-16 cm	24.152	469	0.357	1.176	0.022	0.1291	0.0024	0.67633	788	10	782	14	806	31	782.0	14.0	0.8	
U1456A-70F-2, 10-16 cm	23.530	330	1.012	0.675	0.013	0.0831	0.0011	0.61248	522.8	7.9	514.8	6.8	542	39	514.8	6.8	1.5	
U1456A-70F-2, 10-16 cm	27.674	635	0.869	1.232	0.019	0.1343	0.0018	0.65741	813.6	8.7	812	10	811	25	812.0	10.0	0.2	
U1456A-70F-2, 10-16 cm	11.511	211.5	1.075	1.589	0.045	0.1556	0.0026	0.58023	964	17	932	15	1023	45	1023.0	45.0	8.9	
U1456A-70F-2, 10-16 cm	14.826	381	1.511	0.111	0.005	0.0164	0.0004	0.40281	107	4.4	104.7	2.8	152	85	104.7	2.8	2.1	
U1456A-70F-2, 10-16 cm	27.674	4140	3.290	0.012	0.000	0.0018	0.0000	0.43234	12.24	0.42	11.69	0.24	134	63	11.7	0.2	4.5	
U1456A-70F-2, 10-16 cm	12.547	164	1.890	1.490	0.069	0.1478	0.0030	0.66782	921	25	889	17	966	57	966.0	57.0	8.0	
U1456A-70F-2, 10-16 cm	27.674	696	0.809	0.043	0.002	0.0068	0.0001	0.24416	43.1	1.6	43.76	0.79	45	70	43.8	0.8	1.5	
U1456A-70F-2, 10-16 cm	27.261	165.5	1.200	1.188	0.025	0.1322	0.0022	0.74204	794	12	802	13	773	30	802.0	13.0	1.0	
U1456A-70F-2, 10-16 cm	9.740	1150	1.644	1.158	0.028	0.1138	0.0025	0.80518	780	13	694	15	1042	29	694.0	15.0	11.0	
U1456A-70F-2, 10-16 cm	27.675	283	1.131	4.800	0.130	0.3115	0.0075	0.86508	1777	23	1744	37	1818	24	1818.0	24.0	4.1	
U1456A-70F-2, 10-16 cm	2.901	1296	122.000	0.031	0.004	0.0044	0.0004	0.75855	30.9	3.5	28	2.4	260	160	28.0	2.4	9.4	
U1456A-70F-2, 10-16 cm	26.017	689	1.624	0.055	0.002	0.0085	0.0002	0.36930	54.4	2	54.4	1	103	68	54.4	1.0	0.0	
U1456A-70F-2, 10-16 cm	27.674	1616	10.110	0.598	0.011	0.0764	0.0013	0.73859	475.3	6.7	474.5	7.5	477	27	474.5	7.5	0.2	
U1456A-70F-2, 10-16 cm	14.826	545	2.621	0.932	0.025	0.1084	0.0022	0.72601	667	13	663	13	668	41	663.0	13.0	0.6	
U1456A-70F-2, 10-16 cm	16.691	769	9.120	2.902	0.090	0.2263	0.0066	0.85559	1376	23	1313	34	1493	29	1493.0	29.0	12.1	
U1456A-70F-2, 10-16 cm	17.935	534	0.831	12.130	0.290	0.4690	0.0110	0.61356	2609	22	2473	47	2732	32	2732.0	32.0	9.5	
U1456A-70F-2, 10-16 cm	7.159	470	1.937	3.730	0.110	0.2503	0.0079	0.72986	1576	24	1439	41	1765	42	1765.0	42.0	18.5	
U1456A-70F-2, 10-16 cm	26.638	323	1.280	0.577	0.015	0.0728	0.0017	0.59916	460.8	9.5	453	10	489	49	453.0	10.0	1.7	
U1456A-70F-2, 10-16 cm	25.187	170.7	1.090	2.172	0.039	0.1982	0.0028	0.61801	1169	12	1165	15	1176	27	1176.0	27.0	0.9	
U1456A-70F-2, 10-16 cm	27.674	224	20.300	0.698	0.019	0.0835	0.0018	0.51293	536	11	517	10	609	48	517.0	10.0	3.5	
U1456A-70F-2, 10-16 cm	27.674	1313	1.469	2.047	0.048	0.1880	0.0035	0.78397	1130	17	1109	19	1156	30	1156.0	30.0	4.1	
U1456A-70F-2, 10-16 cm	13.169	986	5.510	1.084	0.030	0.1149	0.0033	0.79448	744	14	701	19	861	39	701.0	19.0	5.8	
U1456A-70F-2, 10-16 cm	25.809	509	1.510	0.065	0.004	0.0097	0.0005	0.60790	63.2	3.8	62	2.9	133	93	62.0	2.9	1.9	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456A-70F-2, 10-16 cm	22.080	116.5	2.424	1.096	0.028	0.1214	0.0024	0.37923	752	15	738	14	760	56	738.0	14.0	1.9	Rim Core
U1456A-70F-2, 10-16 cm	22.908	1019	2.045	0.369	0.007	-0.0029	0.0002	0.02356	318.7	5.3	-18.8	1.1	434	37	DISC	DISC	105.9	
U1456A-70F-2, 10-16 cm	27.674	129.9	0.659	0.059	0.004	0.0084	0.0002	0.28099	58.1	4.2	54	1.4	200	130	54.0	1.4	7.1	
U1456A-70F-2, 10-16 cm	27.674	1044	2.796	1.348	0.023	0.1414	0.0019	0.64595	866	10	852	11	872	28	872.0	28.0	2.3	
U1456A-70F-2, 10-16 cm	20.007	525	2.066	8.960	0.230	0.4150	0.0093	0.74575	2330	23	2234	42	2406	30	2406.0	30.0	7.1	
U1456A-70F-2, 10-16 cm	4.766	215	1.795	0.712	0.058	0.0835	0.0053	0.73030	542	33	516	31	630	120	516.0	31.0	4.8	
U1456A-70F-2, 10-16 cm	20.007	179.8	2.725	1.482	0.035	0.1490	0.0028	0.69129	925	14	895	16	964	37	964.0	37.0	7.2	
U1456A-70F-2, 10-16 cm	27.675	385	1.457	0.113	0.004	0.0168	0.0004	0.24742	108	3.6	107.2	2.3	128	69	107.2	2.3	0.7	
U1456A-70F-2, 10-16 cm	15.448	374	1.065	2.114	0.061	0.1953	0.0045	0.74440	1153	19	1149	25	1136	38	1136.0	38.0	1.1	
U1456A-70F-2, 10-16 cm	27.674	2520	0.767	1.288	0.023	0.1365	0.0020	0.82166	839	10	825	12	857	22	825.0	12.0	1.7	
U1457C-31R-1, 94-100 cm	27.674	354	0.984	5.475	0.049	0.3430	0.0031	0.81701	1896	7.7	1900	15	1866	12	1866.0	12.0	1.8	Rim Core
U1457C-31R-1, 94-100 cm	8.874	371.6	3.840	0.836	0.023	0.0982	0.0020	0.61468	616	13	604	12	639	52	604.0	12.0	1.9	
U1457C-31R-1, 94-100 cm	7.984	340	1.340	1.690	0.038	0.1682	0.0029	0.82446	1003	14	1002	16	981	27	981.0	27.0	2.1	
U1457C-31R-1, 94-100 cm	26.565	6940	7.076	0.013	0.000	0.0019	0.0000	0.24127	12.82	0.25	12.15	0.13	110	41	12.2	0.1	5.2	
U1457C-31R-1, 94-100 cm	15.472	746	0.979	1.165	0.023	0.1052	0.0015	0.36862	783	11	644.8	8.5	1168	38	DISC	DISC	17.7	
U1457C-31R-1, 94-100 cm	27.675	1119	0.832	0.049	0.001	0.0075	0.0001	0.11565	48.6	1.2	48.19	0.53	85	51	48.2	0.5	0.8	
U1457C-31R-1, 94-100 cm	12.699	34.1	0.510	0.150	0.019	0.0212	0.0009	0.05884	140	17	135.3	5.5	210	230	135.3	5.5	3.4	
U1457C-31R-1, 94-100 cm	4.437	355	15.600	0.585	0.039	0.0683	0.0046	0.66295	466	25	426	27	670	110	426.0	27.0	8.6	
U1457C-31R-1, 94-100 cm	22.682	150.4	2.410	0.891	0.021	0.1012	0.0016	0.52574	645	11	621.4	9.2	737	42	621.4	9.2	3.7	
U1457C-31R-1, 94-100 cm	26.720	590	1.387	0.122	0.003	0.0185	0.0003	0.34804	116.4	2.6	118.1	1.9	113	48	118.1	1.9	1.5	
U1457C-31R-1, 94-100 cm	27.356	3070	49.500	0.121	0.002	0.0178	0.0002	0.72091	115.8	2	113.6	1.4	173	29	113.6	1.4	1.9	Rim Core
U1457C-31R-1, 94-100 cm	27.674	268.2	1.771	0.319	0.007	0.0433	0.0005	0.06268	280.7	5.3	272.9	2.9	353	49	272.9	2.9	2.8	
U1457C-31R-1, 94-100 cm	27.675	1030	0.884	0.129	0.003	0.0189	0.0003	0.34476	122.8	2.8	120.5	1.9	190	50	120.5	1.9	1.9	
U1457C-31R-1, 94-100 cm	21.630	401	0.698	0.121	0.005	0.0179	0.0004	0.27868	115.8	4	114.6	2.7	164	74	114.6	2.7	1.0	
U1457C-31R-1, 94-100 cm	26.402	57.3	0.407	1.256	0.034	0.1389	0.0017	0.33720	824	16	837.9	9.8	760	53	837.9	9.8	1.7	
U1457C-31R-1, 94-100 cm	21.950	776	1.705	0.124	0.003	0.0185	0.0002	0.22117	118.9	2.5	118.4	1.5	151	49	118.4	1.5	0.4	
U1457C-31R-1, 94-100 cm	27.674	486	1.629	0.116	0.003	0.0172	0.0003	0.34065	110.8	2.9	109.6	1.8	150	56	109.6	1.8	1.1	
U1457C-31R-1, 94-100 cm	5.408	3210	3.340	0.131	0.006	0.0192	0.0008	0.65559	124.9	5.4	122.5	5.1	182	81	122.5	5.1	1.9	
U1457C-31R-1, 94-100 cm	15.587	262	0.845	0.119	0.005	0.0175	0.0003	0.08406	114.1	4.9	111.6	1.9	195	96	111.6	1.9	2.2	
U1457C-31R-1, 94-100 cm	27.674	192	0.501	0.059	0.004	0.0093	0.0002	0.06902	58.2	3.5	59.5	0.99	50	110	59.5	1.0	2.2	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-31R-1, 94-100 cm	23.858	1017	17.320	1.162	0.020	0.1192	0.0021	0.78876	781.2	9.6	726	12	967	23	726.0	12.0	7.1	
U1457C-31R-1, 94-100 cm	27.675	1380	7.000	0.234	0.005	0.0340	0.0006	0.55196	213.1	3.8	215.2	3.8	203	36	215.2	3.8	1.0	
U1457C-31R-1, 94-100 cm	17.813	304	0.896	1.719	0.045	0.1706	0.0037	0.81225	1015	16	1015	20	1025	27	1025.0	27.0	1.0	
U1457C-31R-1, 94-100 cm	17.496	558	16.100	1.749	0.023	0.1724	0.0017	0.61412	1026	8.5	1025	9.1	1032	21	1032.0	21.0	0.7	
U1457C-31R-1, 94-100 cm	2.227	648	108.000	0.025	0.003	0.0035	0.0005	0.43168	24.7	3.3	22.5	3.3	280	260	DISC	DISC	8.9	Rim
U1457C-31R-1, 94-100 cm	18.132	579	0.899	1.285	0.023	0.1362	0.0023	0.71516	838	10	823	13	880	27	823.0	13.0	1.8	Core
U1457C-31R-1, 94-100 cm	26.402	759	7.760	0.574	0.008	0.0717	0.0008	0.66304	460.6	5.2	446.1	4.8	531	24	446.1	4.8	3.1	
U1457C-31R-1, 94-100 cm	27.674	1970	6.660	0.129	0.003	0.0180	0.0003	0.51976	123.3	2.7	114.8	2.1	281	45	114.8	2.1	6.9	
U1457C-31R-1, 94-100 cm	2.227	970	130.000	0.032	0.005	0.0047	0.0007	0.44404	31.7	4.8	29.9	4.4	190	320	DISC	DISC	5.7	Rim
U1457C-31R-1, 94-100 cm	18.451	918	105.000	1.335	0.028	0.1321	0.0021	0.63407	861	13	800	12	1024	31	800.0	12.0	7.1	Core
U1457C-31R-1, 94-100 cm	6.680	932	3.410	1.688	0.058	0.1665	0.0053	0.76991	1002	22	992	29	1025	40	1025.0	40.0	3.2	Rim
U1457C-31R-1, 94-100 cm	13.042	847	0.594	2.708	0.033	0.2185	0.0021	0.66329	1330	9.1	1274	11	1409	18	1409.0	18.0	9.6	Core
U1457C-31R-1, 94-100 cm	25.448	822	1.937	9.683	0.079	0.4589	0.0042	0.51503	2404	7.5	2434	19	2377	15	2377.0	15.0	2.4	
U1457C-31R-1, 94-100 cm	24.811	666	1.339	9.760	0.110	0.4580	0.0058	0.68838	2410	10	2437	26	2373	18	2373.0	18.0	2.7	
U1457C-31R-1, 94-100 cm	24.811	167	0.721	1.185	0.024	0.1348	0.0019	0.39094	792	11	815	11	701	41	815.0	11.0	2.9	
U1457C-31R-1, 94-100 cm	20.358	418.3	1.166	3.611	0.045	0.2678	0.0031	0.68483	1551	9.8	1529	16	1567	18	1567.0	18.0	2.4	
U1457C-31R-1, 94-100 cm	25.130	140.1	0.820	0.086	0.005	0.0129	0.0003	0.22871	83	4.8	82.3	1.6	110	110	82.3	1.6	0.8	
U1457C-31R-1, 94-100 cm	27.674	327	1.649	0.713	0.011	0.0884	0.0008	0.30282	546	6.5	546.2	4.4	532	33	546.2	4.4	0.0	
U1457C-31R-1, 94-100 cm	27.675	228	3.170	0.121	0.004	0.0182	0.0003	0.01748	115.4	3.5	116	1.6	120	69	116.0	1.6	0.5	
U1457C-31R-1, 94-100 cm	7.634	402	4.070	0.634	0.013	0.0815	0.0009	0.35005	498.3	8.2	505.2	5.4	459	45	505.2	5.4	1.4	Rim
U1457C-31R-1, 94-100 cm	13.678	482	0.991	4.784	0.052	0.3066	0.0025	0.59994	1781	9.2	1724	12	1848	16	1848.0	16.0	6.7	Core
U1457C-31R-1, 94-100 cm	25.130	217	1.610	1.435	0.022	0.1541	0.0017	0.41470	902	9.2	923.6	9.7	853	30	853.0	30.0	8.3	
U1457C-31R-1, 94-100 cm	26.084	279.2	0.362	1.269	0.018	0.1385	0.0009	0.40057	830.9	7.7	836.2	4.9	820	25	836.2	4.9	0.6	
U1457C-31R-1, 94-100 cm	18.769	232.9	2.130	1.769	0.023	0.1777	0.0012	0.27402	1033	8.5	1054	6.4	995	26	995.0	26.0	6.0	
U1457C-31R-1, 94-100 cm	9.224	476	2.710	6.460	0.200	0.3720	0.0110	0.76930	2036	27	2036	50	2049	37	2049.0	37.0	0.6	
U1457C-31R-1, 94-100 cm	6.682	1240	2.060	1.474	0.062	0.1402	0.0052	0.54298	917	25	845	29	1108	76	845.0	29.0	7.9	
U1457C-31R-1, 94-100 cm	5.453	3950	0.619	0.101	0.004	0.0126	0.0003	0.68907	98	3.9	80.4	2.2	539	65	DISC	DISC	18.0	
U1457C-31R-1, 94-100 cm	18.451	485	0.390	1.915	0.031	0.1785	0.0025	0.56753	1085	11	1059	14	1129	28	1129.0	28.0	6.2	
U1457C-31R-1, 94-100 cm	25.766	2919	2.420	1.296	0.011	0.1360	0.0010	0.61022	843.6	4.9	821.9	5.9	879	15	821.9	5.9	2.6	
U1457C-31R-1, 94-100 cm	10.817	203	2.105	0.853	0.026	0.1003	0.0026	0.72162	625	14	619	14	619	49	619.0	14.0	1.0	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-31R-1, 94-100 cm	12.725	2369	1.556	0.587	0.013	0.0720	0.0017	0.81255	468.4	8.6	448	10	530	27	448.0	10.0	4.4	Core
U1457C-31R-1, 94-100 cm	11.770	1870	1.660	0.177	0.004	0.0256	0.0003	0.35586	165.2	3.2	163.1	1.9	135	43	163.1	1.9	1.3	
U1457C-31R-1, 94-100 cm	20.358	390	1.127	1.144	0.017	0.1237	0.0013	0.05581	773.3	8.1	752	7.3	786	31	752.0	7.3	2.8	
U1457C-31R-1, 94-100 cm	24.493	305	0.829	1.198	0.014	0.1308	0.0013	0.43178	799.9	6.8	792.6	7.2	768	24	792.6	7.2	0.9	
U1457C-31R-1, 94-100 cm	5.726	262	2.390	5.300	0.180	0.3320	0.0120	0.73390	1866	29	1846	60	1852	36	1852.0	36.0	0.3	
U1457C-31R-1, 94-100 cm	10.816	1219	5.460	0.930	0.019	0.1062	0.0018	0.84956	667.1	9.9	651	11	684	28	651.0	11.0	2.4	
U1457C-31R-1, 94-100 cm	23.857	1132	3.990	10.490	0.140	0.4130	0.0055	0.88762	2477	12	2227	25	2668	9.9	2667.7	9.9	16.5	
U1457C-31R-1, 94-100 cm	22.586	229.2	0.907	2.232	0.033	0.2014	0.0019	0.52568	1190	10	1183	10	1174	24	1174.0	24.0	0.8	
U1457C-31R-1, 94-100 cm	2.547	199	0.735	1.211	0.074	0.1269	0.0043	0.51907	804	33	770	24	880	100	770.0	24.0	4.2	
U1457C-31R-1, 94-100 cm	26.085	1272	1.540	0.019	0.001	0.0029	0.0000	0.00536	19.47	0.74	18.91	0.28	97	77	18.9	0.3	2.9	
U1457C-31R-1, 94-100 cm	27.674	1274	2.920	1.674	0.025	0.1690	0.0021	0.74557	997	9.8	1006	12	991	22	991.0	22.0	1.5	Core
U1457C-31R-1, 94-100 cm	27.674	358.8	0.756	1.275	0.013	0.1422	0.0010	0.36278	834	5.8	857.2	5.8	804	21	804.0	5.8	2.8	
U1457C-31R-1, 94-100 cm	7.316	1260	10.700	1.722	0.057	0.1673	0.0039	0.78771	1015	21	997	22	1087	41	1087.0	41.0	8.3	
U1457C-31R-1, 94-100 cm	10.499	328.1	2.465	3.296	0.054	0.2545	0.0031	0.77182	1479	13	1462	16	1539	20	1539.0	20.0	5.0	
U1457C-31R-1, 94-100 cm	27.674	670	0.438	0.067	0.002	0.0102	0.0002	0.17216	65.5	2	65.2	1	135	65	65.2	1.0	0.5	
U1457C-31R-1, 94-100 cm	23.857	237	2.679	1.703	0.024	0.1760	0.0016	0.57927	1008	8.8	1045	8.9	964	22	964.0	22.0	8.4	
U1457C-31R-1, 94-100 cm	21.630	120.2	0.689	0.842	0.020	0.1017	0.0013	0.20824	620	11	624	7.6	624	53	624.0	7.6	0.6	
U1457C-31R-1, 94-100 cm	27.674	453	6.230	0.615	0.008	0.0801	0.0006	0.42372	485.9	4.8	496.6	3.7	447	26	496.6	3.7	2.2	
U1457C-31R-1, 94-100 cm	11.135	1553	1.110	0.072	0.002	0.0108	0.0002	0.19372	70.3	2.1	69.2	1.2	135	70	69.2	1.2	1.6	
U1457C-31R-1, 94-100 cm	25.766	725	4.537	9.540	0.120	0.4452	0.0050	0.73779	2389	11	2372	22	2419	13	2419.0	13.0	1.9	
U1457C-31R-1, 94-100 cm	20.994	805	124.000	0.581	0.010	0.0744	0.0008	0.42437	464.6	6.1	462.5	4.5	478	33	462.5	4.5	0.5	Core
U1457C-31R-1, 94-100 cm	27.674	4900	1.215	0.084	0.001	0.0128	0.0002	0.58700	82.3	1.3	82.1	1.1	88	30	82.1	1.1	0.2	
U1457C-31R-1, 94-100 cm	2.545	781	26.100	0.034	0.005	0.0043	0.0004	0.42769	33.5	5.1	27.6	2.4	440	300	DISC	DISC	17.6	
U1457C-31R-1, 94-100 cm	11.135	1158	6.420	1.354	0.030	0.1215	0.0022	0.73203	868	13	739	12	1213	30	739.0	12.0	14.9	
U1457C-31R-1, 94-100 cm	17.177	285.7	2.615	0.486	0.013	0.0626	0.0008	0.21899	401.4	8.5	391.4	4.6	449	57	391.4	4.6	2.5	
U1457C-31R-1, 94-100 cm	14.951	146	1.940	1.559	0.036	0.1639	0.0030	0.46972	952	14	978	16	892	41	892.0	41.0	9.6	
U1457C-31R-1, 94-100 cm	13.997	249.4	2.316	0.778	0.015	0.0938	0.0014	0.09791	583.8	8.8	577.7	8.1	606	50	577.7	8.1	1.0	
U1457C-31R-1, 94-100 cm	6.998	304	0.774	2.840	0.140	0.2080	0.0087	0.93086	1359	38	1217	47	1597	34	1597.0	34.0	23.8	
U1457C-31R-1, 94-100 cm	5.091	1889	15.780	0.117	0.006	0.0169	0.0005	0.37993	112	5.4	107.9	3.3	200	100	107.9	3.3	3.7	
U1457C-31R-1, 94-100 cm	6.044	353	1.099	2.749	0.049	0.2150	0.0045	0.78044	1341	13	1255	24	1480	25	1480.0	25.0	15.2	Core

Table 3

									207/235		206/238		207/206					
	Duration				2σ				Age	2σ	Age	2σ	Age	2σ	Best age	2σ	%	Rim/C
Sample Name	(s)	[U] ppm	U/Th	207/235	error	206/238	2σ error	RHO	(Ma)	error	(Ma)	error	(Ma)	error	(Ma)	error	Discordance*	ore
U1457C-31R-1, 94-100 cm	4.135	383	5.040	0.451	0.029	0.0547	0.0027	0.34445	377	20	343	17	570	120	343.0	17.0	9.0	
U1457C-31R-1, 94-100 cm	27.675	763	0.707	1.915	0.025	0.1825	0.0019	0.70729	1085	8.7	1080	11	1096	19	1096.0	19.0	1.5	
U1457C-31R-1, 94-100 cm	12.089	794	15.000	1.066	0.020	0.1184	0.0023	0.70122	736	10	721	13	777	32	721.0	13.0	2.0	
U1457C-31R-1, 94-100 cm	7.316	626	1.738	1.681	0.050	0.1629	0.0044	0.88343	1000	19	973	24	1046	34	1046.0	34.0	7.0	
U1457C-31R-1, 94-100 cm	13.042	1015	2.401	1.601	0.026	0.1608	0.0022	0.67218	970	10	961	12	985	25	985.0	25.0	2.4	
U1457C-31R-1, 94-100 cm	27.674	669	0.711	0.183	0.004	0.0267	0.0003	0.33036	170.7	3.5	169.7	1.6	195	47	169.7	1.6	0.6	
U1457C-31R-1, 94-100 cm	27.674	341	1.485	0.330	0.007	0.0469	0.0006	0.45330	289.3	5	295.4	3.9	228	43	295.4	3.9	2.1	
U1457C-31R-1, 94-100 cm	27.675	1640	4.120	0.656	0.009	0.0820	0.0009	0.62299	511.8	5.4	507.8	5.6	523	24	507.8	5.6	0.8	
U1457C-31R-1, 94-100 cm	23.857	857	4.020	0.900	0.014	0.1075	0.0015	0.73992	650.6	7.6	657.8	8.6	627	23	657.8	8.6	1.1	
U1457C-31R-1, 94-100 cm	14.316	2030	2.430	0.123	0.004	0.0184	0.0003	0.03581	118.6	3.7	117.6	1.9	120	71	117.6	1.9	0.8	
U1457C-31R-1, 94-100 cm	11.770	901	6.380	0.428	0.010	0.0554	0.0009	0.56174	361.1	6.8	347.7	5.2	460	42	347.7	5.2	3.7	
U1457C-31R-1, 94-100 cm	17.495	978	1.750	1.238	0.016	0.1320	0.0015	0.70364	817.4	7.2	799.2	8.6	876	20	799.2	8.6	2.2	
U1457C-31R-1, 94-100 cm	17.814	1304	3.190	0.116	0.003	0.0174	0.0003	0.28445	111.2	2.3	111.1	1.8	129	48	111.1	1.8	0.1	
U1457C-31R-1, 94-100 cm	10.815	220	1.382	0.625	0.040	0.0249	0.0008	0.45065	488	25	158.3	5.1	2686	86	DISC	DISC	67.6	Rim
U1457C-31R-1, 94-100 cm	12.724	107.3	1.467	0.720	0.032	0.0748	0.0021	0.02390	548	19	465	13	900	110	DISC	DISC	15.1	Core
U1457C-31R-1, 94-100 cm	16.541	2420	1.550	0.039	0.001	0.0058	0.0001	0.17940	38.4	1	37.59	0.41	113	56	37.6	0.4	2.1	
U1457C-31R-1, 94-100 cm	27.675	101.9	0.564	0.064	0.005	0.0108	0.0003	0.03479	63	4.5	69.5	1.6	-100	120	69.5	1.6	10.3	
U1457C-31R-1, 94-100 cm	27.674	533	2.320	5.513	0.080	0.3510	0.0044	0.83166	1903	12	1941	21	1874	15	1874.0	15.0	3.6	
U1457C-31R-1, 94-100 cm	27.674	1225	0.786	0.072	0.002	0.0107	0.0001	0.41221	70.4	1.8	68.61	0.91	154	51	68.6	0.9	2.5	
U1457C-31R-1, 94-100 cm	17.496	414	1.079	2.774	0.050	0.2280	0.0034	0.83730	1346	14	1323	18	1400	18	1400.0	18.0	5.5	
U1457C-31R-1, 94-100 cm	28.946	400	0.741	0.957	0.014	0.1053	0.0012	0.55439	680.9	7.3	645	7.2	811	25	645.0	7.2	5.3	
U1457C-31R-1, 94-100 cm	27.674	473	1.831	0.121	0.003	0.0185	0.0003	0.06953	116.3	3	118.2	1.6	108	62	118.2	1.6	1.6	
U1457C-31R-1, 94-100 cm	27.674	2029	3.520	0.651	0.010	0.0825	0.0012	0.69005	508.3	6.4	511	7	496	27	511.0	7.0	0.5	
U1457C-31R-1, 94-100 cm	14.952	1452	0.991	1.123	0.010	0.1151	0.0007	0.56522	764.3	5	702.1	4.2	960	16	702.1	4.2	8.1	
U1457C-31R-1, 94-100 cm	27.674	130.5	0.518	0.052	0.004	0.0080	0.0002	0.00452	50.8	3.3	51.4	1.1	70	130	51.4	1.1	1.2	
U1457C-31R-1, 94-100 cm	27.675	630	3.470	0.111	0.003	0.0170	0.0002	0.16014	106.9	2.3	108.8	1.2	103	47	108.8	1.2	1.8	
U1457C-31R-1, 94-100 cm	24.811	98	1.301	1.266	0.028	0.1412	0.0016	0.42511	828	13	851.3	9.2	790	43	790.0	9.2	2.8	
U1457C-31R-1, 94-100 cm	22.586	409	2.179	0.658	0.009	0.0843	0.0009	0.38844	512.7	5.7	521.8	5.1	498	31	521.8	5.1	1.8	
U1457C-31R-1, 94-100 cm	8.270	493	2.360	0.711	0.018	0.0878	0.0012	0.68574	545	11	542.7	6.8	567	41	542.7	6.8	0.4	Rim
U1457C-31R-1, 94-100 cm	15.269	588	1.108	2.007	0.016	0.1920	0.0014	0.32950	1118	5.5	1132	7.7	1120	18	1120.0	18.0	1.1	Core

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1457C-31R-1, 94-100 cm	27.674	217.3	1.960	1.558	0.028	0.1619	0.0023	0.51988	953	11	967	13	947	32	947.0	32.0	2.1	Rim Core
U1457C-31R-1, 94-100 cm	16.223	248	1.806	9.690	0.150	0.4394	0.0053	0.85028	2403	15	2347	24	2475	14	2475.0	14.0	5.2	
U1457C-31R-1, 94-100 cm	30.219	336	3.620	0.645	0.028	0.0822	0.0031	0.89913	500	17	508	19	488	38	508.0	19.0	1.6	
U1457C-31R-1, 94-100 cm	27.674	2110	1.320	0.018	0.001	0.0029	0.0000	0.03520	18.36	0.6	18.45	0.25	50	69	18.5	0.3	0.5	
U1457C-31R-1, 94-100 cm	6.999	751	3.770	0.644	0.016	0.0830	0.0016	0.33587	504.3	9.7	513.7	9.5	463	56	513.7	9.5	1.9	
U1457C-31R-1, 94-100 cm	5.851	900	2.000	0.122	0.010	0.0181	0.0006	0.10162	116.7	8.6	115.3	3.9	150	160	115.3	3.9	1.2	
U1457C-31R-1, 94-100 cm	13.165	127.1	2.080	7.650	0.220	0.3505	0.0091	0.74138	2185	26	1935	43	2435	34	2435.0	34.0	20.5	
U1457C-31R-1, 94-100 cm	27.675	661	1.480	0.111	0.004	0.0168	0.0003	0.35107	106.9	3.7	107.4	1.8	103	66	107.4	1.8	0.5	
U1457C-31R-1, 94-100 cm	25.568	860	1.750	0.322	0.008	0.0454	0.0010	0.59663	283.6	6.3	286	5.9	254	46	286.0	5.9	0.8	
U1457C-31R-1, 94-100 cm	27.674	180	0.871	0.061	0.004	0.0094	0.0002	0.04967	59.7	3.9	60.1	1.3	60	120	60.1	1.3	0.7	
U1457C-31R-1, 94-100 cm	27.675	195.9	1.167	0.107	0.005	0.0158	0.0004	0.16914	102.9	4.2	101.2	2.5	162	90	101.2	2.5	1.7	
U1457C-31R-1, 94-100 cm	27.674	89.8	0.951	11.010	0.170	0.4762	0.0075	0.74810	2520	15	2508	33	2532	19	2532.0	19.0	0.9	
U1457C-31R-1, 94-100 cm	22.759	366	1.363	0.113	0.005	0.0165	0.0003	0.36309	108.6	4.1	105.1	2.1	186	75	105.1	2.1	3.2	
U1457C-31R-1, 94-100 cm	27.674	333	1.595	0.117	0.005	0.0172	0.0003	0.11268	112	4.3	109.8	1.8	162	80	109.8	1.8	2.0	
U1457C-31R-1, 94-100 cm	22.525	375	1.140	0.126	0.005	0.0180	0.0003	0.11869	119.9	4.3	115.3	2.1	216	81	115.3	2.1	3.8	
U1457C-31R-1, 94-100 cm	13.632	947	1.221	0.638	0.016	-0.0043	0.0001	0.62151	500	10	-28.02	0.58	567	47	DISC	DISC	105.6	
U1457C-33R-3, 10-17 cm	27.675	63.7	1.381	0.063	0.007	0.0085	0.0004	0.06741	62.3	6.8	54.5	2.3	230	200	54.5	2.3	12.5	
U1457C-33R-3, 10-17 cm	26.057	287	10.130	0.758	0.018	0.0907	0.0017	0.53796	571	10	560	10	600	46	560.0	10.0	1.9	
U1457C-33R-3, 10-17 cm	12.300	422	20.570	1.719	0.045	0.1573	0.0027	0.35497	1013	17	941	15	1159	51	1159.0	51.0	18.8	
U1457C-33R-3, 10-17 cm	21.201	183.5	0.332	2.127	0.043	0.1965	0.0034	0.61612	1155	14	1156	18	1140	32	1140.0	32.0	1.4	
U1457C-33R-3, 10-17 cm	12.300	975	1.342	0.992	0.035	0.1081	0.0038	0.74590	697	18	661	22	803	51	661.0	22.0	5.2	
U1457C-33R-3, 10-17 cm	19.314	460	64.500	0.041	0.002	0.0061	0.0002	0.25511	40.3	2.4	39.2	1.1	120	120	39.2	1.1	2.7	
U1457C-33R-3, 10-17 cm	10.681	134.4	0.377	6.620	0.180	0.3789	0.0099	0.85280	2058	23	2069	47	2033	26	2033.0	26.0	1.8	
U1457C-33R-3, 10-17 cm	1.809	4740	33.500	0.487	0.036	0.0601	0.0042	0.61057	402	25	376	25	540	140	376.0	25.0	6.5	
U1457C-33R-3, 10-17 cm	21.201	477	0.887	1.352	0.030	0.1191	0.0023	0.73938	866	13	725	13	1226	30	DISC	DISC	16.3	
U1457C-33R-3, 10-17 cm	20.661	270	1.160	1.496	0.035	0.1511	0.0029	0.61060	926	14	906	16	959	37	959.0	37.0	5.5	
U1457C-33R-3, 10-17 cm	18.234	355	5.750	5.075	0.082	0.3289	0.0051	0.74761	1830	14	1832	25	1809	19	1809.0	19.0	1.3	
U1457C-33R-3, 10-17 cm	15.536	826	1.310	4.435	0.086	0.2840	0.0060	0.87189	1716	16	1610	30	1839	21	1839.0	21.0	12.5	
U1457C-33R-3, 10-17 cm	27.675	214	0.427	0.086	0.005	0.0125	0.0003	0.09115	83.5	4.5	79.9	2	180	110	79.9	2.0	4.3	
U1457C-33R-3, 10-17 cm	27.675	255	1.635	5.051	0.077	0.3215	0.0045	0.79840	1825	13	1796	22	1867	17	1867.0	17.0	3.8	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1457C-33R-3, 10-17 cm	10.951	608	1.139	1.159	0.043	0.1078	0.0036	0.67571	779	21	659	21	1183	55	DISC	DISC	15.4	Rim Core
U1457C-33R-3, 10-17 cm	14.458	1425	9.510	0.601	0.014	0.0675	0.0015	0.75040	477.2	8.6	421.1	8.9	787	30	421.1	8.9	11.8	
U1457C-33R-3, 10-17 cm	18.503	348	0.627	1.435	0.037	0.1452	0.0034	0.60908	901	15	873	19	985	45	985.0	45.0	11.4	
U1457C-33R-3, 10-17 cm	27.675	50.2	1.728	1.250	0.110	0.1209	0.0031	0.41576	779	32	735	18	910	100	735.0	18.0	5.6	
U1457C-33R-3, 10-17 cm	27.674	826	1.239	0.047	0.002	0.0071	0.0002	0.36021	46.3	1.7	45.7	1.1	123	72	45.7	1.1	1.3	
U1457C-33R-3, 10-17 cm	27.674	184	1.013	0.323	0.010	0.0457	0.0008	0.22561	282.8	7.8	288	4.9	266	67	288.0	4.9	1.8	
U1457C-33R-3, 10-17 cm	19.853	122.8	1.131	1.274	0.046	0.1292	0.0021	0.11746	829	20	783	12	943	62	783.0	12.0	5.5	
U1457C-33R-3, 10-17 cm	23.628	2820	0.822	0.096	0.003	0.0141	0.0004	0.72850	92.7	2.3	90.1	2.2	182	40	90.1	2.2	2.8	
U1457C-33R-3, 10-17 cm	18.773	321.4	1.971	0.055	0.003	0.0083	0.0002	0.21980	54.1	3	53.1	1.6	120	110	53.1	1.6	1.8	
U1457C-33R-3, 10-17 cm	27.675	581	0.693	0.124	0.004	0.0168	0.0003	0.34724	119.3	3.7	107.4	2.1	361	68	107.4	2.1	10.0	
U1457C-33R-3, 10-17 cm	16.076	136.4	0.934	2.628	0.087	0.2083	0.0051	0.58973	1302	24	1219	27	1466	50	1466.0	50.0	16.8	
U1457C-33R-3, 10-17 cm	27.674	705	4.810	0.960	0.014	0.1099	0.0016	0.66029	682.4	7.5	672	9.3	720	25	672.0	9.3	1.5	
U1457C-33R-3, 10-17 cm	19.313	227.1	0.881	18.860	0.340	0.5720	0.0110	0.67300	3031	17	2911	45	3117	24	3117.0	24.0	6.6	
U1457C-33R-3, 10-17 cm	27.675	251.9	1.199	1.102	0.020	0.1217	0.0016	0.47222	753.9	9.9	739.8	9.2	796	35	739.8	9.2	1.9	
U1457C-33R-3, 10-17 cm	16.346	577	2.450	1.955	0.055	0.1833	0.0047	0.80823	1096	19	1084	26	1131	33	1131.0	33.0	4.2	
U1457C-33R-3, 10-17 cm	9.603	932	29.500	1.284	0.029	0.1365	0.0026	0.58662	837	13	824	15	871	40	824.0	15.0	1.6	
U1457C-33R-3, 10-17 cm	5.395	162	2.392	3.380	0.200	0.2610	0.0092	0.80195	1492	47	1494	48	1517	66	1517.0	66.0	1.5	
U1457C-33R-3, 10-17 cm	23.629	604.5	5.170	5.853	0.087	0.3055	0.0046	0.75482	1952	13	1717	23	2211	17	2211.0	17.0	22.3	
U1457C-33R-3, 10-17 cm	21.201	673	1.072	0.864	0.021	0.0920	0.0022	0.85769	630	11	567	13	855	26	567.0	13.0	10.0	
U1457C-33R-3, 10-17 cm	27.675	97.2	1.254	1.459	0.041	0.1617	0.0035	0.63642	908	17	965	19	749	44	749.0	19.0	6.3	
U1457C-33R-3, 10-17 cm	14.997	248	0.715	1.030	0.026	0.1076	0.0022	0.50475	717	13	659	13	893	50	659.0	13.0	8.1	
U1457C-33R-3, 10-17 cm	19.852	258.9	9.590	4.574	0.060	0.3069	0.0038	0.70202	1743	11	1725	19	1755	19	1755.0	19.0	1.7	
U1457C-33R-3, 10-17 cm	27.674	196.5	1.174	1.174	0.022	0.1302	0.0017	0.60964	786	10	788.8	9.5	758	32	788.8	9.5	0.4	
U1457C-33R-3, 10-17 cm	13.379	287	1.040	0.974	0.027	0.1117	0.0026	0.52126	689	14	682	15	698	53	682.0	15.0	1.0	
U1457C-33R-3, 10-17 cm	21.202	293	2.020	15.580	0.830	0.4290	0.0220	0.82535	2810	55	2280	100	3249	54	3249.0	54.0	29.8	
U1457C-33R-3, 10-17 cm	14.458	477	4.850	0.598	0.015	0.0749	0.0014	0.55262	475.3	9.6	465.6	8.6	506	55	465.6	8.6	2.0	
U1457C-33R-3, 10-17 cm	27.675	429	1.920	0.790	0.015	0.0957	0.0012	0.50737	590.1	8.4	588.9	7.1	590	34	588.9	7.1	0.2	
U1457C-33R-3, 10-17 cm	27.674	480	1.370	1.845	0.033	0.1795	0.0036	0.77914	1059	12	1063	20	1052	26	1052.0	26.0	1.0	
U1457C-33R-3, 10-17 cm	27.675	82.6	0.509	5.960	0.230	0.3290	0.0110	0.74620	1955	32	1824	51	2109	45	2109.0	45.0	13.5	
U1457C-33R-3, 10-17 cm	21.201	1634	1.378	0.020	0.001	0.0032	0.0001	0.33125	20.54	0.99	20.44	0.53	71	90	20.4	0.5	0.5	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-33R-3, 10-17 cm	27.675	98.6	1.236	0.068	0.007	0.0092	0.0003	0.05566	65.8	6.1	59.2	1.9	260	180	59.2	1.9	10.0	
U1457C-33R-3, 10-17 cm	19.044	539	1.409	1.433	0.026	0.1411	0.0024	0.66875	901	11	851	14	1029	29	1029.0	29.0	17.3	
U1457C-33R-3, 10-17 cm	17.694	266	1.357	7.720	0.170	0.3943	0.0071	0.83229	2194	20	2141	33	2244	24	2244.0	24.0	4.6	
U1457C-33R-3, 10-17 cm	19.853	784	4.680	0.119	0.003	0.0175	0.0004	0.44012	114.5	3.2	112	2.2	151	58	112.0	2.2	2.2	
U1457C-33R-3, 10-17 cm	16.885	1772	7.610	1.282	0.026	0.1326	0.0024	0.78890	836	12	802	13	922	26	802.0	13.0	4.1	
U1457C-33R-3, 10-17 cm	25.246	122.5	1.420	1.249	0.031	0.1309	0.0020	0.60216	820	14	793	12	884	45	793.0	12.0	3.3	
U1457C-33R-3, 10-17 cm	26.595	869	3.670	5.182	0.070	0.3112	0.0037	0.83859	1847	11	1746	18	1957	13	1957.0	13.0	10.8	
U1457C-33R-3, 10-17 cm	27.675	1347	2.610	0.121	0.003	0.0178	0.0003	0.62319	115.6	2.5	113.4	1.7	150	40	113.4	1.7	1.9	
U1457C-33R-3, 10-17 cm	23.089	36.7	0.587	1.109	0.049	0.1249	0.0033	0.21041	755	25	758	19	710	100	758.0	19.0	0.4	
U1457C-33R-3, 10-17 cm	16.616	1610	4.910	1.807	0.036	0.1681	0.0030	0.79254	1046	13	1001	17	1138	25	1138.0	25.0	12.0	
U1457C-33R-3, 10-17 cm	12.839	902	2.008	0.414	0.013	0.0548	0.0014	0.69438	350.8	9.2	344.1	8.6	393	46	344.1	8.6	1.9	
U1457C-33R-3, 10-17 cm	27.675	317	8.410	1.385	0.027	0.1459	0.0026	0.64613	880	11	879	15	904	34	904.0	34.0	2.8	
U1457C-33R-3, 10-17 cm	16.615	102.2	0.945	1.057	0.035	0.1146	0.0027	0.61202	732	18	699	15	834	54	699.0	15.0	4.5	
U1457C-33R-3, 10-17 cm	27.674	267	2.740	1.197	0.036	0.1238	0.0035	0.64852	798	17	754	19	935	52	754.0	19.0	5.5	
U1457C-33R-3, 10-17 cm	27.675	330	1.630	0.973	0.029	0.1111	0.0033	0.72935	689	16	680	20	752	44	680.0	20.0	1.3	
U1457C-33R-3, 10-17 cm	27.674	112.2	1.309	0.087	0.006	0.0120	0.0004	0.19158	84	5.8	76.9	2.5	300	140	76.9	2.5	8.5	
U1457C-33R-3, 10-17 cm	12.569	655	1.557	5.150	0.160	0.3069	0.0092	0.90709	1839	26	1723	45	1992	22	1992.0	22.0	13.5	
U1457C-33R-3, 10-17 cm	27.675	163.2	0.969	1.541	0.027	0.1540	0.0018	0.51508	945	11	923	10	1007	32	1007.0	32.0	8.3	
U1457C-33R-3, 10-17 cm	27.674	534	0.948	0.154	0.004	0.0226	0.0004	0.38107	145.2	3.9	144	2.7	168	58	144.0	2.7	0.8	
U1457C-33R-3, 10-17 cm	27.674	246	0.956	1.275	0.024	0.1390	0.0023	0.71121	834	11	838	13	830	31	838.0	13.0	0.5	
U1457C-33R-3, 10-17 cm	22.011	261	1.024	4.950	0.092	0.3160	0.0048	0.75446	1807	16	1769	24	1844	22	1844.0	22.0	4.1	
U1457C-33R-3, 10-17 cm	21.740	857	22.800	0.757	0.014	0.0910	0.0017	0.77284	571.5	8.4	561	10	600	27	561.0	10.0	1.8	
U1457C-33R-3, 10-17 cm	27.674	1941	0.606	0.544	0.007	0.0685	0.0009	0.69494	440.8	4.6	427.2	5.7	493	23	427.2	5.7	3.1	
U1457C-33R-3, 10-17 cm	17.155	592	1.500	1.191	0.024	0.1248	0.0021	0.73728	795	11	758	12	900	26	758.0	12.0	4.7	
U1457C-33R-3, 10-17 cm	22.820	776	2.300	5.134	0.089	0.3265	0.0053	0.74023	1843	16	1820	26	1858	22	1858.0	22.0	2.0	
U1457C-33R-3, 10-17 cm	27.674	681	8.990	1.120	0.022	0.1226	0.0021	0.70470	761	11	745	12	796	31	745.0	12.0	2.1	
U1457C-33R-3, 10-17 cm	27.675	615	11.820	0.633	0.015	0.0783	0.0018	0.76640	497.4	9.5	486	11	535	38	486.0	11.0	2.3	
U1457C-33R-3, 10-17 cm	5.287	2793	16.400	0.640	0.029	0.0774	0.0035	0.80653	501	18	480	21	601	65	480.0	21.0	4.2	
U1457C-33R-3, 10-17 cm	13.486	258.9	0.831	1.110	0.030	0.1204	0.0027	0.67283	756	14	733	15	841	39	733.0	15.0	3.0	
U1457C-33R-3, 10-17 cm	2.079	1370	163.000	0.026	0.004	0.0038	0.0004	0.25117	25.8	3.5	24.7	2.7	170	300	DISC	DISC	4.3	Rim

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-33R-3, 10-17 cm	9.604	85.9	0.896	3.270	0.120	0.2538	0.0095	0.59003	1468	28	1456	49	1490	57	1490.0	57.0	2.3	Core
U1457C-33R-3, 10-17 cm	20.122	2880	0.793	0.039	0.001	0.0054	0.0001	0.50680	38.8	1.3	34.78	0.61	285	64	34.8	0.6	10.4	
U1457C-33R-3, 10-17 cm	27.944	969	9.850	5.054	0.081	0.3050	0.0049	0.87434	1825	13	1714	24	1977	14	1977.0	14.0	13.3	
U1457C-33R-3, 10-17 cm	9.333	1500	0.465	0.046	0.002	0.0069	0.0002	0.11982	45.9	2.2	44.1	1	160	100	44.1	1.0	3.9	
U1457C-33R-3, 10-17 cm	20.123	301	2.600	0.837	0.019	0.1001	0.0014	0.61735	616	10	614.7	8.4	642	36	614.7	8.4	0.2	
U1457C-33R-3, 10-17 cm	27.674	641	1.424	0.111	0.003	0.0165	0.0003	0.24011	106.7	3.1	105.3	1.6	157	61	105.3	1.6	1.3	
U1457C-33R-3, 10-17 cm	15.268	81.5	0.599	0.113	0.010	0.0120	0.0005	0.13504	107.6	8.7	77.1	3.4	760	190	DISC	DISC	28.3	
U1457C-33R-3, 10-17 cm	17.424	301	1.561	0.814	0.023	0.0923	0.0022	0.68544	603	13	569	13	721	47	569.0	13.0	5.6	
U1457C-33R-3, 10-17 cm	19.313	685	7.950	0.615	0.018	0.0756	0.0020	0.59337	485	11	469	12	533	47	469.0	12.0	3.3	
U1457C-33R-3, 10-17 cm	27.674	262.7	0.925	0.712	0.017	0.0814	0.0016	0.40526	546	10	504	9.4	681	52	504.0	9.4	7.7	
U1457C-33R-3, 10-17 cm	27.675	772	3.350	7.320	0.190	0.3650	0.0110	0.67754	2141	23	2000	52	2266	38	2266.0	38.0	11.7	
U1457C-33R-3, 10-17 cm	8.793	960	6.200	0.207	0.011	0.0251	0.0011	0.35181	190.7	8.9	159.5	7	590	120	DISC	DISC	16.4	
U1457C-33R-3, 10-17 cm	21.201	340	1.022	1.280	0.030	0.1379	0.0033	0.80449	834	14	832	19	823	32	832.0	19.0	0.2	
U1457C-33R-3, 10-17 cm	22.550	251.2	1.123	4.972	0.069	0.3157	0.0043	0.70157	1812	12	1768	21	1848	19	1848.0	19.0	4.3	
U1457C-33R-3, 10-17 cm	27.135	1819	4.860	1.069	0.016	0.1148	0.0016	0.80136	737	7.7	700.4	9	836	17	700.4	9.0	5.0	
U1457C-33R-3, 10-17 cm	27.674	649	0.867	0.052	0.003	0.0075	0.0002	0.39442	51.4	2.4	48.33	0.93	206	89	48.3	0.9	6.0	
U1457C-33R-3, 10-17 cm	2.697	1426	6.200	0.075	0.008	0.0108	0.0008	0.25042	73.4	7.5	69.3	5.4	130	250	69.3	5.4	5.6	
U1457C-33R-3, 10-17 cm	27.675	731	4.250	5.157	0.082	0.3265	0.0051	0.89121	1842	14	1820	25	1860	13	1860.0	13.0	2.2	
U1457C-33R-3, 10-17 cm	27.675	452	4.790	1.581	0.034	0.1600	0.0034	0.69730	959	13	956	19	996	36	996.0	36.0	4.0	
U1457C-33R-3, 10-17 cm	27.674	1128	16.500	0.057	0.002	0.0084	0.0003	0.70340	56.3	2.3	54	1.6	156	62	54.0	1.6	4.1	
U1457C-33R-3, 10-17 cm	14.728	437	1.374	1.686	0.048	0.1648	0.0031	0.71508	1000	18	983	17	1030	38	1030.0	38.0	4.6	
U1457C-33R-3, 10-17 cm	18.234	560	4.780	0.198	0.006	0.0286	0.0006	0.32433	182.9	5.4	181.7	3.4	201	66	181.7	3.4	0.7	
U1457C-33R-3, 10-17 cm	16.615	650	1.920	0.961	0.024	0.0961	0.0022	0.70135	682	12	591	13	996	37	591.0	13.0	13.3	
U1457C-33R-3, 10-17 cm	27.674	3350	3.240	0.100	0.002	0.0149	0.0002	0.69428	96.7	1.7	95.3	1.3	136	30	95.3	1.3	1.4	
U1457C-33R-3, 10-17 cm	27.674	257	0.566	0.061	0.004	0.0089	0.0002	0.03003	59.8	3.6	57.4	1.3	170	120	57.4	1.3	4.0	
U1457C-33R-3, 10-17 cm	20.931	489	1.025	0.111	0.004	0.0166	0.0003	0.30640	106.3	3.3	106	1.8	138	66	106.0	1.8	0.3	
U1457C-33R-3, 10-17 cm	23.898	263.8	1.425	5.042	0.069	0.3210	0.0043	0.69180	1826	11	1794	21	1864	19	1864.0	19.0	3.8	
U1457C-33R-3, 10-17 cm	27.675	171.2	0.885	0.080	0.005	0.0115	0.0003	0.08009	77.4	4.7	73.7	1.9	210	120	73.7	1.9	4.8	
U1457C-33R-3, 10-17 cm	14.459	4050	7.420	0.772	0.023	0.0750	0.0020	0.67078	580	13	466	12	1067	43	DISC	DISC	19.7	
U1457C-33R-3, 10-17 cm	17.424	172.6	3.470	5.249	0.097	0.3339	0.0060	0.78299	1858	16	1856	29	1875	23	1875.0	23.0	1.0	

Table 3

Sample Name	Duration (s)								207/235		206/238		207/206					Rim/C ore
		[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Best age (Ma)	2 σ error	% Discordance*	
U1457C-33R-3, 10-17 cm	27.675	2371	0.971	0.018	0.001	0.0028	0.0000	0.09146	18.35	0.62	18.29	0.26	78	70	18.3	0.3	0.3	Core
U1457C-33R-3, 10-17 cm	17.424	1049	2.180	0.790	0.017	0.0910	0.0017	0.74220	590.2	9.5	561	10	724	31	561.0	10.0	4.9	
U1457C-33R-3, 10-17 cm	18.234	732	6.990	0.344	0.008	0.0460	0.0008	0.62567	300	5.9	289.6	4.7	417	42	289.6	4.7	3.5	
U1457C-33R-3, 10-17 cm	27.674	635	1.707	0.106	0.004	0.0158	0.0003	0.26150	102.4	3.2	100.7	1.8	187	67	100.7	1.8	1.7	
U1457C-33R-3, 10-17 cm	27.674	125	0.952	5.231	0.076	0.3358	0.0039	0.59883	1855	12	1865	19	1871	22	1871.0	22.0	0.3	
U1457C-33R-3, 10-17 cm	22.010	366	4.060	0.039	0.003	0.0045	0.0001	0.03112	38.3	3.1	29.03	0.81	580	170	DISC	DISC	24.2	
U1457C-33R-3, 10-17 cm	23.931	345	3.020	8.850	0.170	0.3735	0.0065	0.70406	2318	17	2043	31	2565	24	2565.0	24.0	20.4	
U1457C-33R-3, 10-17 cm	27.674	472	0.783	0.050	0.002	0.0075	0.0002	0.24285	49.1	2.3	48.36	0.94	95	85	48.4	0.9	1.5	
U1457C-33R-3, 10-17 cm	27.675	702	2.430	1.309	0.024	0.1388	0.0024	0.59094	852	10	837	14	883	32	837.0	14.0	1.8	
U1457C-33R-3, 10-17 cm	27.674	606	1.051	0.647	0.012	0.0800	0.0011	0.66319	505.3	7.5	496.2	6.7	549	30	496.2	6.7	1.8	
U1457C-33R-3, 10-17 cm	27.675	924	7.700	1.673	0.026	0.1650	0.0022	0.66177	997.9	9.5	984	12	1028	24	1028.0	24.0	4.3	
U1457C-33R-3, 10-17 cm	25.334	798	8.200	5.147	0.079	0.3289	0.0050	0.79084	1841	13	1831	24	1857	18	1857.0	18.0	1.4	
U1457C-33R-3, 10-17 cm	17.611	445	0.932	1.271	0.028	0.1374	0.0023	0.61486	831	13	829	13	847	38	829.0	13.0	0.2	
U1457C-33R-3, 10-17 cm	27.674	400	8.520	0.795	0.013	0.0976	0.0012	0.41334	593.8	6.9	600.4	7	572	33	600.4	7.0	1.1	
U1457C-33R-3, 10-17 cm	9.420	1130	103.000	0.584	0.017	0.0728	0.0019	0.66238	466	11	453	12	528	52	453.0	12.0	2.8	Rim
U1457C-33R-3, 10-17 cm	11.701	160.7	1.557	1.633	0.041	0.1611	0.0028	0.40150	981	16	962	16	1018	47	1018.0	47.0	5.5	Core
U1457C-33R-3, 10-17 cm	24.398	187.8	1.910	2.747	0.059	0.2289	0.0042	0.72880	1344	15	1327	22	1367	31	1367.0	31.0	2.9	Core
U1457C-33R-3, 10-17 cm	20.653	179.8	1.265	3.134	0.072	0.2439	0.0049	0.74638	1437	18	1405	25	1493	29	1493.0	29.0	5.9	
U1457C-33R-3, 10-17 cm	14.803	96.4	2.330	1.415	0.060	0.1501	0.0052	0.61953	889	25	900	29	861	70	861.0	70.0	4.5	Rim
U1457C-33R-3, 10-17 cm	10.063	59	1.000	3.790	0.150	0.2860	0.0100	0.76532	1583	33	1617	51	1551	50	1551.0	50.0	4.3	Core
U1457C-33R-3, 10-17 cm	27.675	380	2.146	1.500	0.026	0.1547	0.0025	0.73401	930	10	927	14	940	25	940.0	25.0	1.4	Core
U1457C-33R-3, 10-17 cm	21.589	586	6.340	0.530	0.011	0.0679	0.0010	0.60926	431.1	7	423.6	6.1	464	34	423.6	6.1	1.7	
U1457C-33R-3, 10-17 cm	27.674	391	1.212	0.072	0.003	0.0104	0.0002	0.15632	70.2	3	66.4	1.3	196	89	66.4	1.3	5.4	
U1457C-33R-3, 10-17 cm	27.674	630	2.500	0.108	0.004	0.0160	0.0003	0.27850	103.6	3.4	102.3	1.6	137	67	102.3	1.6	1.3	
U1457C-33R-3, 10-17 cm	27.675	75.7	1.030	1.361	0.035	0.1418	0.0024	0.30896	870	15	854	13	919	52	919.0	52.0	7.1	
U1456C-45X-3, 45-51 cm	23.515	216.3	0.759	0.087	0.006	0.0117	0.0004	0.11918	84.4	5.1	74.9	2.4	340	110	74.9	2.4	11.3	
U1456C-45X-3, 45-51 cm	28.507	139.4	1.305	7.850	0.260	0.3970	0.0130	0.73516	2198	32	2146	61	2278	38	2278.0	38.0	5.8	
U1456C-45X-3, 45-51 cm	28.229	660	0.747	1.463	0.030	0.1422	0.0024	0.58917	916	12	856	14	1064	34	1064.0	34.0	19.5	Core
U1456C-45X-3, 45-51 cm	23.516	1172	9.360	1.590	0.050	0.1518	0.0050	0.67672	960	20	913	29	1095	54	1095.0	54.0	16.6	
U1456C-45X-3, 45-51 cm	14.920	422	2.456	0.685	0.017	0.0879	0.0019	0.36377	529	11	543	11	457	58	543.0	11.0	2.6	Core

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456C-45X-3, 45-51 cm	27.675	434	3.660	0.908	0.026	0.0936	0.0025	0.51467	652	14	578	15	925	53	578.0	15.0	11.3	Rim
U1456C-45X-3, 45-51 cm	2.773	2620	2.310	0.760	0.038	0.0920	0.0030	0.81483	573	22	567	18	588	71	567.0	18.0	1.0	
U1456C-45X-3, 45-51 cm	23.238	506	1.480	1.325	0.019	0.1433	0.0017	0.54189	855.5	8.5	863	9.8	840	28	840.0	9.8	0.9	Core
U1456C-45X-3, 45-51 cm	27.674	606.7	27.200	5.830	0.074	0.3518	0.0049	0.71567	1950	11	1941	23	1958	19	1958.0	19.0	0.9	
U1456C-45X-3, 45-51 cm	27.675	607	6.740	1.473	0.044	0.1500	0.0047	0.55367	918	18	899	26	968	55	968.0	55.0	7.1	Rim
U1456C-45X-3, 45-51 cm	17.693	410	4.950	0.630	0.013	0.0784	0.0012	0.35836	495.2	8.3	486.3	7.4	530	46	486.3	7.4	1.8	
U1456C-45X-3, 45-51 cm	26.565	545	2.200	0.696	0.021	0.0849	0.0028	0.49020	534	12	524	16	584	65	524.0	16.0	1.9	Core
U1456C-45X-3, 45-51 cm	16.861	1278	1.673	0.018	0.001	0.0028	0.0001	0.29228	17.85	0.94	18.15	0.36	20	97	18.2	0.4	1.7	
U1456C-45X-3, 45-51 cm	27.675	305	1.771	1.392	0.022	0.1493	0.0019	0.45146	883.8	9.3	897	11	847	33	847.0	11.0	1.5	Rim
U1456C-45X-3, 45-51 cm	17.139	1223	2.570	0.379	0.013	0.0480	0.0015	0.47257	325.4	9.7	301.9	9.1	471	66	301.9	9.1	7.2	
U1456C-45X-3, 45-51 cm	27.674	165.8	0.970	0.057	0.004	0.0085	0.0002	0.10121	56.9	3.9	54.8	1.2	120	130	54.8	1.2	3.7	Core
U1456C-45X-3, 45-51 cm	2.941	1410	28.000	0.765	0.071	0.0847	0.0057	0.74242	574	40	524	34	760	140	524.0	34.0	8.7	
U1456C-45X-3, 45-51 cm	12.149	151.8	1.310	22.020	0.420	0.6180	0.0130	0.64145	3182	18	3097	52	3235	26	3235.0	26.0	4.3	Rim
U1456C-45X-3, 45-51 cm	27.674	578	1.433	0.302	0.010	0.0417	0.0010	0.49469	267.7	7.7	263.2	6.4	316	62	263.2	6.4	1.7	
U1456C-45X-3, 45-51 cm	27.951	786	1.460	1.034	0.033	0.1083	0.0032	0.65655	716	16	662	18	895	48	662.0	18.0	7.5	Core
U1456C-45X-3, 45-51 cm	27.675	614	1.890	0.100	0.004	0.0158	0.0006	0.49912	96.7	4	100.7	3.5	35	72	100.7	3.5	4.1	
U1456C-45X-3, 45-51 cm	27.674	546	16.800	4.544	0.057	0.3054	0.0036	0.70934	1737	10	1717	18	1760	17	1760.0	17.0	2.4	Rim
U1456C-45X-3, 45-51 cm	27.674	423	1.188	0.110	0.004	0.0161	0.0002	0.13300	106	3.2	103.2	1.5	168	67	103.2	1.5	2.6	
U1456C-45X-3, 45-51 cm	9.931	104.6	0.846	0.061	0.009	0.0097	0.0007	0.26836	59.1	8.3	62.2	4.4	50	250	62.2	4.4	5.2	Core
U1456C-45X-3, 45-51 cm	17.138	149.4	1.193	5.640	0.110	0.3305	0.0064	0.63976	1919	17	1839	31	2008	29	2008.0	29.0	8.4	
U1456C-45X-3, 45-51 cm	27.674	229	3.720	1.575	0.048	0.1612	0.0054	0.52391	956	19	961	30	956	61	956.0	61.0	0.5	Rim
U1456C-45X-3, 45-51 cm	3.604	1360	2.110	0.798	0.026	0.0865	0.0030	0.39895	595	15	535	18	826	76	535.0	18.0	10.1	
U1456C-45X-3, 45-51 cm	21.853	195.7	1.404	2.017	0.038	0.1908	0.0027	0.55385	1119	13	1125	14	1103	32	1103.0	32.0	2.0	Core
U1456C-45X-3, 45-51 cm	22.129	857	12.660	3.166	0.092	0.2052	0.0056	0.57772	1442	22	1201	30	1814	46	DISC	DISC	33.8	
U1456C-45X-3, 45-51 cm	27.674	246	2.350	0.059	0.004	0.0091	0.0004	0.15517	57.8	3.9	58.3	2.2	50	130	58.3	2.2	0.9	Rim
U1456C-45X-3, 45-51 cm	1.941	332	11.100	0.167	0.024	0.0252	0.0024	0.54244	156	21	160	15	110	240	160.0	15.0	2.6	
U1456C-45X-3, 45-51 cm	15.475	311	1.734	1.307	0.027	0.1398	0.0024	0.71402	850	12	843	14	865	35	843.0	14.0	0.8	Core
U1456C-45X-3, 45-51 cm	16.308	598	3.380	1.669	0.024	0.1699	0.0018	0.52709	997.4	9.4	1011	10	960	25	960.0	25.0	5.3	
U1456C-45X-3, 45-51 cm	19.634	289	1.940	3.229	0.073	0.2561	0.0046	0.70219	1460	18	1469	24	1447	31	1447.0	31.0	1.5	Rim
U1456C-45X-3, 45-51 cm	20.744	663	1.390	1.207	0.019	0.1336	0.0015	0.58266	802.7	8.6	808.4	8.4	788	26	808.4	8.4	0.7	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456C-45X-3, 45-51 cm	4.385	812	5.060	1.270	0.110	0.1293	0.0088	0.73218	826	50	783	50	940	130	783.0	50.0	5.2	
U1456C-45X-3, 45-51 cm	5.494	270	1.510	0.075	0.009	0.0104	0.0008	0.12752	73.4	8.2	66.9	4.8	290	250	66.9	4.8	8.9	
U1456C-45X-3, 45-51 cm	27.675	561	2.990	5.320	0.120	0.3357	0.0070	0.56605	1867	19	1862	34	1877	34	1877.0	34.0	0.8	
U1456C-45X-3, 45-51 cm	27.674	427	4.530	1.825	0.046	0.1831	0.0042	0.64515	1049	16	1082	23	985	40	985.0	40.0	9.8	
U1456C-45X-3, 45-51 cm	26.011	340.4	1.064	3.355	0.038	0.2633	0.0033	0.58016	1493	9	1506	17	1468	23	1468.0	23.0	2.6	
U1456C-45X-3, 45-51 cm	18.247	216	1.966	0.113	0.007	0.0167	0.0004	0.08373	108.3	6.2	106.4	2.5	170	120	106.4	2.5	1.8	
U1456C-45X-3, 45-51 cm	28.230	256	13.700	0.832	0.027	0.0989	0.0024	0.59376	611	15	607	14	616	55	607.0	14.0	0.7	
U1456C-45X-3, 45-51 cm	21.297	858	2.256	6.080	0.100	0.3077	0.0044	0.82163	1987	15	1729	22	2270	16	2270.0	16.0	23.8	
U1456C-45X-3, 45-51 cm	27.674	86.2	0.687	0.744	0.027	0.0903	0.0018	0.41808	562	16	557	11	568	72	557.0	11.0	0.9	
U1456C-45X-3, 45-51 cm	27.674	2343	0.770	0.039	0.001	0.0057	0.0001	0.27568	38.73	0.99	36.42	0.38	184	53	36.4	0.4	6.0	
U1456C-45X-3, 45-51 cm	26.289	868	4.120	0.995	0.026	0.1049	0.0023	0.63491	698	13	643	14	885	44	643.0	14.0	7.9	
U1456C-45X-3, 45-51 cm	10.484	199	0.999	0.103	0.010	0.0139	0.0004	0.15782	99	9.1	88.7	2.8	320	190	88.7	2.8	10.4	
U1456C-45X-3, 45-51 cm	20.743	492.4	1.927	5.568	0.081	0.3222	0.0049	0.75322	1911	12	1799	24	2034	19	2034.0	19.0	11.6	
U1456C-45X-3, 45-51 cm	10.207	736	1.638	4.330	0.110	0.2490	0.0056	0.74632	1695	21	1432	29	2044	32	2044.0	32.0	29.9	
U1456C-45X-3, 45-51 cm	27.674	7.98	1.810	2.130	0.120	0.1869	0.0072	0.27513	1128	42	1106	40	1150	120	1150.0	120.0	3.8	
U1456C-45X-3, 45-51 cm	22.130	414	1.029	1.151	0.022	0.1281	0.0022	0.49142	776	10	777	13	786	39	777.0	13.0	0.1	
U1456C-45X-3, 45-51 cm	9.377	1000	1.610	0.059	0.003	0.0089	0.0004	0.22952	58.5	3.2	57.3	2.4	130	120	57.3	2.4	2.1	
U1456C-45X-3, 45-51 cm	19.079	421	9.300	1.744	0.042	0.1692	0.0037	0.54256	1022	16	1007	21	1052	49	1052.0	49.0	4.3	
U1456C-45X-3, 45-51 cm	19.356	113.8	1.061	1.209	0.052	0.1352	0.0044	0.62103	798	23	816	25	742	69	816.0	25.0	2.3	
U1456C-45X-3, 45-51 cm	27.674	241	1.791	2.066	0.052	0.1876	0.0044	0.48011	1132	17	1107	24	1197	44	1197.0	44.0	7.5	
U1456C-45X-3, 45-51 cm	27.674	743	1.770	0.547	0.012	0.0715	0.0021	0.51908	442.9	8	445	13	469	56	445.0	13.0	0.5	
U1456C-45X-3, 45-51 cm	25.456	158.4	1.497	8.080	0.120	0.4114	0.0055	0.53498	2238	13	2220	25	2258	24	2258.0	24.0	1.7	
U1456C-45X-3, 45-51 cm	25.456	81.7	0.575	4.435	0.067	0.3039	0.0035	0.44383	1716	12	1710	17	1724	27	1724.0	27.0	0.8	
U1456C-45X-3, 45-51 cm	13.535	427	1.970	7.300	0.280	0.3500	0.0130	0.91179	2138	36	1928	60	2361	28	2361.0	28.0	18.3	
U1456C-45X-3, 45-51 cm	27.674	59.6	0.835	1.211	0.034	0.1318	0.0020	0.24937	803	16	798	11	808	63	798.0	11.0	0.6	
U1456C-45X-3, 45-51 cm	27.675	430	3.240	6.890	0.099	0.3938	0.0051	0.66866	2096	12	2139	24	2058	20	2058.0	20.0	3.9	
U1456C-45X-3, 45-51 cm	14.920	854	3.060	1.274	0.023	0.1343	0.0021	0.62317	833	10	812	12	898	32	812.0	12.0	2.5	
U1456C-45X-3, 45-51 cm	20.743	155.6	1.389	6.541	0.064	0.3731	0.0032	0.50028	2050	8.7	2043	15	2060	17	2060.0	17.0	0.8	
U1456C-45X-3, 45-51 cm	27.674	990	0.892	0.081	0.002	0.0126	0.0001	0.04478	79.3	2.3	80.74	0.91	59	61	80.7	0.9	1.8	
U1456C-45X-3, 45-51 cm	27.674	989	0.771	0.175	0.004	0.0251	0.0003	0.27054	163.4	3.3	160	2.1	202	46	160.0	2.1	2.1	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456C-45X-3, 45-51 cm	19.634	466	1.559	3.196	0.065	0.2066	0.0037	0.83724	1453	15	1210	20	1831	20	DISC	DISC	33.9	Core
U1456C-45X-3, 45-51 cm	27.674	188.6	1.152	0.807	0.023	0.0982	0.0019	0.53061	598	13	603	11	553	50	603.0	11.0	0.8	
U1456C-45X-3, 45-51 cm	21.021	2650	3.950	0.116	0.004	0.0176	0.0004	0.48284	111.8	3.5	112.1	2.4	100	59	112.1	2.4	0.3	
U1456C-45X-3, 45-51 cm	27.674	718	2.360	0.659	0.012	0.0823	0.0015	0.53832	512.8	7.1	509.6	8.8	515	38	509.6	8.8	0.6	
U1456C-45X-3, 45-51 cm	14.366	195	3.900	0.843	0.035	0.1029	0.0041	0.55812	620	20	630	24	578	85	630.0	24.0	1.6	
U1456C-45X-3, 45-51 cm	10.485	204	1.175	0.148	0.010	0.0195	0.0008	0.28850	139.5	9.1	124.2	4.8	380	150	124.2	4.8	11.0	
U1456C-45X-3, 45-51 cm	25.734	81.3	1.237	0.792	0.027	0.0955	0.0021	0.08393	589	15	587	13	564	72	587.0	13.0	0.3	
U1456C-45X-3, 45-51 cm	5.495	138.7	0.541	0.187	0.019	0.0142	0.0005	0.33879	173	16	91	3.3	1430	190	DISC	DISC	47.4	
U1456C-45X-3, 45-51 cm	8.267	196	0.917	0.091	0.010	0.0131	0.0005	0.10840	88.3	8.8	84.1	3	200	200	84.1	3.0	4.8	
U1456C-45X-3, 45-51 cm	27.675	316	1.035	0.187	0.007	0.0248	0.0005	0.27104	173.1	6	158.1	3.1	334	76	158.1	3.1	8.7	
U1456C-45X-3, 45-51 cm	24.624	465	2.610	10.120	0.280	0.4070	0.0120	0.74964	2437	26	2193	56	2646	34	2646.0	34.0	17.1	
U1456C-45X-3, 45-51 cm	21.575	2620	1.211	0.175	0.003	0.0255	0.0003	0.87875	163.2	2.8	162	2	158	30	162.0	2.0	0.7	
U1456C-45X-3, 45-51 cm	27.674	193.3	1.910	0.122	0.007	0.0175	0.0005	0.06835	116.2	5.9	111.9	2.9	180	100	111.9	2.9	3.7	
U1456C-45X-3, 45-51 cm	27.674	253	2.880	1.273	0.041	0.1290	0.0028	0.45211	830	19	781	16	927	61	781.0	16.0	5.9	
U1456C-45X-3, 45-51 cm	8.040	531	120.000	0.019	0.003	0.0029	0.0002	0.31775	19	2.9	18.5	1.3	90	250	18.5	1.3	2.6	
U1456C-45X-3, 45-51 cm	9.098	1180	2.530	0.727	0.041	0.0748	0.0038	0.57053	552	24	464	23	900	100	DISC	DISC	15.9	
U1456C-45X-3, 45-51 cm	27.674	178.8	1.056	0.708	0.018	0.0912	0.0024	0.45612	543	11	562	14	447	62	562.0	14.0	3.5	
U1456C-45X-3, 45-51 cm	27.674	144.4	0.474	0.612	0.015	0.0818	0.0016	0.32830	482.9	9.7	506.3	9.3	358	55	506.3	9.3	4.8	
U1456C-45X-3, 45-51 cm	2.495	1359	106.000	0.151	0.021	0.0207	0.0018	0.50550	142	18	132	11	260	230	132.0	11.0	7.0	Rim
U1456C-45X-3, 45-51 cm	17.138	1374	0.561	0.769	0.009	0.0937	0.0009	0.47805	578.7	5.4	577	5.2	572	24	577.0	5.2	0.3	Core
U1456C-45X-3, 45-51 cm	12.980	920	26.400	0.058	0.004	0.0085	0.0004	0.49499	57.2	3.4	54.7	2.3	145	97	54.7	2.3	4.4	
U1456C-45X-3, 45-51 cm	27.674	1797	4.980	0.024	0.002	0.0036	0.0002	0.62972	24.3	1.5	23.2	1.1	127	93	23.2	1.1	4.5	
U1456C-45X-3, 45-51 cm	10.763	644	1.426	0.586	0.018	0.0747	0.0014	0.51337	467	11	464.5	8.1	457	60	464.5	8.1	0.5	
U1456C-45X-3, 45-51 cm	12.980	1545	25.300	0.643	0.039	0.0717	0.0040	0.69458	499	24	445	24	740	100	445.0	24.0	10.8	
U1456C-45X-3, 45-51 cm	20.466	1674	1.580	0.022	0.001	0.0034	0.0001	0.21532	22.1	1.1	21.84	0.55	65	91	21.8	0.6	1.2	
U1456C-45X-3, 45-51 cm	14.089	206	1.970	1.096	0.038	0.1219	0.0044	0.59815	748	18	740	25	779	69	740.0	25.0	1.1	Rim
U1456C-45X-3, 45-51 cm	27.675	425	2.410	1.032	0.036	0.1177	0.0034	0.73025	714	18	716	20	695	52	716.0	20.0	0.3	
U1456C-45X-3, 45-51 cm	7.435	393	36.000	0.047	0.005	0.0073	0.0004	0.17837	46.5	5.2	46.6	2.3	30	220	46.6	2.3	0.2	
U1456C-45X-3, 45-51 cm	1.664	2720	290.000	0.114	0.011	0.0171	0.0008	0.15502	109.7	9.7	109.1	5	110	200	109.1	5.0	0.5	
U1456C-45X-3, 45-51 cm	17.416	513	8.520	0.911	0.017	0.1041	0.0019	0.73501	656.8	9.3	638	11	710	34	638.0	11.0	2.9	Core

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456C-45X-3, 45-51 cm	27.675	451	5.780	1.025	0.018	0.1175	0.0019	0.45430	716.1	9.1	717	11	716	36	717.0	11.0	0.1	
U1456C-45X-3, 45-51 cm	21.574	818	13.000	0.164	0.006	0.0245	0.0008	0.55973	153.9	5.2	156.1	4.9	124	63	156.1	4.9	1.4	
U1456C-45X-3, 45-51 cm	27.674	499	12.310	1.273	0.031	0.1372	0.0036	0.64390	830	14	830	20	843	45	830.0	20.0	0.0	
U1456C-45X-3, 45-51 cm	16.861	687	1.456	0.966	0.015	0.1130	0.0017	0.36981	685.6	7.6	689.8	9.8	662	36	689.8	9.8	0.6	
U1456C-45X-3, 45-51 cm	21.852	85	1.950	1.041	0.061	0.1096	0.0053	0.61139	714	31	668	31	858	92	668.0	31.0	6.4	
U1456C-45X-3, 45-51 cm	27.675	147.7	0.577	3.295	0.096	0.2508	0.0065	0.51267	1476	22	1444	33	1507	52	1507.0	52.0	4.2	
U1456C-45X-3, 45-51 cm	27.674	473	1.042	0.112	0.004	0.0164	0.0003	0.30310	107.7	3.9	104.7	2.2	167	75	104.7	2.2	2.8	
U1456C-45X-3, 45-51 cm	27.675	62.5	0.787	0.060	0.012	0.0082	0.0003	0.12567	57.6	9.8	52.8	2.1	70	200	52.8	2.1	8.3	
U1456C-45X-3, 45-51 cm	27.675	247.5	3.060	0.239	0.008	0.0348	0.0008	0.13218	217.5	6.9	220.3	4.9	197	75	220.3	4.9	1.3	
U1456C-45X-3, 45-51 cm	23.239	916	4.630	0.605	0.009	0.0788	0.0009	0.54356	479.9	5.7	488.8	5.1	439	28	488.8	5.1	1.9	
U1456C-45X-3, 45-51 cm	13.257	261	0.583	0.154	0.008	0.0221	0.0005	0.12194	145.1	7	140.6	3.4	240	120	140.6	3.4	3.1	
U1456C-45X-3, 45-51 cm	14.644	152.5	0.640	0.043	0.004	0.0068	0.0002	0.03976	43	4.2	43.8	1.4	40	180	43.8	1.4	1.9	
U1456C-45X-3, 45-51 cm	27.674	260.7	1.449	0.117	0.004	0.0164	0.0003	0.21724	112.4	3.8	105	2	259	72	105.0	2.0	6.6	
U1456C-45X-3, 45-51 cm	23.115	285	1.220	1.205	0.022	0.1317	0.0018	0.54064	803	10	798	10	795	32	798.0	10.0	0.6	
U1456C-45X-3, 45-51 cm	24.773	104.6	0.621	1.551	0.034	0.1555	0.0027	0.54817	948	14	931	15	970	41	970.0	41.0	4.0	
U1456C-45X-3, 45-51 cm	27.675	86	1.352	0.082	0.006	0.0126	0.0004	0.03869	80.3	5.8	80.8	2.4	80	130	80.8	2.4	0.6	
U1456C-45X-3, 45-51 cm	27.674	728	2.720	0.112	0.003	0.0161	0.0003	0.43625	107.4	3	102.7	1.6	199	56	102.7	1.6	4.4	
U1456C-45X-3, 45-51 cm	27.674	393.3	3.347	1.353	0.019	0.1440	0.0017	0.46847	867.6	8	866.8	9.8	865	28	865.0	28.0	0.2	
U1456C-45X-3, 45-51 cm	16.692	102.7	1.517	3.609	0.091	0.2661	0.0057	0.70853	1547	20	1520	29	1592	34	1592.0	34.0	4.5	
U1456C-45X-3, 45-51 cm	27.674	65.9	1.383	0.081	0.007	0.0132	0.0004	0.03177	77.9	6.7	84.3	2.7	-40	150	84.3	2.7	8.2	
U1456C-45X-3, 45-51 cm	23.530	520	3.360	0.611	0.010	0.0786	0.0011	0.52203	483.3	6.4	487.4	6.7	458	35	487.4	6.7	0.8	
U1456C-45X-3, 45-51 cm	27.675	441	6.220	0.051	0.003	0.0078	0.0002	0.16873	50.5	2.5	50.2	1.4	80	100	50.2	1.4	0.6	
U1456C-45X-3, 45-51 cm	27.674	847	1.845	0.115	0.003	0.0177	0.0003	0.43336	110.8	2.3	112.9	1.7	85	42	112.9	1.7	1.9	
U1456C-45X-3, 45-51 cm	27.675	1560	0.950	0.034	0.001	0.0051	0.0001	0.22126	34.3	1.2	32.92	0.56	136	73	32.9	0.6	4.0	
U1456C-45X-3, 45-51 cm	27.674	318	1.890	1.272	0.026	0.1411	0.0028	0.65389	831	12	850	16	786	36	786.0	16.0	2.3	
U1456C-45X-3, 45-51 cm	27.674	211.4	1.874	3.073	0.042	0.2470	0.0031	0.51342	1425	10	1422	16	1423	25	1423.0	25.0	0.1	
U1456C-45X-3, 45-51 cm	24.566	2103	72.000	0.097	0.003	0.0143	0.0003	0.66174	93.5	2.3	91.7	1.8	156	40	91.7	1.8	1.9	
U1456C-45X-3, 45-51 cm	16.691	1430	4.990	0.117	0.005	0.0177	0.0005	0.67274	111.7	4.4	113	3.1	82	62	113.0	3.1	1.2	
U1456C-45X-3, 45-51 cm	16.277	757	0.401	0.069	0.003	0.0099	0.0002	0.39307	67.9	2.8	63.2	1.2	208	80	63.2	1.2	6.9	
U1456C-45X-3, 45-51 cm	27.674	1014	2.145	1.346	0.021	0.1445	0.0024	0.74004	865.3	9.2	870	14	870	24	870.0	24.0	0.0	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456C-45X-3, 45-51 cm	27.675	490	2.522	0.119	0.003	0.0182	0.0003	0.23765	113.9	3	116.3	1.6	92	57	116.3	1.6	2.1	Rim Core
U1456C-45X-3, 45-51 cm	27.674	103.7	1.987	1.139	0.024	0.1222	0.0016	0.48057	770	12	743	9.3	831	41	743.0	9.3	3.5	
U1456C-45X-3, 45-51 cm	27.675	256	1.600	1.289	0.023	0.1387	0.0019	0.49998	839	10	837	10	840	33	837.0	10.0	0.2	
U1456C-45X-3, 45-51 cm	27.674	1647	2.690	0.117	0.003	0.0177	0.0003	0.55779	112.5	2.3	113	1.7	105	38	113.0	1.7	0.4	
U1456C-45X-3, 45-51 cm	1.637	3790	105.000	0.017	0.005	0.0025	0.0004	0.62749	17.3	5	16.2	2.8	150	340	DISC	DISC	6.4	
U1456C-45X-3, 45-51 cm	18.764	873	7.420	0.992	0.022	0.1152	0.0027	0.70543	700	11	702	16	692	37	702.0	16.0	0.3	
U1456C-45X-3, 45-51 cm	27.675	171.1	1.169	0.062	0.004	0.0096	0.0003	0.20625	60.5	3.6	61.7	1.6	70	120	61.7	1.6	2.0	
U1456C-45X-3, 45-51 cm	15.190	247.7	1.227	1.044	0.023	-0.0065	0.0001	0.66906	725	11	-42.03	0.8	751	36	DISC	DISC	105.8	
U1456C-45X-3, 45-51 cm	27.674	871	1.321	0.117	0.003	0.0174	0.0003	0.40829	112.5	2.9	110.9	1.9	152	53	110.9	1.9	1.4	
U1456C-45X-3, 45-51 cm	21.886	647	2.820	1.732	0.041	0.1720	0.0042	0.83692	1017	15	1022	23	1012	27	1012.0	27.0	1.0	
U1456C-45X-3, 45-51 cm	27.674	346	10.600	1.434	0.026	0.1491	0.0022	0.65471	901	11	896	12	906	27	906.0	27.0	1.1	Rim Core
U1457C-41R-2, 20-26 cm	14.917	65.7	0.479	10.190	0.180	0.4614	0.0063	0.37949	2449	17	2444	28	2444	31	2444.0	31.0	0.0	
U1457C-41R-2 20-26 cm	5.468	1080	7.600	0.705	0.033	0.0839	0.0018	0.66618	541	19	519	11	615	76	519.0	11.0	4.1	
U1457C-41R-2 20-26 cm	7.323	1711	13.330	2.931	0.098	0.2125	0.0059	0.94941	1387	26	1241	32	1611	26	1611.0	26.0	23.0	
U1457C-41R-2 20-26 cm	24.636	934	1.441	0.126	0.004	0.0179	0.0003	0.50480	120.8	3.3	114.3	2.1	247	55	114.3	2.1	5.4	
U1457C-41R-2 20-26 cm	22.815	228	0.882	1.076	0.021	0.1215	0.0014	0.31996	740	10	739.2	8.1	735	42	739.2	8.1	0.1	
U1457C-41R-2 20-26 cm	9.449	303	0.668	0.059	0.006	0.0091	0.0003	0.08016	57.8	6	58.6	1.9	30	190	58.6	1.9	1.4	
U1457C-41R-2 20-26 cm	28.282	1281	0.664	0.021	0.001	0.0030	0.0001	0.01711	20.9	0.91	19.38	0.34	190	91	19.4	0.3	7.3	
U1457C-41R-2 20-26 cm	15.220	534	2.460	1.307	0.027	0.1390	0.0025	0.52010	847	12	839	14	870	41	839.0	14.0	0.9	
U1457C-41R-2 20-26 cm	9.145	717	10.200	0.424	0.017	0.0507	0.0017	0.63048	358	12	318	11	611	72	318.0	11.0	11.2	
U1457C-41R-2 20-26 cm	27.675	229	0.972	0.038	0.003	0.0057	0.0002	0.15030	37.2	2.9	36.81	0.97	80	140	36.8	1.0	1.0	Rim Core
U1457C-41R-2 20-26 cm	19.170	279.4	3.090	1.380	0.024	0.1465	0.0017	0.37933	879	10	881.3	9.6	862	35	862.0	35.0	2.2	
U1457C-41R-2 20-26 cm	15.524	303.8	1.462	1.613	0.026	0.1614	0.0019	0.38570	974.1	9.9	965	10	992	29	992.0	29.0	2.7	
U1457C-41R-2 20-26 cm	16.436	572	1.954	1.278	0.017	0.1345	0.0012	0.53509	835.2	7.7	813.6	7.1	884	24	813.6	7.1	2.6	
U1457C-41R-2 20-26 cm	27.675	272	1.120	1.536	0.024	0.1580	0.0014	0.36204	943.3	9.4	945.6	7.9	929	30	929.0	30.0	1.8	
U1457C-41R-2 20-26 cm	27.674	959	0.525	0.047	0.002	0.0070	0.0001	0.08146	46.7	1.9	45.13	0.61	128	80	45.1	0.6	3.4	
U1457C-41R-2 20-26 cm	23.119	525	3.890	0.796	0.013	0.0943	0.0011	0.48271	593.5	7.4	581.1	6.2	629	32	581.1	6.2	2.1	
U1457C-41R-2 20-26 cm	23.421	663	1.635	1.247	0.018	0.1331	0.0018	0.62175	821	8.4	805	10	861	26	805.0	10.0	1.9	
U1457C-41R-2 20-26 cm	17.346	114.4	2.770	1.087	0.028	0.1150	0.0019	0.30222	745	14	702	11	869	55	702.0	11.0	5.8	
U1457C-41R-2 20-26 cm	18.865	575	1.396	1.602	0.025	0.1570	0.0016	0.42963	970	9.6	939.7	9	1052	31	1052.0	31.0	10.7	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1457C-41R-2 20-26 cm	27.675	1457	2.870	0.023	0.001	0.0035	0.0001	0.15765	22.68	0.89	22.65	0.4	72	78	22.7	0.4	0.1	Rim Core
U1457C-41R-2 20-26 cm	28.586	943	15.000	0.236	0.007	0.0351	0.0009	0.58434	214.3	6	222.3	5.8	150	53	222.3	5.8	3.7	
U1457C-41R-2 20-26 cm	24.333	169.4	1.929	1.315	0.024	0.1403	0.0015	0.27397	850	11	846.2	8.3	869	39	846.2	8.3	0.4	
U1457C-41R-2 20-26 cm	27.674	1145	2.140	0.169	0.003	0.0251	0.0002	0.30694	158.5	2.5	159.8	1.4	152	36	159.8	1.4	0.8	
U1457C-41R-2 20-26 cm	25.245	449	1.829	0.653	0.012	0.0816	0.0008	0.48043	509.1	7.5	505.6	5	535	37	505.6	5.0	0.7	
U1457C-41R-2 20-26 cm	27.674	501	3.680	1.231	0.016	0.1330	0.0013	0.50280	813.6	7.5	804.6	7.7	844	25	804.6	7.7	1.1	
U1457C-41R-2 20-26 cm	27.674	275	1.260	0.174	0.006	0.0256	0.0004	0.16234	162.5	4.8	162.8	2.4	177	65	162.8	2.4	0.2	
U1457C-41R-2 20-26 cm	21.904	200	1.024	0.692	0.023	0.0860	0.0018	0.46663	533	14	531	11	529	66	531.0	11.0	0.4	
U1457C-41R-2 20-26 cm	8.841	436	1.507	1.086	0.026	0.1097	0.0014	0.51644	745	13	670.9	8	982	42	670.9	8.0	9.9	
U1457C-41R-2 20-26 cm	7.626	1170	5.410	2.251	0.059	0.1913	0.0042	0.65198	1195	18	1128	23	1318	41	1318.0	41.0	14.4	
U1457C-41R-2 20-26 cm	6.683	292	7.640	3.373	0.075	0.2413	0.0042	0.62444	1497	17	1393	22	1669	38	1669.0	38.0	16.5	
U1457C-41R-2 20-26 cm	27.675	309	2.150	1.125	0.024	0.1261	0.0020	0.45663	763	11	765	11	780	39	765.0	11.0	0.3	
U1457C-41R-2 20-26 cm	10.056	242	0.674	0.995	0.051	0.1133	0.0028	0.54779	702	27	691	16	748	95	691.0	16.0	1.6	
U1457C-41R-2 20-26 cm	26.156	465	5.750	1.683	0.063	0.1526	0.0043	0.20372	993	23	917	25	1163	65	1163.0	65.0	21.2	
U1457C-41R-2 20-26 cm	26.155	582	3.750	2.450	0.130	0.1759	0.0066	0.86408	1232	37	1041	36	1604	53	DISC	DISC	35.1	
U1457C-41R-2 20-26 cm	21.599	765	25.900	4.940	0.110	0.2996	0.0066	0.61973	1804	18	1687	32	1945	34	1945.0	34.0	13.3	
U1457C-41R-2 20-26 cm	27.674	172.7	0.741	0.109	0.007	0.0164	0.0005	0.35166	104.7	6.2	104.5	3	130	110	104.5	3.0	0.2	
U1457C-41R-2 20-26 cm	26.155	454	1.329	1.638	0.020	0.1650	0.0014	0.55530	983.9	7.6	984.1	8	987	21	987.0	21.0	0.3	
U1457C-41R-2 20-26 cm	8.234	1377	1.042	0.997	0.026	0.0940	0.0021	0.65745	701	13	579	12	1122	41	DISC	DISC	17.4	
U1457C-41R-2 20-26 cm	27.674	142.3	0.688	3.982	0.068	0.2900	0.0052	0.52713	1627	14	1640	26	1616	33	1616.0	33.0	1.5	
U1457C-41R-2 20-26 cm	21.599	433	1.660	7.830	0.120	0.3565	0.0056	0.65278	2209	13	1964	27	2448	21	2448.0	21.0	19.8	
U1457C-41R-2 20-26 cm	24.940	1470	1.596	0.133	0.004	0.0195	0.0003	0.35110	126.8	3.4	124.4	2	177	54	124.4	2.0	1.9	
U1457C-41R-2 20-26 cm	5.164	1099	27.700	0.570	0.035	0.0691	0.0034	0.84811	456	22	430	20	590	75	430.0	20.0	5.7	
U1457C-41R-2 20-26 cm	21.296	44.5	-17.400	1.315	0.063	0.1375	0.0054	0.43207	842	28	828	30	860	100	828.0	30.0	1.7	
U1457C-41R-2 20-26 cm	5.804	1047	6.020	6.900	0.240	0.3290	0.0130	0.76747	2095	30	1829	64	2373	44	2373.0	44.0	22.9	
U1457C-41R-2 20-26 cm	27.675	77.5	0.912	1.376	0.045	0.1482	0.0036	0.37693	877	18	890	20	810	63	810.0	20.0	1.5	
U1457C-41R-2 20-26 cm	10.664	1224	35.700	5.040	0.130	0.3170	0.0110	0.59420	1823	22	1774	54	1856	50	1856.0	50.0	4.4	
U1457C-41R-2 20-26 cm	27.675	780	1.761	0.110	0.004	0.0163	0.0004	0.44147	105.8	3.4	104.2	2.3	144	63	104.2	2.3	1.5	
U1457C-41R-2 20-26 cm	27.675	80.5	0.480	0.661	0.022	0.0820	0.0016	0.22096	512	13	507.6	9.6	501	72	507.6	9.6	0.9	
U1457C-41R-2 20-26 cm	12.790	87.9	1.296	0.127	0.014	0.0186	0.0009	0.39623	120	13	118.7	5.9	130	180	118.7	5.9	1.1	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-41R-2 20-26 cm	27.674	129.9	1.064	0.060	0.005	0.0082	0.0003	0.04673	58.8	5	52.3	1.6	280	160	52.3	1.6	11.1	
U1457C-41R-2 20-26 cm	27.674	57.9	0.651	0.060	0.008	0.0078	0.0004	0.04158	58.2	7.6	50.2	2.3	200	240	50.2	2.3	13.7	
U1457C-41R-2 20-26 cm	27.674	208	1.503	0.043	0.003	0.0068	0.0002	0.00739	42.3	2.7	43.4	1.1	20	120	43.4	1.1	2.6	
U1457C-41R-2 20-26 cm	6.379	846	0.964	0.924	0.029	0.0918	0.0029	0.64648	664	15	566	17	1015	52	566.0	17.0	14.8	
U1457C-41R-2 20-26 cm	28.377	733	0.626	0.068	0.003	0.0001	0.0011	0.01815	66.9	2.5	0.4	7	91	71	DISC	DISC	99.4	
U1457C-41R-2 20-26 cm	12.696	379.4	1.408	0.319	0.011	0.0451	0.0008	0.32064	280.4	8.1	284.1	4.8	263	68	284.1	4.8	1.3	
U1457C-41R-2 20-26 cm	27.674	373	1.946	1.580	0.022	0.1603	0.0016	0.47070	960.8	8.6	958.3	8.9	971	25	971.0	25.0	1.3	
U1457C-41R-2 20-26 cm	27.674	1550	14.820	4.761	0.066	0.2996	0.0041	0.75711	1776	12	1688	21	1882	18	1882.0	18.0	10.3	
U1457C-41R-2 20-26 cm	19.951	470	1.476	2.521	0.053	0.2080	0.0029	0.71000	1275	15	1218	16	1368	27	1368.0	27.0	11.0	
U1457C-41R-2 20-26 cm	27.674	3800	3.670	0.014	0.000	0.0020	0.0000	0.34510	14.5	0.41	13.07	0.22	259	58	13.1	0.2	9.9	
U1457C-41R-2 20-26 cm	18.781	969	3.620	4.915	0.071	-0.0164	0.0002	0.75166	1803	12	-106.3	1.4	1966	18	DISC	DISC	105.9	
U1457C-41R-2 20-26 cm	27.674	572	1.700	0.123	0.004	0.0174	0.0002	0.32794	117.5	3.2	111.1	1.4	236	57	111.1	1.4	5.4	
U1457C-41R-2 20-26 cm	27.674	569	2.940	1.462	0.024	0.1498	0.0019	0.60897	913	9.8	899	11	943	27	943.0	27.0	4.7	
U1457C-41R-2 20-26 cm	11.058	595	25.700	0.650	0.016	0.0812	0.0014	0.59652	507.9	9.6	503.3	8.4	520	44	503.3	8.4	0.9	
U1457C-41R-2 20-26 cm	27.675	3330	1.562	0.021	0.001	0.0032	0.0003	0.11688	20.6	0.61	20.7	1.7	84	61	20.7	1.7	0.5	
U1457C-41R-2 20-26 cm	10.824	448	4.050	5.460	0.150	-0.0178	0.0004	0.90096	1891	22	-115.9	2.6	2003	22	DISC	DISC	106.1	
U1457C-41R-2 20-26 cm	12.462	236.1	0.591	1.141	0.030	0.1236	0.0026	0.49314	771	15	751	15	823	52	751.0	15.0	2.6	
U1457C-41R-2 20-26 cm	27.674	346	2.187	9.970	0.110	0.4460	0.0042	0.73483	2430	10	2376	19	2472	13	2472.0	13.0	3.9	
U1457C-41R-2 20-26 cm	19.016	92.9	1.492	1.320	0.036	0.1370	0.0025	0.42700	851	16	827	14	914	51	827.0	14.0	2.8	
U1457C-41R-2 20-26 cm	24.632	246	2.420	0.983	0.022	0.1111	0.0018	0.47912	693	11	679	10	727	38	679.0	10.0	2.0	
U1457C-41R-2 20-26 cm	18.079	370	11.600	0.819	0.019	0.0979	0.0017	0.59268	606	11	601.9	9.9	609	42	601.9	9.9	0.7	
U1457C-41R-2 20-26 cm	7.021	1228	3.240	0.680	0.022	0.0796	0.0019	0.50953	526	14	494	11	671	62	494.0	11.0	6.1	Rim
U1457C-41R-2 20-26 cm	12.931	62.6	1.592	1.379	0.053	0.1483	0.0037	0.55221	875	23	891	21	846	71	846.0	21.0	1.8	Core
U1457C-41R-2 20-26 cm	14.335	244	0.970	0.068	0.007	0.0081	0.0004	0.59782	66.2	6.7	52.2	2.7	550	170	DISC	DISC	21.1	
U1457C-41R-2 20-26 cm	27.674	1482	0.953	0.127	0.003	0.0175	0.0003	0.43136	121	3	111.8	1.7	310	49	111.8	1.7	7.6	
U1457C-41R-2 20-26 cm	5.442	1009	11.210	0.484	0.020	0.0632	0.0017	0.66944	400	14	395	10	442	75	395.0	10.0	1.3	Rim
U1457C-41R-2 20-26 cm	12.637	427	6.500	1.527	0.050	0.1472	0.0032	0.58300	938	19	885	18	1069	37	1069.0	37.0	17.2	Core
U1457C-41R-2 20-26 cm	27.675	1558	5.350	0.107	0.003	0.0162	0.0003	0.42118	102.9	2.3	103.8	1.6	97	45	103.8	1.6	0.9	
U1457C-41R-2 20-26 cm	18.313	634	0.665	0.061	0.003	0.0090	0.0001	0.31213	59.6	2.4	57.72	0.91	157	80	57.7	0.9	3.2	
U1457C-41R-2 20-26 cm	21.824	162	1.063	0.066	0.006	0.0097	0.0003	0.05440	64.8	5.2	62.2	1.9	170	160	62.2	1.9	4.0	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1457C-41R-2 20-26 cm	27.674	195	1.115	0.091	0.005	0.0134	0.0004	0.16914	87.7	4.8	85.8	2.3	170	110	85.8	2.3	2.2	Core
U1457C-41R-2 20-26 cm	27.675	1130	4.180	0.384	0.012	0.0513	0.0012	0.56766	328.9	8.6	322.3	7.4	364	53	322.3	7.4	2.0	
U1457C-41R-2 20-26 cm	27.674	2050	2.930	0.551	0.011	0.0713	0.0013	0.75132	444.8	7.1	443.8	7.8	465	29	443.8	7.8	0.2	
U1457C-41R-2 20-26 cm	11.526	336	1.556	1.245	0.028	0.1337	0.0023	0.60390	820	13	809	13	866	38	809.0	13.0	1.3	
U1457C-41R-2 20-26 cm	17.377	27.5	0.412	1.102	0.049	0.1196	0.0034	0.16975	748	24	728	19	800	100	728.0	19.0	2.7	
U1457C-41R-2 20-26 cm	27.674	603	4.520	8.380	0.140	0.4172	0.0068	0.81761	2269	15	2245	31	2298	18	2298.0	18.0	2.3	
U1457C-41R-2 20-26 cm	27.674	139.3	1.482	7.459	0.092	0.3984	0.0043	0.63381	2166	11	2161	20	2174	17	2174.0	17.0	0.6	
U1457C-41R-2 20-26 cm	21.121	540	4.420	0.954	0.020	0.1039	0.0020	0.67753	680	11	637	12	827	33	637.0	12.0	6.3	
U1457C-41R-2 20-26 cm	14.569	336	1.350	0.986	0.028	0.1101	0.0026	0.65858	695	14	673	15	752	46	673.0	15.0	3.2	
U1457C-41R-2 20-26 cm	27.674	115.6	1.613	1.078	0.027	-0.0050	0.0170	0.04607	741	13	-5	72	811	51	DISC	DISC	100.7	
U1457C-41R-2 20-26 cm	27.674	1686	0.768	0.157	0.003	0.0230	0.0015	0.05421	148.2	2.5	146.2	9.7	187	33	146.2	9.7	1.3	
U1457C-41R-2 20-26 cm	22.525	121.4	0.764	0.070	0.006	0.0100	0.0003	0.04998	68.5	5.7	63.9	1.8	200	160	63.9	1.8	6.7	
U1457C-41R-2 20-26 cm	26.036	378.9	1.347	5.708	0.089	0.3315	0.0046	0.76866	1929	14	1844	22	2006	18	2006.0	18.0	8.1	
U1457C-41R-2 20-26 cm	23.931	1356	10.850	0.752	0.013	0.0870	0.0014	0.68740	568.4	7.4	537.8	8.3	672	28	537.8	8.3	5.4	
U1457C-41R-2 20-26 cm	27.674	1806	1.268	0.047	0.001	0.0070	0.0001	0.42464	46.5	1.2	44.96	0.69	106	50	45.0	0.7	3.3	
U1457C-41R-2 20-26 cm	9.888	193.1	1.338	0.855	0.037	0.0963	0.0023	0.51667	629	21	592	14	710	83	592.0	14.0	5.9	
U1457C-41R-2 20-26 cm	27.674	427.8	2.153	1.560	0.026	0.1566	0.0023	0.68958	954	11	937	13	966	27	966.0	27.0	3.0	
U1457C-41R-2 20-26 cm	3.569	1970	16.840	0.459	0.018	0.0567	0.0020	0.48564	383	13	355	12	536	81	355.0	12.0	7.3	Rim
U1457C-41R-2 20-26 cm	12.403	254.3	1.215	1.729	0.042	0.1686	0.0031	0.65943	1017	16	1004	17	1019	38	1019.0	38.0	1.5	Core
U1457C-41R-2 20-26 cm	27.675	551	1.160	0.098	0.003	0.0150	0.0003	0.30562	94.5	2.8	96	1.7	60	59	96.0	1.7	1.6	Rim
U1457C-41R-2 20-26 cm	3.744	670	73.500	0.242	0.019	0.0314	0.0014	0.48701	220	16	199.6	8.4	410	150	199.6	8.4	9.3	
U1457C-41R-2 20-26 cm	5.911	326.5	1.997	10.430	0.200	0.4282	0.0071	0.54699	2473	18	2297	32	2597	30	2597.0	30.0	11.6	Core
U1457C-41R-2 20-26 cm	13.868	657	1.594	0.828	0.026	0.0972	0.0024	0.76408	610	14	598	14	636	44	598.0	14.0	2.0	Rim
U1457C-41R-2 20-26 cm	27.674	3120	1.530	0.025	0.001	0.0037	0.0001	0.40658	25.49	0.79	23.66	0.4	186	59	23.7	0.4	7.2	
U1457C-41R-2 20-26 cm	7.255	473	4.170	0.610	0.021	0.0781	0.0027	0.57040	483	13	484	16	451	69	484.0	16.0	0.2	Core
U1457C-41R-2 20-26 cm	13.867	105.1	1.550	1.522	0.044	0.1490	0.0028	0.45950	936	18	895	16	1015	54	1015.0	54.0	11.8	
U1457C-41R-2 20-26 cm	12.462	123.1	1.570	0.457	0.027	0.0540	0.0018	0.65579	379	19	339	11	590	100	339.0	11.0	10.6	Rim
U1457C-41R-2 20-26 cm	16.441	453	1.469	1.107	0.021	0.1177	0.0015	0.51252	755.7	9.9	717.4	8.9	846	33	717.4	8.9	5.1	
U1457C-41R-2 20-26 cm	27.675	353.5	6.270	1.531	0.029	0.1555	0.0026	0.71005	942	12	931	15	949	29	949.0	29.0	1.9	Core
U1457C-41R-2 20-26 cm	27.674	344	1.165	1.638	0.039	0.1618	0.0036	0.62292	982	15	965	20	1004	43	1004.0	43.0	3.9	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-41R-2 20-26 cm	18.548	587	5.390	1.700	0.048	0.1490	0.0036	0.75995	1005	18	895	20	1239	37	1239.0	37.0	27.8	
U1457C-41R-2 20-26 cm	27.675	117.3	0.493	0.637	0.018	0.0780	0.0013	0.47399	498	11	483.8	8	533	54	483.8	8.0	2.9	
U1457C-41R-2 20-26 cm	27.674	843	5.230	0.315	0.007	0.0421	0.0008	0.64725	277.6	5.5	265.8	4.8	351	39	265.8	4.8	4.3	
U1457C-41R-2 20-26 cm	10.122	808	0.583	0.051	0.003	0.0073	0.0002	0.19642	50.8	3.2	46.7	1.2	210	130	46.7	1.2	8.1	
U1457C-41R-2 20-26 cm	7.080	267.7	3.310	1.434	0.057	0.1469	0.0042	0.72928	901	24	883	23	917	56	917.0	56.0	3.7	
U1457C-41R-2 20-26 cm	25.568	1283	2.164	3.764	0.052	0.2647	0.0031	0.71955	1583	11	1513	16	1659	17	1659.0	17.0	8.8	
U1457C-41R-2 20-26 cm	19.717	146	1.756	1.634	0.037	0.1643	0.0029	0.55047	983	15	980	16	961	40	961.0	40.0	2.0	
U1457C-41R-2 20-26 cm	19.718	231	0.590	0.055	0.004	0.0079	0.0002	0.14652	54.1	3.8	50.5	1.3	180	130	50.5	1.3	6.7	
U1457C-41R-2 20-26 cm	26.270	491	1.072	3.975	0.055	0.2838	0.0035	0.68021	1627	11	1609	17	1623	20	1623.0	20.0	0.9	
U1457C-41R-2 20-26 cm	15.505	588	16.210	5.142	0.091	0.3118	0.0047	0.77705	1843	14	1749	23	1914	21	1914.0	21.0	8.6	
U1457C-41R-2 20-26 cm	16.676	520	4.740	4.601	0.079	0.3112	0.0049	0.71524	1747	14	1746	24	1710	22	1710.0	22.0	2.1	
U1457C-41R-2 20-26 cm	8.250	332.9	0.335	0.781	0.035	0.0801	0.0024	0.34344	584	20	496	14	894	91	DISC	DISC	15.1	
U1457C-41R-2 20-26 cm	9.654	738	1.212	2.635	0.065	0.1811	0.0040	0.76162	1308	18	1073	22	1680	29	DISC	DISC	36.1	
U1457C-41R-2 20-26 cm	27.675	1215	2.920	0.223	0.004	0.0315	0.0004	0.51601	204.2	3.5	199.9	2.7	208	37	199.9	2.7	2.1	
U1457C-41R-2 20-26 cm	9.888	303	0.818	0.095	0.007	0.0125	0.0004	0.16668	92	6.8	80.3	2.3	330	150	80.3	2.3	12.7	
U1457C-41R-2 20-26 cm	15.973	540	4.300	0.038	0.003	0.0055	0.0002	0.15940	37.7	3	35	1.3	180	150	35.0	1.3	7.2	
U1457C-42R-1 80-88 cm	15.588	324	1.270	1.011	0.019	0.1152	0.0015	0.51582	708.6	9.7	703	8.7	726	36	703.0	8.7	0.8	
U1457C-42R-1 80-88 cm	27.674	652	1.209	1.807	0.018	0.1719	0.0014	0.56609	1047	6.3	1022	7.8	1075	17	1075.0	17.0	4.9	
U1457C-42R-1 80-88 cm	27.675	101.1	0.827	1.663	0.028	0.1632	0.0015	0.31721	994	11	974.3	8.2	1006	33	1006.0	33.0	3.2	
U1457C-42R-1 80-88 cm	14.951	682	30.100	11.660	0.120	0.4624	0.0037	0.62544	2576	10	2450	16	2651	14	2651.0	14.0	7.6	
U1457C-42R-1 80-88 cm	19.087	608	3.680	0.806	0.011	0.0944	0.0010	0.31832	599.7	6.1	581.3	5.9	636	30	581.3	5.9	3.1	
U1457C-42R-1 80-88 cm	27.674	138	1.780	0.040	0.003	0.0057	0.0002	0.12465	39.5	3.3	36.7	1.1	130	150	36.7	1.1	7.1	
U1457C-42R-1 80-88 cm	25.448	201	0.598	0.052	0.004	0.0075	0.0002	0.11508	50.9	3.5	48.2	1.2	150	130	48.2	1.2	5.3	
U1457C-42R-1 80-88 cm	27.674	192.7	0.718	0.057	0.003	0.0090	0.0002	0.12405	56.4	3.1	57.6	1.2	50	110	57.6	1.2	2.1	
U1457C-42R-1 80-88 cm	27.674	100.4	0.521	0.089	0.006	0.0139	0.0003	0.02780	86.4	5.6	88.9	1.6	40	120	88.9	1.6	2.9	
U1457C-42R-1 80-88 cm	27.674	1823	46.200	0.050	0.001	0.0076	0.0002	0.66367	49.1	1.2	48.9	1	90	43	48.9	1.0	0.4	
U1457C-42R-1 80-88 cm	16.858	1085	23.400	1.384	0.036	0.1454	0.0036	0.65247	879	15	875	20	924	44	924.0	44.0	5.3	Rim
U1457C-42R-1 80-88 cm	10.816	749	6.180	1.776	0.032	0.1750	0.0034	0.74200	1036	12	1039	18	1064	30	1064.0	30.0	2.3	Core
U1457C-42R-1 80-88 cm	27.674	248	1.663	0.115	0.006	0.0168	0.0006	0.33376	109.6	5.5	107.2	3.6	192	99	107.2	3.6	2.2	
U1457C-42R-1 80-88 cm	27.675	283	0.585	0.178	0.005	0.0265	0.0004	0.42668	165.5	4.6	168.3	2.7	155	57	168.3	2.7	1.7	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1457C-42R-1 80-88 cm	3.817	584	3.300	5.070	0.260	0.3170	0.0170	0.58596	1826	44	1771	81	1903	86	1903.0	86.0	6.9	Rim
U1457C-42R-1 80-88 cm	17.813	358	1.798	13.810	0.180	0.5354	0.0050	0.56513	2735	12	2763	21	2728	17	2728.0	17.0	1.3	Core
U1457C-42R-1 80-88 cm	3.499	595	20.200	0.251	0.016	0.0356	0.0015	0.47398	227	13	225.6	9.2	230	130	225.6	9.2	0.6	Rim
U1457C-42R-1 80-88 cm	8.272	341.4	2.287	9.300	0.110	0.4248	0.0055	0.69229	2367	11	2282	25	2438	19	2438.0	19.0	6.4	Core
U1457C-42R-1 80-88 cm	17.495	459	3.370	0.992	0.024	0.1043	0.0020	0.76466	698	12	639	11	892	31	639.0	11.0	8.5	
U1457C-42R-1 80-88 cm	12.724	383	3.260	10.860	0.180	0.4537	0.0068	0.64298	2509	15	2411	30	2579	23	2579.0	23.0	6.5	
U1457C-42R-1 80-88 cm	19.086	493	2.179	1.799	0.025	0.1777	0.0021	0.65642	1045	9.6	1054	12	1000	23	1000.0	23.0	5.4	
U1457C-42R-1 80-88 cm	14.951	259.4	1.127	4.629	0.070	0.2890	0.0048	0.68363	1753	13	1635	24	1873	23	1873.0	23.0	12.7	
U1457C-42R-1 80-88 cm	27.674	163.1	3.510	1.380	0.022	0.1468	0.0017	0.37485	878.9	9.4	882.9	9.7	834	29	834.0	9.7	0.5	
U1457C-42R-1 80-88 cm	13.360	904	13.340	0.637	0.010	0.0795	0.0010	0.38155	499.8	5.8	492.8	6.1	497	34	492.8	6.1	1.4	
U1457C-42R-1 80-88 cm	27.674	193.6	1.476	4.617	0.071	0.3121	0.0049	0.71722	1749	13	1750	24	1730	21	1730.0	21.0	1.2	
U1457C-42R-1 80-88 cm	27.675	237	1.241	1.608	0.026	0.1647	0.0028	0.48156	971	10	982	15	931	36	931.0	36.0	5.5	
U1457C-42R-1 80-88 cm	27.675	82.2	0.784	4.910	0.150	0.3298	0.0086	0.59682	1794	26	1832	42	1735	49	1735.0	49.0	5.6	
U1457C-42R-1 80-88 cm	15.587	92.5	0.543	11.300	0.150	0.4947	0.0051	0.59480	2546	12	2590	22	2496	19	2496.0	19.0	3.8	
U1457C-42R-1 80-88 cm	23.539	152.6	2.510	1.089	0.030	0.1233	0.0026	0.74816	745	14	749	15	737	42	749.0	15.0	0.5	
U1457C-42R-1 80-88 cm	24.493	537	0.490	0.707	0.012	0.0869	0.0011	0.70446	542.3	7	537.1	6.4	555	27	537.1	6.4	1.0	
U1457C-42R-1 80-88 cm	2.545	725	30.000	0.026	0.005	0.0037	0.0003	0.08860	25.8	4.4	23.6	1.8	210	340	23.6	1.8	8.5	
U1457C-42R-1 80-88 cm	27.674	369	1.064	0.256	0.005	0.0364	0.0003	0.02170	231.3	4.2	230.5	2.1	217	48	230.5	2.1	0.3	
U1457C-42R-1 80-88 cm	27.674	770	2.470	2.044	0.018	0.1977	0.0016	0.71931	1130	6	1163	8.8	1057	12	1057.0	12.0	10.0	
U1457C-42R-1 80-88 cm	8.907	678	9.110	1.002	0.022	0.1158	0.0020	0.59087	704	11	706	12	683	40	706.0	12.0	0.3	
U1457C-42R-1 80-88 cm	23.221	241	2.100	4.566	0.062	0.2905	0.0039	0.87463	1741	11	1643	19	1849	14	1849.0	14.0	11.1	
U1457C-42R-1 80-88 cm	27.675	698	5.010	1.681	0.024	0.1676	0.0022	0.66904	999.7	9	999	12	989	24	989.0	24.0	1.0	
U1457C-42R-1 80-88 cm	26.402	382	1.902	1.220	0.013	0.1338	0.0010	0.49116	808.9	6.1	809.6	5.8	788	22	809.6	5.8	0.1	
U1457C-42R-1 80-88 cm	27.675	593	0.654	0.042	0.002	0.0063	0.0001	0.02537	41.3	1.4	40.24	0.68	100	70	40.2	0.7	2.6	
U1457C-42R-1 80-88 cm	27.674	194.4	1.350	1.627	0.025	0.1631	0.0016	0.61519	978.8	9.6	973.7	8.9	974	25	974.0	25.0	0.0	
U1457C-42R-1 80-88 cm	15.906	66.2	0.305	1.630	0.041	0.1604	0.0026	0.28297	982	16	959	14	1009	54	1009.0	54.0	5.0	
U1457C-42R-1 80-88 cm	27.674	50.9	0.657	1.262	0.031	0.1375	0.0016	0.19800	825	14	830.4	9.2	775	55	830.4	9.2	0.7	
U1457C-42R-1 80-88 cm	27.675	197	0.619	0.057	0.004	0.0090	0.0002	0.00845	55.6	3.4	57.8	1.2	20	110	57.8	1.2	4.0	
U1457C-42R-1 80-88 cm	27.674	260.1	1.200	1.314	0.018	0.1426	0.0012	0.32979	851.8	8.2	859.1	7	808	29	808.0	7.0	0.9	
U1457C-42R-1 80-88 cm	2.863	1061	39.900	0.161	0.012	0.0233	0.0010	0.78800	152	11	148.5	6	159	98	148.5	6.0	2.3	Rim

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1457C-42R-1 80-88 cm	20.040	144.5	1.110	1.507	0.024	0.1561	0.0013	0.39058	931.8	9.7	934.9	7.5	898	30	898.0	30.0	4.1	Core
U1457C-42R-1 80-88 cm	25.129	908	1.765	0.564	0.006	0.0723	0.0005	0.35797	453.8	4	449.9	3.1	450	23	449.9	3.1	0.9	
U1457C-42R-1 80-88 cm	27.674	319	0.983	0.061	0.003	0.0092	0.0002	0.12978	60.4	2.7	58.8	1.1	117	87	58.8	1.1	2.6	
U1457C-42R-1 80-88 cm	16.541	104.9	0.973	1.757	0.045	0.1746	0.0035	0.57208	1027	17	1037	19	980	50	980.0	50.0	5.8	
U1457C-42R-1 80-88 cm	14.315	236	1.803	1.272	0.019	0.1377	0.0016	0.33342	832.6	8.6	831.3	9.2	826	33	831.3	9.2	0.2	
U1457C-42R-1 80-88 cm	27.675	546.9	3.730	1.579	0.018	0.1624	0.0017	0.51570	961.2	7.3	970	9.4	937	22	937.0	22.0	3.5	
U1457C-42R-1 80-88 cm	27.675	391	0.585	0.464	0.008	0.0625	0.0005	0.20623	387.1	5.3	390.7	3	372	37	390.7	3.0	0.9	
U1457C-42R-1 80-88 cm	27.674	191.4	0.986	0.088	0.004	0.0133	0.0002	0.06521	84.9	3.6	84.9	1.4	130	87	84.9	1.4	0.0	
U1457C-42R-1 80-88 cm	8.906	259	2.010	1.340	0.063	0.1472	0.0078	0.53868	859	28	883	44	830	100	830.0	44.0	2.8	Rim
U1457C-42R-1 80-88 cm	13.997	494	4.540	11.410	0.500	0.4960	0.0180	0.94500	2540	44	2588	78	2539	27	2539.0	27.0	1.9	Core
U1457C-42R-1 80-88 cm	18.768	916	4.900	1.146	0.015	0.1243	0.0014	0.59777	774.9	7.1	755.3	8	869	22	755.3	8.0	2.5	
U1457C-42R-1 80-88 cm	27.039	113.2	1.024	0.067	0.005	0.0087	0.0002	0.01039	65.6	4.8	55.6	1.5	380	150	DISC	DISC	15.2	
U1457C-42R-1 80-88 cm	27.674	125	1.530	0.559	0.016	0.0736	0.0008	0.18843	449	11	457.7	4.9	411	62	457.7	4.9	1.9	
U1457C-42R-1 80-88 cm	27.356	4760	7.420	0.039	0.001	0.0061	0.0001	0.14562	38.8	1.1	39.22	0.45	43	55	39.2	0.5	1.1	
U1457C-42R-1 80-88 cm	27.674	972	1.378	0.274	0.004	0.0373	0.0004	0.45356	245.3	3.2	235.9	2.4	283	30	235.9	2.4	3.8	
U1457C-42R-1 80-88 cm	15.587	854	1.814	9.350	0.160	0.4086	0.0056	0.85787	2370	15	2207	25	2489	15	2489.0	15.0	11.3	
U1457C-42R-1 80-88 cm	13.042	674	6.150	0.114	0.004	0.0170	0.0004	0.31141	109.2	3.8	108.6	2.2	116	72	108.6	2.2	0.5	
U1457C-42R-1 80-88 cm	27.674	324	1.108	10.499	0.079	0.4683	0.0031	0.69760	2479	6.9	2476	13	2451	9.9	2451.2	9.9	1.0	
U1457C-42R-1 80-88 cm	13.361	67.4	0.306	0.102	0.012	0.0094	0.0004	0.05771	97	11	60.3	2.3	910	260	DISC	DISC	37.8	
U1457C-42R-1 80-88 cm	11.134	695	5.090	2.286	0.050	0.2023	0.0034	0.68994	1206	15	1187	18	1202	31	1202.0	31.0	1.2	
U1457C-42R-1 80-88 cm	19.086	1133	1.264	0.040	0.001	0.0060	0.0001	0.22610	39.9	1.1	38.5	0.48	67	56	38.5	0.5	3.5	
U1457C-42R-1 80-88 cm	23.222	925	18.490	0.764	0.009	0.0922	0.0009	0.55055	576.1	5	568.6	5.1	562	22	568.6	5.1	1.3	
U1457C-42R-1 80-88 cm	27.674	505	2.940	0.098	0.002	0.0147	0.0002	0.02080	94.8	2.1	93.7	1	81	52	93.7	1.0	1.2	
U1457C-42R-1 80-88 cm	11.771	1145	3.360	1.539	0.022	0.1509	0.0021	0.73707	945.4	8.8	906	11	1011	20	1011.0	20.0	10.4	
U1457C-42R-1 80-88 cm	23.856	758	4.300	9.756	0.074	0.4177	0.0031	0.66280	2412	6.8	2249	14	2538	10	2538.0	10.0	11.4	
U1457C-42R-1 80-88 cm	22.586	152.4	1.718	0.070	0.005	0.0104	0.0002	0.07441	68	4.3	66.8	1.4	110	120	66.8	1.4	1.8	
U1457C-42R-1 80-88 cm	27.674	72.2	0.890	2.045	0.038	0.1837	0.0021	0.35899	1128	13	1087	11	1203	36	1203.0	36.0	9.6	
U1457C-42R-1 80-88 cm	27.674	705	1.340	0.061	0.002	0.0093	0.0002	0.08509	59.7	2	59.4	1.3	110	73	59.4	1.3	0.5	
U1457C-42R-1 80-88 cm	27.357	768	5.800	0.044	0.001	0.0062	0.0001	0.00555	43.3	1.4	40	0.51	237	67	40.0	0.5	7.6	
U1457C-42R-1 80-88 cm	19.405	348	3.061	1.909	0.045	0.1679	0.0030	0.56993	1081	16	1000	17	1270	38	1270.0	38.0	21.3	

Table 3

									207/235		206/238		207/206					
	Duration				2σ				Age	2σ	Age	2σ	Age	2σ	Best age	2σ	%	Rim/C
Sample Name	(s)	[U] ppm	U/Th	207/235	error	206/238	2σ error	RHO	(Ma)	error	(Ma)	error	(Ma)	error	(Ma)	error	Discordance*	ore
U1457C-42R-1 80-88 cm	25.447	22.19	1.026	0.074	0.011	0.0095	0.0005	0.03629	71	10	61.4	3	250	270	61.4	3.0	13.5	
U1457C-42R-1 80-88 cm	27.674	619	1.780	1.635	0.019	0.1651	0.0015	0.67714	983	7.2	984.6	8.1	1006	17	1006.0	17.0	2.1	
U1457C-42R-1 80-88 cm	27.675	544	4.050	0.899	0.012	0.1087	0.0014	0.55056	651.4	6.4	664.7	8.3	634	26	664.7	8.3	2.0	
U1457C-42R-1 80-88 cm	27.674	1406	1.918	0.023	0.001	0.0036	0.0000	0.15891	23.5	0.78	23.03	0.25	105	65	23.0	0.3	2.0	
U1457C-42R-1 80-88 cm	27.674	218	1.543	1.205	0.022	0.1350	0.0016	0.45427	801.1	9.9	816	8.9	786	33	816.0	8.9	1.9	
U1457C-42R-1 80-88 cm	27.674	161.3	0.736	0.116	0.005	0.0178	0.0003	0.06753	111.1	4.3	113.9	1.9	112	82	113.9	1.9	2.5	
U1457C-42R-1 80-88 cm	27.674	114.5	1.289	1.224	0.019	0.1361	0.0012	0.23119	811.5	9.2	822.2	6.5	808	35	822.2	6.5	1.3	
U1457C-42R-1 80-88 cm	27.675	540	1.249	0.113	0.003	0.0173	0.0003	0.34554	108.7	2.8	110.5	1.9	107	54	110.5	1.9	1.7	
U1457C-42R-1 80-88 cm	27.675	468	1.933	0.560	0.009	0.0737	0.0010	0.18784	451.1	5.8	458.4	6	414	33	458.4	6.0	1.6	
U1457C-42R-1 80-88 cm	27.674	1298	4.120	0.040	0.001	0.0059	0.0001	0.22598	40	1	37.99	0.76	179	59	38.0	0.8	5.0	
U1457C-42R-1 80-88 cm	11.771	126.3	0.900	1.286	0.046	0.1399	0.0044	0.77596	840	22	844	25	843	48	844.0	25.0	0.5	
U1457C-42R-1 80-88 cm	27.674	181.3	1.223	4.614	0.098	0.3277	0.0070	0.64259	1748	18	1824	34	1674	33	1674.0	33.0	9.0	
U1457C-42R-1 80-88 cm	27.675	347.1	1.777	1.880	0.018	0.1825	0.0013	0.38593	1073	6.5	1081	7	1075	19	1075.0	19.0	0.5	
U1457C-42R-1 80-88 cm	13.678	818	2.930	0.679	0.013	0.0867	0.0017	0.50977	525.8	8	536	10	506	43	536.0	10.0	1.9	
U1457C-42R-1 80-88 cm	13.043	70.8	1.022	0.066	0.010	0.0097	0.0005	0.22075	64.2	9.4	62	2.9	140	290	62.0	2.9	3.4	
U1457C-42R-1 80-88 cm	21.312	887	2.900	0.483	0.013	0.0606	0.0015	0.83495	398.7	8.7	378.9	9.3	542	31	378.9	9.3	5.0	
U1457C-42R-1 80-88 cm	27.674	216	1.843	1.050	0.016	0.1219	0.0010	0.28889	727.6	7.8	741.1	5.9	703	33	741.1	5.9	1.9	
U1457C-42R-1 80-88 cm	21.312	1398	8.700	0.946	0.021	0.1055	0.0024	0.92491	674	11	646	14	796	20	646.0	14.0	4.2	
U1457C-42R-1 80-88 cm	27.675	51.3	0.341	0.661	0.021	0.0831	0.0013	0.15966	514	13	514.7	7.7	506	70	514.7	7.7	0.1	
U1457C-42R-1 80-88 cm	4.447	956	29.000	0.578	0.047	0.0736	0.0042	0.51276	470	25	457	25	510	130	457.0	25.0	2.8	Rim
U1457C-42R-1 80-88 cm	14.102	349.7	3.125	3.828	0.078	0.2658	0.0052	0.62760	1596	16	1519	27	1680	30	1680.0	30.0	9.6	Core
U1457C-42R-1 80-88 cm	6.144	501	7.210	0.413	0.020	0.0527	0.0016	0.59198	350	15	330.9	9.7	435	88	330.9	9.7	5.5	
U1457C-42R-1 80-88 cm	27.674	560	1.874	1.219	0.018	0.1334	0.0017	0.58388	808.1	8	807	9.5	781	25	807.0	9.5	0.1	
U1457C-42R-1 80-88 cm	27.674	1520	3.730	0.592	0.012	0.0742	0.0013	0.65306	470.9	7.5	461.2	7.6	485	34	461.2	7.6	2.1	
U1457C-42R-1 80-88 cm	21.589	306.2	1.454	7.170	0.110	0.3802	0.0057	0.68977	2130	14	2076	27	2165	22	2165.0	22.0	4.1	
U1457C-42R-1 80-88 cm	27.674	965	1.865	0.109	0.003	0.0165	0.0003	0.39528	105	2.6	105.6	1.6	84	49	105.6	1.6	0.6	
U1457C-42R-1 80-88 cm	27.675	107.4	1.690	0.066	0.005	0.0096	0.0003	0.16319	64.7	4.9	61.5	1.8	120	140	61.5	1.8	4.9	
U1457C-42R-1 80-88 cm	11.760	613	2.360	0.187	0.009	0.0246	0.0006	0.16293	176.7	8.6	156.5	3.4	390	110	156.5	3.4	11.4	
U1457C-42R-1 80-88 cm	26.973	87.8	1.246	1.424	0.035	0.1456	0.0022	0.37402	897	14	876	12	939	48	939.0	48.0	6.7	
U1457C-42R-1 80-88 cm	27.674	82.2	0.940	2.072	0.046	0.1957	0.0031	0.43596	1137	15	1152	17	1094	42	1094.0	42.0	5.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age			Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error	% Discordance*	
U1457C-42R-1 80-88 cm	27.675	390.3	0.713	0.047	0.002	0.0075	0.0001	0.10602	46.9	2.1	48.4	0.85	10	85	48.4	0.9	3.2	Rim Core
U1457C-42R-1 80-88 cm	12.696	138.5	1.794	0.101	0.009	0.0128	0.0004	0.06994	97.4	8.5	82.2	2.5	410	190	DISC	DISC	15.6	
U1457C-42R-1 80-88 cm	27.674	257	2.060	1.759	0.042	0.1750	0.0032	0.70912	1028	15	1039	18	998	34	998.0	34.0	4.1	
U1457C-42R-1 80-88 cm	6.144	890	14.300	0.760	0.039	0.0937	0.0038	0.53575	572	23	577	22	550	100	577.0	22.0	0.9	
U1457C-42R-1 80-88 cm	8.251	2730	10.000	0.114	0.006	0.0151	0.0052	0.11928	109.8	5.4	96	33	247	63	DISC	DISC	12.6	
U1457C-42R-1 80-88 cm	27.674	368	1.710	0.114	0.005	0.0170	0.0004	0.33805	109.5	4.2	108.5	2.5	139	77	108.5	2.5	0.9	
U1457C-42R-1 80-88 cm	19.015	379	1.041	1.625	0.040	0.1571	0.0036	0.60085	977	15	940	20	1065	43	1065.0	43.0	11.7	
U1457C-42R-1 80-88 cm	5.383	512	0.543	7.690	0.260	0.3440	0.0100	0.81814	2201	26	1904	49	2488	31	2488.0	31.0	23.5	
U1457C-42R-1 80-88 cm	13.164	209.5	2.263	3.652	0.099	0.2678	0.0069	0.62398	1557	21	1528	35	1601	42	1601.0	42.0	4.6	
U1457C-42R-1 80-88 cm	27.675	296	1.155	0.046	0.002	-0.0002	0.0011	0.02704	45.9	2.3	1.2	5.3	139	97	DISC	DISC	97.4	
U1457C-42R-1 80-88 cm	18.547	119.3	1.653	0.712	0.023	0.0876	0.0019	0.43477	544	14	541	11	551	69	541.0	11.0	0.6	
U1457C-42R-1 80-88 cm	9.186	205	1.389	1.309	0.042	0.1380	0.0044	0.70122	848	19	832	25	882	51	832.0	25.0	1.9	
U1457C-42R-1 80-88 cm	9.127	63	-7.000	0.025	0.009	0.0036	0.0004	0.30148	24.7	8.3	23.1	2.4	-60	520	DISC	DISC	6.5	
U1457C-42R-1 80-88 cm	15.973	450	1.810	1.343	0.034	0.1429	0.0033	0.52193	862	15	860	18	861	46	861.0	46.0	0.1	
U1457C-42R-1 80-88 cm	9.655	160.9	1.057	10.920	0.340	0.4820	0.0130	0.79010	2511	28	2532	56	2496	29	2496.0	29.0	1.4	
U1457C-42R-1 80-88 cm	24.398	164	1.027	1.432	0.037	0.1452	0.0027	0.52579	898	15	874	15	934	47	934.0	47.0	6.4	
U1457C-42R-1 80-88 cm	27.674	160	1.354	0.111	0.006	0.0165	0.0004	0.33419	106.4	5.2	105.3	2.5	147	98	105.3	2.5	1.0	
U1457C-42R-1 80-88 cm	16.441	1889	1.121	1.473	0.019	0.1482	0.0019	0.60372	918.7	7.9	891	10	974	24	974.0	24.0	8.5	
U1457C-42R-1 80-88 cm	26.271	215	1.232	4.473	0.092	0.3062	0.0060	0.71701	1721	17	1720	30	1717	27	1717.0	27.0	0.2	
U1457C-42R-1 80-88 cm	27.674	361	17.090	0.214	0.007	0.0309	0.0005	0.30187	196.3	5.6	196	3	182	61	196.0	3.0	0.2	
U1457C-42R-1 80-88 cm	22.291	474	5.660	1.785	0.038	0.1684	0.0029	0.65380	1037	14	1003	16	1096	34	1096.0	34.0	8.5	
U1457C-42R-1 80-88 cm	21.122	563	1.900	11.430	0.250	0.4812	0.0090	0.71474	2553	20	2529	39	2563	26	2563.0	26.0	1.3	
U1457C-42R-1 80-88 cm	24.632	65.9	2.433	0.202	0.013	0.0287	0.0006	0.04271	185	10	182.4	4	190	120	182.4	4.0	1.4	
U1457C-43R-1 55-63 cm	5.385	561	9.300	0.133	0.011	0.0193	0.0008	0.17954	126.5	9.9	123.2	5.1	160	150	123.2	5.1	2.6	
U1457C-43R-1 55-63 cm	21.070	566	6.200	0.812	0.014	0.0946	0.0013	0.59881	604	7.9	582.4	7.9	686	30	582.4	7.9	3.6	
U1457C-43R-1 55-63 cm	27.674	576	1.099	0.059	0.003	0.0092	0.0003	0.51610	58.4	3.1	58.9	1.6	49	85	58.9	1.6	0.9	
U1457C-43R-1 55-63 cm	20.519	2816	2.810	0.559	0.005	0.0713	0.0006	0.56429	450.6	3.5	443.7	3.6	482	20	443.7	3.6	1.5	
U1457C-43R-1 55-63 cm	26.023	114.5	0.557	1.360	0.033	0.1389	0.0023	0.51033	868	14	838	13	939	51	838.0	13.0	3.5	
U1457C-43R-1 55-63 cm	19.419	240	0.670	3.248	0.048	0.2362	0.0025	0.50113	1469	11	1366	13	1622	25	1622.0	25.0	15.8	
U1457C-43R-1 55-63 cm	10.888	63.5	1.870	3.070	0.200	0.1469	0.0093	0.76026	1418	52	880	52	2372	80	DISC	DISC	62.9	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1457C-43R-1 55-63 cm	10.888	144	0.877	1.262	0.050	0.1284	0.0021	0.32946	825	22	779	12	950	80	779.0	12.0	5.6	Rim Core
U1457C-43R-1 55-63 cm	20.794	138	2.158	5.389	0.080	0.3142	0.0043	0.57795	1881	13	1760	21	2024	24	2024.0	24.0	13.0	
U1457C-43R-1 55-63 cm	14.190	815	1.461	1.215	0.019	0.1312	0.0018	0.59357	808.5	9.1	794	10	850	30	794.0	10.0	1.8	
U1457C-43R-1 55-63 cm	19.969	236	30.500	0.785	0.022	0.0949	0.0019	0.64713	587	12	586	11	585	50	586.0	11.0	0.2	
U1457C-43R-1 55-63 cm	24.372	560	2.220	9.100	0.110	0.4112	0.0051	0.86136	2345	11	2219	23	2453	14	2453.0	14.0	9.5	
U1457C-43R-1 55-63 cm	6.210	533	1.146	1.322	0.046	0.1231	0.0035	0.55229	854	20	748	20	1116	62	748.0	20.0	12.4	
U1457C-43R-1 55-63 cm	15.291	775	4.560	4.777	0.094	0.3060	0.0065	0.78531	1778	17	1719	32	1849	25	1849.0	25.0	7.0	
U1457C-43R-1 55-63 cm	8.963	374	1.360	0.177	0.012	0.0252	0.0006	0.03553	165	10	160.5	3.8	210	140	160.5	3.8	2.7	
U1457C-43R-1 55-63 cm	27.674	130.7	5.180	8.080	0.110	0.3871	0.0040	0.69746	2237	12	2108	18	2356	17	2356.0	17.0	10.5	
U1457C-43R-1 55-63 cm	11.163	767	1.740	8.380	0.210	0.3937	0.0091	0.85716	2274	22	2138	42	2382	23	2382.0	23.0	10.2	
U1457C-43R-1 55-63 cm	21.895	211.4	0.472	0.743	0.019	0.0891	0.0015	0.49945	562	11	550	8.9	585	53	550.0	8.9	2.1	
U1457C-43R-1 55-63 cm	6.604	499	1.091	0.150	0.009	0.0214	0.0006	0.05261	141.4	7.5	136.6	3.5	200	130	136.6	3.5	3.4	
U1457C-43R-1 55-63 cm	16.117	716	3.760	3.210	0.050	0.2222	0.0038	0.78261	1458	12	1293	20	1711	22	1711.0	22.0	24.4	
U1457C-43R-1 55-63 cm	23.272	125.3	1.630	1.735	0.039	0.1666	0.0027	0.53030	1018	14	993	15	1071	38	1071.0	38.0	7.3	
U1457C-43R-1 55-63 cm	14.466	566	44.200	0.088	0.004	0.0133	0.0003	0.21091	85.7	4.1	84.9	1.8	116	95	84.9	1.8	0.9	
U1457C-43R-1 55-63 cm	21.070	195.2	1.940	0.106	0.006	0.0164	0.0004	0.00949	101.4	5.5	104.7	2.6	80	110	104.7	2.6	3.3	
U1457C-43R-1 55-63 cm	22.170	177.4	0.621	0.593	0.017	0.0732	0.0010	0.33529	473	11	455	5.9	536	59	455.0	5.9	3.8	
U1457C-43R-1 55-63 cm	18.043	170.5	1.057	0.993	0.028	0.1058	0.0017	0.33309	698	14	648	10	857	57	648.0	10.0	7.2	
U1457C-43R-1 55-63 cm	26.848	116.7	0.920	0.062	0.006	0.0088	0.0003	0.03517	60.1	5.2	56.7	1.8	180	160	56.7	1.8	5.7	
U1457C-43R-1 55-63 cm	13.916	1578	0.979	0.018	0.001	0.0028	0.0001	0.08851	17.7	1	17.77	0.33	60	110	17.8	0.3	0.4	
U1457C-43R-1 55-63 cm	27.675	118.2	1.360	1.569	0.029	0.1572	0.0018	0.37285	956	11	941	10	978	36	978.0	36.0	3.8	
U1457C-43R-1 55-63 cm	18.593	267.8	1.817	11.320	0.170	0.4659	0.0067	0.77437	2550	14	2464	29	2616	17	2616.0	17.0	5.8	
U1457C-43R-1 55-63 cm	10.337	889	1.088	0.791	0.023	0.0750	0.0017	0.77505	590	13	466	10	1106	37	DISC	DISC	21.0	
U1457C-43R-1 55-63 cm	17.767	214.6	0.891	1.049	0.025	0.1150	0.0019	0.37803	727	13	701	11	795	49	701.0	11.0	3.6	
U1457C-43R-1 55-63 cm	26.298	115.2	0.892	5.320	0.110	0.2969	0.0048	0.69244	1869	18	1678	25	2084	29	2084.0	29.0	19.5	
U1457C-43R-1 55-63 cm	25.748	436	1.850	1.574	0.023	0.1541	0.0020	0.52769	958.5	9.2	924	11	1038	28	1038.0	28.0	11.0	
U1457C-43R-1 55-63 cm	27.675	482	1.032	0.060	0.003	0.0090	0.0002	0.24159	59	3	57.9	1.5	117	99	57.9	1.5	1.9	
U1457C-43R-1 55-63 cm	11.439	394	1.166	1.315	0.042	0.1378	0.0039	0.83035	850	19	832	22	893	44	832.0	22.0	2.1	
U1457C-43R-1 55-63 cm	27.674	176	1.156	0.119	0.008	0.0156	0.0003	0.00469	113.6	6.9	99.5	2	350	130	99.5	2.0	12.4	
U1457C-43R-1 55-63 cm	3.302	922	8.600	0.586	0.027	0.0699	0.0027	0.77833	468	17	436	16	588	65	436.0	16.0	6.8	Rim

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-43R-1 55-63 cm	20.795	568	4.760	1.390	0.034	0.1269	0.0027	0.76112	882	14	770	15	1175	33	770.0	15.0	12.7	Core
U1457C-43R-1 55-63 cm	28.224	1047	6.400	0.694	0.009	0.0843	0.0012	0.46774	534.7	5.5	522.3	7.1	586	31	522.3	7.1	2.3	
U1457C-43R-1 55-63 cm	17.492	459	6.180	0.678	0.014	0.0860	0.0014	0.39499	524.7	8.6	532.8	8	490	47	532.8	8.0	1.5	
U1457C-43R-1 55-63 cm	27.675	392	4.300	0.572	0.010	0.0723	0.0010	0.08636	458.2	6.8	449.7	6.1	492	41	449.7	6.1	1.9	
U1457C-43R-1 55-63 cm	27.674	508.3	2.255	1.019	0.013	0.1151	0.0011	0.44304	712.7	6.7	701.9	6.1	741	27	701.9	6.1	1.5	
U1457C-43R-1 55-63 cm	27.675	600	2.050	0.554	0.011	0.0717	0.0011	0.51131	446.7	7.5	446.2	6.7	438	42	446.2	6.7	0.1	
U1457C-43R-1 55-63 cm	22.721	172	3.630	10.220	0.130	0.4519	0.0056	0.46352	2452	12	2406	24	2495	22	2495.0	22.0	3.6	
U1457C-43R-1 55-63 cm	12.264	140.8	1.215	0.939	0.038	0.1068	0.0034	0.47482	669	20	653	20	710	80	653.0	20.0	2.4	
U1457C-43R-1 55-63 cm	27.675	839	6.100	4.010	0.065	0.2872	0.0038	0.80417	1633	13	1626	19	1639	18	1639.0	18.0	0.8	
U1457C-43R-1 55-63 cm	15.567	2965	5.850	5.322	0.068	0.3164	0.0037	0.70834	1871	11	1772	18	1982	21	1982.0	21.0	10.6	
U1457C-43R-1 55-63 cm	27.674	187.9	1.464	0.111	0.006	0.0167	0.0004	0.16862	106.4	5.5	107	2.2	110	100	107.0	2.2	0.6	
U1457C-43R-1 55-63 cm	16.116	514	1.031	0.125	0.006	0.0165	0.0003	0.18832	119.2	5.5	105.3	1.9	370	100	105.3	1.9	11.7	
U1457C-43R-1 55-63 cm	12.814	1880	1.140	0.079	0.003	0.0115	0.0003	0.39454	76.8	2.8	74	1.6	144	68	74.0	1.6	3.6	
U1457C-43R-1 55-63 cm	27.675	1231	1.310	0.056	0.002	0.0081	0.0002	0.34461	55.4	1.8	52.2	1.1	185	67	52.2	1.1	5.8	
U1457C-43R-1 55-63 cm	5.935	2010	217.000	0.111	0.008	0.0165	0.0008	0.67418	107	7.1	105.3	5.1	120	100	105.3	5.1	1.6	Rim
U1457C-43R-1 55-63 cm	14.860	357	6.730	0.681	0.023	0.0763	0.0021	0.60866	525	14	474	12	750	56	474.0	12.0	9.7	Core
U1457C-43R-1 55-63 cm	5.385	843	0.731	0.680	0.041	0.0786	0.0042	0.71193	524	25	487	25	671	93	487.0	25.0	7.1	
U1457C-43R-1 55-63 cm	23.546	1360	2.480	0.916	0.016	0.1048	0.0011	0.64409	659.2	8.4	642.4	6.7	716	26	642.4	6.7	2.5	
U1457C-43R-1 55-63 cm	11.990	659	3.020	0.624	0.017	0.0788	0.0018	0.55992	491	10	489	11	489	48	489.0	11.0	0.4	
U1457C-43R-1 55-63 cm	27.675	431	1.034	0.091	0.004	0.0137	0.0002	0.00584	88.4	3.3	87.9	1.4	113	75	87.9	1.4	0.6	
U1457C-43R-1 55-63 cm	27.675	145.1	-68.000	0.593	0.018	0.0734	0.0014	0.34156	473	12	456.6	8.7	522	64	456.6	8.7	3.5	
U1457C-43R-1 55-63 cm	6.145	54.3	1.069	12.140	0.520	0.4650	0.0210	0.87333	2609	40	2456	94	2730	37	2730.0	37.0	10.0	
U1457C-43R-1 55-63 cm	19.483	514	1.996	1.160	0.020	0.1257	0.0023	0.67492	780.6	9.6	763	13	817	32	763.0	13.0	2.3	
U1457C-43R-1 55-63 cm	27.675	104.7	1.087	0.123	0.008	0.0179	0.0004	0.06188	117.3	6.9	114.2	2.4	180	120	114.2	2.4	2.6	
U1457C-43R-1 55-63 cm	27.674	188.7	1.026	5.141	0.083	0.3307	0.0045	0.67034	1839	14	1840	22	1839	21	1839.0	21.0	0.1	
U1457C-43R-1 55-63 cm	18.782	94.2	0.649	1.177	0.043	0.1326	0.0030	0.38104	785	20	805	18	699	76	805.0	18.0	2.5	
U1457C-43R-1 55-63 cm	20.419	2960	32.300	0.602	0.011	0.0760	0.0012	0.77070	477.8	7	472.1	7.2	491	26	472.1	7.2	1.2	
U1457C-43R-1 55-63 cm	27.675	961	2.529	0.109	0.003	0.0160	0.0002	0.38601	104.7	2.5	102.5	1.3	161	49	102.5	1.3	2.1	
U1457C-43R-1 55-63 cm	14.569	867	7.910	0.680	0.021	0.0830	0.0018	0.70077	525	13	514	10	564	48	514.0	10.0	2.1	Rim
U1457C-43R-1 55-63 cm	7.957	239	5.800	1.567	0.050	0.1539	0.0044	0.70560	955	20	922	25	1036	47	1036.0	47.0	11.0	Core

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-43R-1 55-63 cm	6.145	1566	1.800	1.049	0.055	0.1160	0.0053	0.81523	726	28	707	31	795	63	707.0	31.0	2.6	Rim
U1457C-43R-1 55-63 cm	4.272	2600	3.500	0.113	0.009	0.0176	0.0010	0.45818	108.2	8.3	112.5	6	60	130	112.5	6.0	4.0	
U1457C-43R-1 55-63 cm	27.674	432	4.870	0.551	0.010	0.0720	0.0009	0.51433	444.7	6.5	448.6	5.5	428	37	448.6	5.5	0.9	
U1457C-43R-1 55-63 cm	12.931	915	1.649	1.862	0.041	0.1713	0.0029	0.75550	1066	14	1019	16	1162	28	1162.0	28.0	12.3	
U1457C-43R-1 55-63 cm	27.674	822	1.446	0.616	0.011	0.0762	0.0011	0.65508	486.4	6.9	473	6.5	546	31	473.0	6.5	2.8	
U1457C-43R-1 55-63 cm	27.674	105	1.206	0.055	0.006	0.0084	0.0003	0.03543	53.3	5.9	53.9	1.8	-10	190	53.9	1.8	1.1	
U1457C-43R-1 55-63 cm	27.675	407	1.100	1.222	0.022	0.1304	0.0020	0.64187	809	10	790	11	854	32	790.0	11.0	2.3	
U1457C-43R-1 55-63 cm	20.185	154.6	1.052	1.448	0.034	0.1481	0.0026	0.41550	906	14	890	15	932	50	932.0	50.0	4.5	
U1457C-43R-1 55-63 cm	25.334	177.5	0.725	4.868	0.073	0.3159	0.0046	0.71040	1796	13	1768	23	1827	21	1827.0	21.0	3.2	
U1457C-43R-1 55-63 cm	26.972	308	1.104	0.343	0.011	0.0455	0.0012	0.67868	298	8.7	286.6	7.5	387	55	286.6	7.5	3.8	
U1457C-43R-1 55-63 cm	27.674	1563	31.600	0.224	0.005	0.0322	0.0006	0.55803	204.9	4.3	204	3.5	215	42	204.0	3.5	0.4	
U1457C-43R-1 55-63 cm	9.186	328	8.030	0.629	0.023	-0.0043	0.0001	0.70758	494	15	-27.87	0.84	543	59	DISC	DISC	105.6	
U1457C-43R-1 55-63 cm	27.674	619	2.880	0.338	0.007	0.0469	0.0008	0.43718	296	5.6	295.4	4.9	309	46	295.4	4.9	0.2	
U1457C-43R-1 55-63 cm	27.675	461	3.740	5.534	0.087	0.3495	0.0058	0.71950	1904	14	1930	27	1886	22	1886.0	22.0	2.3	
U1457C-43R-1 55-63 cm	22.525	67.5	0.622	1.146	0.043	0.1132	0.0026	0.39940	769	20	691	15	988	72	691.0	15.0	10.1	
U1457C-43R-1 55-63 cm	16.910	923	3.760	2.462	0.036	0.2002	0.0033	0.72301	1260	11	1176	18	1418	22	1418.0	22.0	17.1	
U1457C-43R-1 55-63 cm	27.674	54.5	0.676	1.350	0.039	0.1402	0.0019	0.27411	862	17	845	11	891	59	845.0	11.0	2.0	
U1457C-43R-1 55-63 cm	16.441	322	1.309	0.130	0.006	0.0189	0.0005	0.31432	124.2	5.6	120.5	3.3	213	95	120.5	3.3	3.0	
U1457C-43R-1 55-63 cm	7.489	242	6.380	4.580	0.230	0.3050	0.0120	0.77008	1737	41	1714	58	1777	55	1777.0	55.0	3.5	Rim
U1457C-43R-1 55-63 cm	16.909	48.5	0.794	7.000	0.180	0.3888	0.0077	0.52250	2105	23	2115	36	2110	41	2110.0	41.0	0.2	Core
U1457C-43R-1 55-63 cm	19.951	329	1.538	5.202	0.081	0.3321	0.0058	0.71403	1851	13	1847	28	1869	23	1869.0	23.0	1.2	Core
U1457C-43R-1 55-63 cm	24.398	999	2.730	0.321	0.009	0.0408	0.0010	0.76491	282.1	6.5	257.5	6.4	488	38	257.5	6.4	8.7	
U1457C-43R-1 55-63 cm	7.549	1077	4.140	0.723	0.041	0.0771	0.0037	0.26727	550	23	478	22	870	130	478.0	22.0	13.1	
U1457C-43R-1 55-63 cm	11.292	579	17.100	0.682	0.022	0.0834	0.0023	0.51665	527	13	516	14	575	65	516.0	14.0	2.1	
U1457C-43R-1 55-63 cm	27.674	240.6	1.573	0.744	0.030	0.0917	0.0033	0.59647	561	17	567	19	547	67	567.0	19.0	1.1	
U1456D-12R-1 30-36 cm	27.675	274	1.910	0.071	0.003	0.0103	0.0002	0.26415	70.3	3.4	65.8	1.2	224	94	65.8	1.2	6.4	
U1456D-12R-1 30-36 cm	24.797	986	3.790	0.523	0.011	0.0615	0.0010	0.74803	426	7.1	384.4	6.2	659	30	384.4	6.2	9.8	
U1456D-12R-1 30-36 cm	18.180	152.2	1.118	3.505	0.085	0.2222	0.0047	0.76975	1524	19	1292	25	1866	28	DISC	DISC	30.8	
U1456D-12R-1 30-36 cm	15.013	607	10.300	0.480	0.011	0.0627	0.0012	0.54421	397.4	7.8	391.7	7.5	427	48	391.7	7.5	1.4	
U1456D-12R-1 30-36 cm	27.674	442	1.840	0.136	0.005	0.0203	0.0003	0.16823	129	4	129.4	2	120	65	129.4	2.0	0.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-12R-1 30-36 cm	27.675	1143	10.800	0.587	0.009	0.0753	0.0011	0.62776	468.5	5.6	467.7	6.5	457	29	467.7	6.5	0.2	Rim Core
U1456D-12R-1 30-36 cm	27.675	1408	18.500	0.100	0.002	0.0151	0.0003	0.28177	96.3	2	96.7	1.6	97	44	96.7	1.6	0.4	
U1456D-12R-1 30-36 cm	27.674	200	1.602	0.988	0.019	0.1093	0.0014	0.48163	696	9.6	668.5	8.2	775	38	668.5	8.2	4.0	
U1456D-12R-1 30-36 cm	27.674	296	0.799	0.081	0.004	0.0116	0.0002	0.12945	78.8	3.9	74.5	1.2	220	100	74.5	1.2	5.5	
U1456D-12R-1 30-36 cm	27.675	287	0.951	0.071	0.003	0.0107	0.0002	0.01167	69.1	3.2	68.6	1.2	113	93	68.6	1.2	0.7	
U1456D-12R-1 30-36 cm	21.631	551	7.830	1.758	0.027	0.1708	0.0026	0.67216	1029	9.8	1016	14	1062	25	1062.0	25.0	4.3	
U1456D-12R-1 30-36 cm	27.675	292	0.782	0.068	0.003	0.0102	0.0002	0.09108	67	3.2	65.4	1.3	151	96	65.4	1.3	2.4	
U1456D-12R-1 30-36 cm	5.179	2332	9.820	0.752	0.021	0.0904	0.0018	0.63201	569	12	558	11	628	49	558.0	11.0	1.9	
U1456D-12R-1 30-36 cm	13.288	1182	1.501	1.654	0.032	0.1598	0.0034	0.78819	990	12	955	19	1071	29	1071.0	29.0	10.8	
U1456D-12R-1 30-36 cm	16.164	1780	1.000	0.055	0.002	0.0079	0.0002	0.50476	54	1.9	50.8	1.3	215	65	50.8	1.3	5.9	
U1456D-12R-1 30-36 cm	21.057	1827	9.350	1.801	0.031	0.1690	0.0026	0.76814	1044	11	1006	15	1140	23	1140.0	23.0	11.8	
U1456D-12R-1 30-36 cm	4.028	1970	37.200	0.013	0.002	0.0021	0.0001	0.02885	13.1	1.9	13.64	0.65	-20	250	13.6	0.7	4.1	
U1456D-12R-1 30-36 cm	11.273	563	0.660	0.081	0.005	0.0116	0.0004	0.41009	78.9	5	74.6	2.8	220	130	74.6	2.8	5.4	
U1456D-12R-1 30-36 cm	5.231	322	0.773	0.114	0.010	0.0162	0.0005	0.32033	109.7	8.8	103.7	3.1	240	170	103.7	3.1	5.5	
U1456D-12R-1 30-36 cm	27.674	593	3.550	1.452	0.021	0.1471	0.0018	0.55857	909	8.8	885	10	974	26	974.0	26.0	9.1	
U1456D-12R-1 30-36 cm	23.933	1440	4.830	0.213	0.004	0.0309	0.0004	0.57437	195.6	3.3	196.4	2.5	186	34	196.4	2.5	0.4	
U1456D-12R-1 30-36 cm	12.424	454	0.725	0.616	0.021	0.0739	0.0022	0.61662	486	13	459	13	622	61	459.0	13.0	5.6	
U1456D-12R-1 30-36 cm	22.207	120	2.193	0.732	0.022	0.0895	0.0015	0.40340	556	12	552.4	8.8	524	60	552.4	8.8	0.6	
U1456D-12R-1 30-36 cm	27.675	363	0.973	0.176	0.006	0.0239	0.0004	0.35348	163.7	5.1	152	2.5	306	67	152.0	2.5	7.1	
U1456D-12R-1 30-36 cm	27.674	75.1	1.288	0.089	0.008	0.0135	0.0005	0.14274	85.7	7.5	86.2	3	50	150	86.2	3.0	0.6	
U1456D-12R-1 30-36 cm	27.675	382.6	0.821	0.118	0.004	0.0172	0.0003	0.19496	113.1	3.5	110.2	1.8	154	69	110.2	1.8	2.6	
U1456D-12R-1 30-36 cm	16.452	344.2	2.300	0.274	0.010	0.0388	0.0009	0.29714	245.2	7.7	245.3	5.8	233	72	245.3	5.8	0.0	
U1456D-12R-1 30-36 cm	20.481	2200	0.367	0.042	0.001	0.0065	0.0001	0.44791	42.1	1.4	41.45	0.72	78	61	41.5	0.7	1.5	
U1456D-12R-1 30-36 cm	6.957	296	0.494	0.073	0.008	0.0102	0.0003	0.04989	71.5	7.6	65.6	2.1	210	210	65.6	2.1	8.3	
U1456D-12R-1 30-36 cm	6.381	758	1.426	1.053	0.030	0.1150	0.0025	0.36967	730	15	702	14	802	60	702.0	14.0	3.8	
U1456D-12R-1 30-36 cm	27.674	251	11.000	0.976	0.027	0.1119	0.0024	0.58803	688	14	683	14	689	49	683.0	14.0	0.7	
U1456D-12R-1 30-36 cm	22.208	59.3	1.048	0.064	0.008	0.0085	0.0004	0.16759	61.8	7.6	54.5	2.3	230	220	54.5	2.3	11.8	
U1456D-12R-1 30-36 cm	25.372	568	5.060	4.902	0.063	0.3169	0.0041	0.63601	1802	10	1774	20	1831	20	1831.0	20.0	3.1	
U1456D-12R-1 30-36 cm	27.674	1372	2.160	0.110	0.002	0.0163	0.0002	0.36915	105.9	2.1	104.2	1.5	151	43	104.2	1.5	1.6	
U1456D-12R-1 30-36 cm	27.675	2100	0.733	0.114	0.002	0.0170	0.0003	0.53850	109.1	2.1	108.3	1.6	137	38	108.3	1.6	0.7	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-12R-1 30-36 cm	13.575	354	2.690	4.960	0.130	0.2950	0.0077	0.84587	1808	23	1664	38	1982	27	1982.0	27.0	16.0	Rim Core
U1456D-12R-1 30-36 cm	27.674	471	1.034	1.126	0.018	0.1222	0.0019	0.60167	765.3	9	743	11	834	30	743.0	11.0	2.9	
U1456D-12R-1 30-36 cm	17.316	353	0.909	0.113	0.006	0.0169	0.0003	0.03119	108.8	5.3	108.2	2.2	150	110	108.2	2.2	0.6	
U1456D-12R-1 30-36 cm	27.674	551.3	1.379	0.191	0.005	0.0278	0.0004	0.37165	177.4	3.8	176.5	2.7	179	49	176.5	2.7	0.5	
U1456D-12R-1 30-36 cm	15.301	2593	11.010	0.034	0.001	0.0050	0.0001	0.39284	34	1.3	31.81	0.7	180	76	31.8	0.7	6.4	
U1456D-12R-1 30-36 cm	21.345	167	0.462	1.218	0.032	0.1292	0.0021	0.39286	808	15	783	12	868	54	783.0	12.0	3.1	
U1456D-12R-1 30-36 cm	8.971	301	2.200	0.123	0.011	0.0179	0.0006	0.17520	117	10	114.5	3.5	200	180	114.5	3.5	2.1	
U1456D-12R-1 30-36 cm	27.674	727	6.110	0.617	0.011	0.0770	0.0011	0.64234	487	6.7	478.2	6.6	531	30	478.2	6.6	1.8	
U1456D-12R-1 30-36 cm	27.675	1040	1.331	0.120	0.004	0.0175	0.0003	0.45069	115.6	3.7	111.7	2	186	60	111.7	2.0	3.4	
U1456D-12R-1 30-36 cm	27.675	468	1.007	0.082	0.003	0.0121	0.0003	0.42872	80	3.2	77.6	1.8	158	74	77.6	1.8	3.0	
U1456D-12R-1 30-36 cm	26.523	292	3.130	0.606	0.012	0.0779	0.0012	0.70984	479.9	7.8	483.7	7	479	39	483.7	7.0	0.8	
U1456D-12R-1 30-36 cm	27.674	312.6	0.930	0.066	0.003	0.0101	0.0002	0.07072	65	3.2	64.8	1.3	79	98	64.8	1.3	0.3	
U1456D-12R-1 30-36 cm	3.741	1577	23.300	0.605	0.034	0.0746	0.0024	0.49781	479	21	464	14	550	100	464.0	14.0	3.1	
U1456D-12R-1 30-36 cm	10.698	249	1.745	9.090	0.240	0.3720	0.0110	0.81543	2343	24	2038	50	2625	27	2625.0	27.0	22.4	
U1456D-12R-1 30-36 cm	27.675	898	1.102	0.103	0.003	0.0156	0.0003	0.41578	99.5	2.4	100.1	1.6	94	47	100.1	1.6	0.6	
U1456D-12R-1 30-36 cm	14.726	1720	0.907	0.088	0.003	0.0109	0.0002	0.46672	85.1	2.7	69.6	1.5	522	64	DISC	DISC	18.2	
U1456D-12R-1 30-36 cm	7.821	381	2.012	10.270	0.180	0.4408	0.0093	0.75407	2458	16	2353	41	2532	26	2532.0	26.0	7.1	
U1456D-12R-1 30-36 cm	6.381	2462	1.399	0.040	0.002	0.0059	0.0001	0.29072	39.4	2.1	38.12	0.93	120	100	38.1	0.9	3.2	
U1456D-12R-1 30-36 cm	10.985	309.6	0.995	7.610	0.250	0.3490	0.0110	0.85290	2180	30	1926	52	2433	29	2433.0	29.0	20.8	
U1456D-12R-1 30-36 cm	27.674	569	1.508	0.673	0.010	0.0842	0.0011	0.48684	522.1	6.3	521.2	6.3	519	32	521.2	6.3	0.2	
U1456D-12R-1 30-36 cm	16.165	771	1.887	0.115	0.004	0.0164	0.0003	0.27225	110.2	3.8	104.7	1.8	229	75	104.7	1.8	5.0	
U1456D-12R-1 30-36 cm	13.287	170.2	1.890	0.020	0.004	0.0027	0.0002	0.21486	20.2	3.8	17.03	0.97	180	320	DISC	DISC	15.7	
U1456D-12R-1 30-36 cm	12.999	3800	17.700	0.567	0.010	0.0719	0.0013	0.71641	455.7	6.7	447.7	7.6	506	30	447.7	7.6	1.8	
U1456D-12R-1 30-36 cm	27.674	202.3	0.936	0.068	0.004	0.0103	0.0002	0.07301	66.7	3.9	66.1	1.5	110	120	66.1	1.5	0.9	
U1456D-12R-1 30-36 cm	27.674	63.4	0.908	1.203	0.037	0.1270	0.0027	0.41302	797	17	770	15	856	63	770.0	15.0	3.4	
U1456D-12R-1 30-36 cm	27.674	1274	1.150	0.121	0.003	0.0176	0.0002	0.33086	116	2.5	112.2	1.5	197	47	112.2	1.5	3.3	
U1456D-12R-1 30-36 cm	10.123	897	0.752	0.041	0.003	0.0063	0.0002	0.01680	41.2	2.4	40.4	1	80	120	40.4	1.0	1.9	
U1456D-12R-1 30-36 cm	27.675	551	0.960	0.070	0.003	0.0100	0.0002	0.02850	68.4	2.4	64.1	1.2	210	73	64.1	1.2	6.3	
U1456D-12R-1 30-36 cm	22.207	191.7	0.627	1.108	0.022	0.1212	0.0018	0.32558	755	11	737	11	798	46	737.0	11.0	2.4	
U1456D-12R-1 30-36 cm	27.674	1388	1.675	0.054	0.002	0.0082	0.0001	0.27951	53.7	1.5	52.39	0.78	117	56	52.4	0.8	2.4	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-12R-1 30-36 cm	27.675	236	0.822	0.071	0.004	0.0103	0.0003	0.10692	68.9	3.8	65.7	1.6	210	110	65.7	1.6	4.6	Rim Core
U1456D-12R-1 30-36 cm	23.933	232.5	0.678	2.058	0.039	0.1877	0.0030	0.66306	1132	13	1108	16	1168	29	1168.0	29.0	5.1	
U1456D-12R-1 30-36 cm	27.675	650	1.411	0.113	0.003	0.0172	0.0003	0.09940	108.9	2.8	109.7	1.6	103	57	109.7	1.6	0.7	
U1456D-12R-1 30-36 cm	27.674	928	3.550	0.109	0.003	0.0157	0.0002	0.20125	104.9	2.5	100.3	1.3	207	54	100.3	1.3	4.4	
U1456D-12R-1 30-36 cm	13.288	505	0.922	7.380	0.210	0.3238	0.0084	0.89285	2153	26	1806	41	2506	22	2506.0	22.0	27.9	
U1456D-12R-1 30-36 cm	27.674	137	0.937	0.106	0.007	0.0128	0.0003	0.08504	101.5	6.1	81.7	2	510	130	DISC	DISC	19.5	
U1456D-12R-1 30-36 cm	27.674	765	0.900	0.073	0.003	0.0105	0.0002	0.02575	71.3	2.3	67.4	1.1	232	71	67.4	1.1	5.5	
U1456D-12R-1 30-36 cm	27.675	249	4.710	1.828	0.035	0.1801	0.0030	0.84424	1053	13	1067	16	1039	30	1039.0	30.0	2.7	
U1456D-12R-1 30-36 cm	4.316	1900	2.730	0.124	0.006	0.0161	0.0008	0.18266	118.5	5.4	102.9	5.3	460	140	102.9	5.3	13.2	
U1456D-12R-1 30-36 cm	8.683	273.3	1.129	3.860	0.110	0.2491	0.0066	0.77784	1601	24	1433	34	1830	39	1830.0	39.0	21.7	
U1456D-12R-1 30-36 cm	6.043	916	27.900	0.768	0.030	0.0925	0.0027	0.51594	577	17	570	16	614	75	570.0	16.0	1.2	
U1456D-12R-1 30-36 cm	17.604	217.2	1.105	1.767	0.033	0.1732	0.0027	0.45480	1034	12	1029	15	1050	37	1050.0	37.0	2.0	
U1456D-12R-1 30-36 cm	17.028	552	1.450	0.065	0.003	0.0098	0.0002	0.22478	63.8	3	62.6	1.5	125	95	62.6	1.5	1.9	
U1456D-12R-1 30-36 cm	18.755	89.9	0.881	0.071	0.007	0.0105	0.0004	0.14271	70.1	6.9	67.3	2.5	140	180	67.3	2.5	4.0	
U1456D-12R-1 30-36 cm	27.674	596.8	1.273	0.017	0.001	0.0026	0.0001	0.08097	17.1	1.2	17.01	0.38	40	120	17.0	0.4	0.5	
U1456D-12R-1 30-36 cm	17.028	304	1.483	0.054	0.005	0.0083	0.0003	0.07758	53.2	4.7	53	1.7	50	160	53.0	1.7	0.4	
U1456D-12R-1 30-36 cm	27.675	255	2.836	1.208	0.020	0.1337	0.0016	0.47793	802.5	9.4	808.5	9.4	756	33	808.5	9.4	0.7	
U1456D-12R-1 30-36 cm	4.943	273	1.005	0.057	0.008	0.0077	0.0004	0.02688	56.5	7.7	49.1	2.5	290	310	49.1	2.5	13.1	
U1456D-12R-1 30-36 cm	27.674	229.9	2.099	0.109	0.005	0.0162	0.0003	0.10151	104.6	4.6	103.8	2	109	91	103.8	2.0	0.8	
U1456D-12R-1 30-36 cm	27.100	3580	2.260	0.016	0.000	0.0023	0.0000	0.10445	15.62	0.48	15.02	0.22	93	63	15.0	0.2	3.8	
U1456D-12R-1 30-36 cm	27.674	186	1.079	0.077	0.005	0.0120	0.0003	0.00331	74.8	4.3	76.6	1.7	30	110	76.6	1.7	2.4	
U1456D-12R-1 30-36 cm	22.782	114	0.613	0.725	0.021	0.0879	0.0016	0.36141	553	13	542.7	9.5	562	65	542.7	9.5	1.9	
U1456D-12R-1 30-36 cm	27.674	569	0.983	0.588	0.011	0.0750	0.0010	0.50059	469	6.7	466.2	6	459	36	466.2	6.0	0.6	
U1456D-12R-1 30-36 cm	27.675	248	2.226	12.670	0.170	0.5037	0.0065	0.67368	2654	13	2627	28	2665	18	2665.0	18.0	1.4	
U1456D-12R-1 30-36 cm	14.150	2983	6.740	0.047	0.001	0.0072	0.0002	0.34546	46.3	1.4	46.44	0.95	65	62	46.4	1.0	0.3	
U1456D-12R-1 30-36 cm	19.617	168.5	1.383	8.200	0.120	0.4162	0.0058	0.66305	2251	14	2242	26	2254	22	2254.0	22.0	0.5	
U1456D-12R-1 30-36 cm	22.207	77.2	2.178	0.107	0.009	0.0144	0.0004	0.11105	102.3	7.8	92.1	2.8	300	160	92.1	2.8	10.0	
U1456D-12R-1 30-36 cm	25.372	1860	2.830	0.124	0.003	0.0179	0.0003	0.44431	119	2.8	114.2	1.7	209	49	114.2	1.7	4.0	
U1456D-12R-1 30-36 cm	19.905	155	2.918	0.768	0.026	0.0910	0.0019	0.52331	575	15	561	11	618	63	561.0	11.0	2.4	
U1456D-12R-1 30-36 cm	19.331	175.7	1.216	0.060	0.005	0.0085	0.0003	0.22396	58.6	5	54.3	1.9	220	160	54.3	1.9	7.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1456D-12R-1 30-36 cm	27.674	161	0.946	0.092	0.006	0.0137	0.0003	0.13523	89	5.5	87.4	2	140	120	87.4	2.0	1.8	
U1456D-12R-1 30-36 cm	20.769	1260	17.900	0.224	0.005	0.0324	0.0005	0.38857	205.2	3.8	205.3	3	215	43	205.3	3.0	0.0	
U1456D-12R-1 30-36 cm	27.674	354	0.766	1.591	0.028	0.1623	0.0025	0.69493	964	11	969	14	966	26	966.0	26.0	0.3	
U1456D-12R-1 30-36 cm	26.523	144.8	0.887	3.407	0.058	0.2584	0.0035	0.56643	1508	13	1481	18	1544	28	1544.0	28.0	4.1	
U1456D-12R-1 30-36 cm	24.798	170.4	1.443	2.616	0.045	0.2138	0.0033	0.51186	1306	13	1248	18	1403	32	1403.0	32.0	11.0	
U1456D-12R-1 30-36 cm	27.675	78.5	0.612	1.185	0.032	0.1315	0.0020	0.32892	790	15	796	12	763	56	796.0	12.0	0.8	
U1456D-12R-1 30-36 cm	27.674	276.7	0.988	0.116	0.005	0.0175	0.0003	0.13159	111.4	4.4	111.8	1.7	122	82	111.8	1.7	0.4	
U1456D-12R-1 30-36 cm	20.194	463	0.643	0.089	0.004	0.0132	0.0003	0.27254	86.5	3.7	84.5	1.6	143	86	84.5	1.6	2.3	
U1456D-12R-1 30-36 cm	28.826	3640	0.913	0.105	0.002	0.0155	0.0003	0.72487	100.9	2.2	99.4	2.1	153	34	99.4	2.1	1.5	
U1456D-12R-1 30-36 cm	27.674	378	0.420	0.046	0.002	0.0072	0.0001	0.10842	45.5	2.3	46.37	0.87	45	99	46.4	0.9	1.9	
U1456D-12R-1 30-36 cm	27.674	135.1	2.490	1.616	0.036	0.1579	0.0026	0.51823	973	14	945	14	1041	41	1041.0	41.0	9.2	
U1456D-12R-1 30-36 cm	27.674	85.2	0.617	0.606	0.021	0.0783	0.0014	0.25717	478	13	486	8.4	430	72	486.0	8.4	1.7	
U1456D-12R-1 30-36 cm	27.675	99.7	1.013	0.128	0.008	0.0163	0.0005	0.14429	120.9	7.4	104.2	2.9	420	130	104.2	2.9	13.8	
U1456D-12R-1 30-36 cm	15.013	25.2	0.642	3.970	0.140	0.2372	0.0071	0.47978	1619	29	1370	37	1971	62	DISC	DISC	30.5	
U1456D-12R-1 30-36 cm	7.362	522	0.919	0.052	0.004	0.0077	0.0003	0.03671	51.2	4	49.7	1.6	130	160	49.7	1.6	2.9	
U1456D-12R-1 30-36 cm	20.009	119.8	1.213	0.083	0.007	0.0111	0.0004	0.22522	80.5	6.1	71	2.6	350	150	71.0	2.6	11.8	
U1456D-12R-1 30-36 cm	16.944	1657	3.880	1.178	0.020	0.1256	0.0021	0.78702	789.2	9.3	762	12	872	22	762.0	12.0	3.4	
U1456D-12R-1 30-36 cm	27.674	670	0.859	0.137	0.004	0.0203	0.0004	0.52926	130.4	3.5	129.4	2.4	170	49	129.4	2.4	0.8	
U1456D-12R-1 30-36 cm	27.675	308.3	0.596	0.044	0.003	0.0071	0.0002	0.04286	43.9	2.6	45.31	0.96	20	110	45.3	1.0	3.2	
U1456D-12R-1 30-36 cm	24.225	846	4.170	0.647	0.010	0.0813	0.0013	0.75929	505.9	6.4	503.5	7.7	519	24	503.5	7.7	0.5	
U1456D-12R-1 30-36 cm	27.675	636	2.023	0.110	0.003	0.0164	0.0002	0.37762	106	2.4	104.6	1.4	133	46	104.6	1.4	1.3	
U1456D-12R-1 30-36 cm	17.964	92.9	0.928	1.175	0.031	0.1277	0.0021	0.48371	791	16	774	12	814	49	774.0	12.0	2.1	
U1456D-12R-1 30-36 cm	21.470	597	1.668	1.060	0.019	0.1165	0.0019	0.77880	732.4	9.5	710	11	794	24	710.0	11.0	3.1	
U1456D-12R-1 30-36 cm	13.918	358	1.643	0.974	0.029	0.1121	0.0029	0.77503	691	15	685	17	698	41	685.0	17.0	0.9	
U1456D-12R-1 30-36 cm	6.473	422	12.340	1.951	0.063	0.1743	0.0044	0.81664	1097	22	1036	24	1229	37	1229.0	37.0	15.7	Rim
U1456D-12R-1 30-36 cm	16.346	598	4.110	5.800	0.160	0.3386	0.0078	0.91329	1941	24	1877	38	2001	20	2001.0	20.0	6.2	Core
U1456D-12R-1 30-36 cm	14.458	520	0.649	4.020	0.110	0.2456	0.0064	0.78656	1633	22	1414	33	1914	27	1914.0	27.0	26.1	
U1456D-12R-1 30-36 cm	27.674	352	0.771	0.064	0.004	0.0099	0.0002	0.04417	62.6	4	63.6	1.5	50	120	63.6	1.5	1.6	
U1456D-12R-1 30-36 cm	16.077	870	0.913	0.274	0.006	0.0384	0.0007	0.47138	245.3	5	242.6	4.5	245	48	242.6	4.5	1.1	
U1456D-12R-1 30-36 cm	27.674	904	1.980	0.018	0.001	0.0028	0.0001	0.20846	18.47	0.97	17.8	0.37	110	100	17.8	0.4	3.6	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1456D-12R-1 30-36 cm	21.740	356	2.556	8.560	0.180	0.4347	0.0081	0.89786	2287	19	2324	36	2242	16	2242.0	16.0	3.7	Rim
U1456D-13R-1 30-38 cm	17.469	272	0.681	0.078	0.005	0.0118	0.0002	0.02588	75.9	4.4	75.3	1.3	110	120	75.3	1.3	0.8	
U1456D-13R-1 30-38 cm	6.983	3010	9.100	0.622	0.019	0.0787	0.0024	0.79676	490	12	488	14	495	46	488.0	14.0	0.4	Core
U1456D-13R-1 30-38 cm	18.005	1085	0.994	0.944	0.011	0.1061	0.0012	0.63945	674.5	5.5	650.1	7.1	756	18	650.1	7.1	3.6	
U1456D-13R-1 30-38 cm	12.903	5440	219.000	0.445	0.012	0.0561	0.0015	0.93621	372.8	8.3	351.6	9.2	508	20	351.6	9.2	5.7	Core
U1456D-13R-1 30-38 cm	20.154	331	0.838	5.394	0.081	0.3200	0.0039	0.84743	1882	13	1789	19	1984	14	1984.0	14.0	9.8	
U1456D-13R-1 30-38 cm	27.675	215.5	1.026	1.182	0.018	0.1306	0.0015	0.52695	790.8	8.6	791.1	8.8	780	28	791.1	8.8	0.0	Core
U1456D-13R-1 30-38 cm	18.273	656	7.170	1.364	0.022	0.1421	0.0020	0.64799	872.5	9.4	856	11	910	30	910.0	30.0	5.9	
U1456D-13R-1 30-38 cm	23.377	446	1.636	3.822	0.046	0.2648	0.0031	0.76057	1596	9.7	1514	16	1701	16	1701.0	16.0	11.0	Core
U1456D-13R-1 30-38 cm	27.675	87.3	0.668	0.083	0.008	0.0117	0.0003	0.16777	79.5	7.6	75	1.9	170	170	75.0	1.9	5.7	
U1456D-13R-1 30-38 cm	17.468	446	0.959	0.125	0.004	0.0185	0.0003	0.19381	119	4	117.9	2.1	158	75	117.9	2.1	0.9	Core
U1456D-13R-1 30-38 cm	19.885	1458	22.340	0.553	0.015	0.0705	0.0017	0.65047	446.1	9.5	439	10	476	47	439.0	10.0	1.6	
U1456D-13R-1 30-38 cm	6.724	1346	0.241	0.126	0.006	0.0176	0.0007	0.45475	119.9	5.4	112.6	4.2	230	92	112.6	4.2	6.1	Core
U1456D-13R-1 30-38 cm	18.006	305.8	0.570	1.345	0.025	0.1287	0.0020	0.40451	864	11	780	11	1076	39	780.0	11.0	9.7	
U1456D-13R-1 30-38 cm	27.675	755	0.589	0.073	0.002	0.0111	0.0002	0.18171	71.9	1.9	71	1	120	57	71.0	1.0	1.3	Core
U1456D-13R-1 30-38 cm	27.674	535	0.678	0.131	0.004	0.0187	0.0004	0.38362	124.8	3.6	119.3	2.2	229	59	119.3	2.2	4.4	
U1456D-13R-1 30-38 cm	19.349	531	11.100	1.467	0.023	0.1533	0.0023	0.63099	917.1	9.2	919	13	911	26	911.0	26.0	0.9	Core
U1456D-13R-1 30-38 cm	20.691	262	1.633	0.914	0.026	0.1026	0.0027	0.68169	659	13	629	15	749	45	629.0	15.0	4.6	
U1456D-13R-1 30-38 cm	22.572	1500	0.750	0.073	0.002	0.0112	0.0001	0.07119	71.5	2	71.63	0.91	72	57	71.6	0.9	0.2	Core
U1456D-13R-1 30-38 cm	19.348	309.8	1.250	1.994	0.027	0.1880	0.0021	0.57248	1113	9	1110	12	1117	23	1117.0	23.0	0.6	
U1456D-13R-1 30-38 cm	27.675	493	1.340	1.414	0.021	0.1416	0.0018	0.65302	893.5	8.8	853	10	977	25	977.0	25.0	12.7	Core
U1456D-13R-1 30-38 cm	26.331	318	0.947	3.802	0.058	0.2730	0.0038	0.74255	1592	12	1555	19	1643	20	1643.0	20.0	5.4	
U1456D-13R-1 30-38 cm	27.674	291.5	1.287	0.084	0.003	0.0117	0.0002	0.04547	81.2	3.1	74.74	0.96	259	83	74.7	1.0	8.0	Core
U1456D-13R-1 30-38 cm	18.542	2149	1.708	0.035	0.001	0.0052	0.0001	0.18187	34.5	1	33.62	0.61	100	66	33.6	0.6	2.6	
U1456D-13R-1 30-38 cm	27.674	633	0.626	0.788	0.013	0.0930	0.0010	0.58163	589.2	7	573	5.9	651	29	573.0	5.9	2.7	Core
U1456D-13R-1 30-38 cm	20.155	307	0.602	0.054	0.004	0.0070	0.0002	0.17435	53.4	4.2	44.9	1	380	160	DISC	DISC	15.9	
U1456D-13R-1 30-38 cm	27.674	899	0.962	0.066	0.002	0.0102	0.0002	0.32491	64.8	1.9	65.16	0.94	76	57	65.2	0.9	0.6	Core
U1456D-13R-1 30-38 cm	17.737	1781	0.726	0.019	0.001	0.0027	0.0001	0.26064	18.94	0.99	17.34	0.34	210	100	17.3	0.3	8.4	
U1456D-13R-1 30-38 cm	27.674	2560	1.791	0.630	0.014	0.0759	0.0018	0.57727	495.6	8.7	472	11	589	44	472.0	11.0	4.8	Core
U1456D-13R-1 30-38 cm	27.675	164.4	5.200	4.052	0.046	0.2873	0.0029	0.47838	1643	9.2	1627	15	1666	20	1666.0	20.0	2.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1456D-13R-1 30-38 cm	27.674	132	1.027	0.106	0.007	0.0160	0.0003	0.06949	101.4	6.3	102.4	2.2	90	120	102.4	2.2	1.0	Rim Core
U1456D-13R-1 30-38 cm	27.675	4350	3.090	0.048	0.001	0.0072	0.0001	0.33845	47.35	0.96	46.09	0.7	119	44	46.1	0.7	2.7	
U1456D-13R-1 30-38 cm	17.199	238.2	0.384	0.150	0.007	0.0192	0.0004	0.11126	141.4	5.9	122.8	2.6	432	98	122.8	2.6	13.2	
U1456D-13R-1 30-38 cm	22.572	160.6	0.477	1.064	0.030	0.1180	0.0018	0.36895	732	15	719	11	774	56	719.0	11.0	1.8	
U1456D-13R-1 30-38 cm	8.604	1440	1.194	0.080	0.003	0.0120	0.0002	0.09182	78.1	2.3	77	1.3	112	70	77.0	1.3	1.4	
U1456D-13R-1 30-38 cm	27.674	454	0.678	0.052	0.003	0.0076	0.0002	0.40220	50.5	2.5	49.01	0.94	136	85	49.0	0.9	3.0	
U1456D-13R-1 30-38 cm	25.257	345	0.576	1.884	0.038	0.1775	0.0034	0.69397	1073	13	1052	18	1112	22	1112.0	22.0	5.4	
U1456D-13R-1 30-38 cm	8.326	1000	1.993	0.298	0.012	0.0377	0.0011	0.82851	264.3	9	238.8	6.7	496	46	238.8	6.7	9.6	
U1456D-13R-1 30-38 cm	27.674	782	0.873	0.054	0.002	0.0080	0.0001	0.21953	53	2.3	51.24	0.75	160	89	51.2	0.8	3.3	
U1456D-13R-1 30-38 cm	27.674	1300	1.400	0.114	0.003	0.0167	0.0002	0.13552	109	2.4	106.7	1.5	155	48	106.7	1.5	2.1	
U1456D-13R-1 30-38 cm	22.572	246	0.635	1.372	0.026	0.1445	0.0020	0.60947	875	11	870	11	884	31	884.0	31.0	1.6	
U1456D-13R-1 30-38 cm	23.914	119.2	1.391	0.688	0.017	0.0844	0.0011	0.25473	531	10	522	6.7	559	54	522.0	6.7	1.7	
U1456D-13R-1 30-38 cm	14.783	504	1.119	0.102	0.004	0.0147	0.0003	0.39537	98.6	3.7	94.3	2.1	198	77	94.3	2.1	4.4	
U1456D-13R-1 30-38 cm	28.480	1100	0.764	0.051	0.002	0.0069	0.0002	0.43870	50.3	2.1	44.6	1.1	322	78	44.6	1.1	11.3	
U1456D-13R-1 30-38 cm	8.058	1477	6.500	0.807	0.014	0.0937	0.0018	0.37046	600.2	8.1	578	11	681	45	578.0	11.0	3.7	
U1456D-13R-1 30-38 cm	13.171	246	1.126	1.526	0.027	0.1557	0.0022	0.57133	940	11	933	12	951	31	951.0	31.0	1.9	
U1456D-13R-1 30-38 cm	12.902	87.4	1.148	0.088	0.012	0.0092	0.0003	0.19507	85	11	58.9	2.1	700	260	DISC	DISC	30.7	
U1456D-13R-1 30-38 cm	6.994	594	1.522	0.092	0.005	0.0080	0.0002	0.01563	89.2	4.5	51	1.3	1250	110	DISC	DISC	42.8	
U1456D-13R-1 30-38 cm	16.931	396.3	2.013	2.852	0.042	0.2334	0.0032	0.60004	1368	11	1352	17	1387	24	1387.0	24.0	2.5	
U1456D-13R-1 30-38 cm	21.765	479	1.408	4.660	0.063	0.3033	0.0039	0.69892	1758	11	1707	19	1820	19	1820.0	19.0	6.2	
U1456D-13R-1 30-38 cm	15.857	457	11.200	0.931	0.017	0.1094	0.0019	0.47498	669	9.2	669	11	665	40	669.0	11.0	0.0	
U1456D-13R-1 30-38 cm	14.513	784	1.390	0.125	0.004	0.0183	0.0003	0.33869	119.1	3.3	116.7	2	176	63	116.7	2.0	2.0	
U1456D-13R-1 30-38 cm	13.439	740	1.108	0.133	0.006	0.0189	0.0006	0.58276	126.2	5.1	120.9	3.7	239	76	120.9	3.7	4.2	
U1456D-13R-1 30-38 cm	11.559	1130	0.769	0.065	0.003	0.0089	0.0002	0.02592	63.5	2.7	57.2	1.3	300	100	57.2	1.3	9.9	
U1456D-13R-1 30-38 cm	24.183	1506	1.846	0.160	0.003	0.0225	0.0003	0.50336	150.3	2.9	143.4	1.9	217	37	143.4	1.9	4.6	
U1456D-13R-1 30-38 cm	27.674	744	5.260	0.719	0.012	0.0873	0.0013	0.63979	549.2	6.9	539.6	7.9	580	30	539.6	7.9	1.7	
U1456D-13R-1 30-38 cm	27.674	274	2.170	0.240	0.008	0.0343	0.0007	0.21302	217.9	6.4	217.4	4.5	223	70	217.4	4.5	0.2	
U1456D-13R-1 30-38 cm	27.675	1500	2.290	0.116	0.002	0.0170	0.0002	0.26047	111.1	2.1	108.9	1	142	37	108.9	1.0	2.0	
U1456D-13R-1 30-38 cm	27.674	480	1.847	0.075	0.003	0.0114	0.0002	0.13246	73.5	2.5	73	1	121	73	73.0	1.0	0.7	
U1456D-13R-1 30-38 cm	27.675	881	0.646	1.018	0.015	0.1148	0.0016	0.65688	712.2	7.3	700.6	9.3	744	24	700.6	9.3	1.6	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		207/206			Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance*	
U1456D-13R-1 30-38 cm	27.675	798	2.244	0.269	0.005	0.0377	0.0006	0.50245	241.3	3.8	238.4	3.6	248	36	238.4	3.6	1.2	Rim Core
U1456D-13R-1 30-38 cm	27.674	509	1.670	1.822	0.020	0.1669	0.0014	0.51964	1053	7.1	994.8	7.5	1169	18	1169.0	18.0	14.9	
U1456D-13R-1 30-38 cm	27.675	423	0.688	0.074	0.003	0.0106	0.0001	0.20267	72.6	2.8	68.23	0.91	198	74	68.2	0.9	6.0	
U1456D-13R-1 30-38 cm	18.005	665	0.542	0.351	0.007	0.0470	0.0006	0.39461	306.2	5.1	295.9	3.5	375	40	295.9	3.5	3.4	
U1456D-13R-1 30-38 cm	16.393	175	0.629	0.059	0.006	0.0074	0.0003	0.31726	58.4	5.8	47.3	1.6	410	190	DISC	DISC	19.0	
U1456D-13R-1 30-38 cm	20.154	243	0.725	0.061	0.004	0.0084	0.0002	0.11856	60.2	4.1	54	1.1	280	150	54.0	1.1	10.3	
U1456D-13R-1 30-38 cm	27.675	575	0.490	1.391	0.018	0.1389	0.0017	0.50246	884.2	7.7	838.3	9.4	1001	25	838.3	9.4	5.2	
U1456D-13R-1 30-38 cm	27.674	162	0.875	0.054	0.006	0.0078	0.0002	0.12223	53	5.8	50.3	1.3	80	190	50.3	1.3	5.1	
U1456D-13R-1 30-38 cm	5.103	1210	8.400	0.224	0.020	0.0303	0.0025	0.84603	204	17	193	16	340	100	193.0	16.0	5.4	
U1456D-13R-1 30-38 cm	18.543	324	0.954	0.799	0.019	0.0905	0.0019	0.58780	596	10	558	11	734	44	558.0	11.0	6.4	
U1456D-13R-1 30-38 cm	27.674	81.9	0.490	1.946	0.040	0.1780	0.0028	0.60342	1095	14	1057	16	1172	33	1172.0	33.0	9.8	
U1456D-13R-1 30-38 cm	19.617	538	2.210	1.747	0.048	0.1513	0.0039	0.76649	1024	18	907	22	1281	36	1281.0	36.0	29.2	
U1456D-13R-1 30-38 cm	27.674	511	1.052	0.066	0.003	0.0093	0.0002	0.26115	65.1	2.4	59.55	0.94	262	76	59.6	0.9	8.5	
U1456D-13R-1 30-38 cm	27.674	126	2.600	1.154	0.024	0.1184	0.0020	0.52238	777	11	721	12	939	39	721.0	12.0	7.2	
U1456D-13R-1 30-38 cm	12.097	628	1.224	0.977	0.021	0.1072	0.0021	0.70345	691	11	656	12	819	37	656.0	12.0	5.1	
U1456D-13R-1 30-38 cm	27.674	453	0.724	0.114	0.004	0.0165	0.0003	0.39485	109.5	3.1	105.8	2.2	185	60	105.8	2.2	3.4	
U1456D-13R-1 30-38 cm	27.674	109	1.182	1.322	0.025	0.1377	0.0015	0.39424	853	11	831.3	8.4	902	36	831.3	8.4	2.5	
U1456D-13R-1 30-38 cm	27.674	874	5.510	0.609	0.009	0.0768	0.0008	0.60219	482.5	5.4	477	4.5	499	25	477.0	4.5	1.1	
U1456D-13R-1 30-38 cm	6.724	208	0.392	0.075	0.008	0.0107	0.0004	0.18193	73.2	7.7	68.3	2.6	260	210	68.3	2.6	6.7	
U1456D-13R-1 30-38 cm	8.595	1300	12.600	0.749	0.027	0.0920	0.0034	0.76638	566	15	567	20	563	53	567.0	20.0	0.2	
U1456D-13R-1 30-38 cm	15.319	725	5.470	0.934	0.018	0.1074	0.0021	0.64542	669	9.6	658	12	705	35	658.0	12.0	1.6	
U1456D-13R-1 30-38 cm	9.143	134	0.814	0.055	0.010	0.0081	0.0008	0.34553	54.1	9.9	52.1	5.4	240	320	DISC	DISC	3.7	
U1456D-13R-1 30-38 cm	16.662	408.4	6.860	0.468	0.013	0.0569	0.0014	0.73636	389.1	9.2	356.6	8.4	592	44	356.6	8.4	8.4	
U1456D-13R-1 30-38 cm	5.382	535	0.696	0.860	0.021	0.0977	0.0022	0.70594	633	14	601	13	743	45	601.0	13.0	5.1	
U1456D-13R-1 30-38 cm	14.245	419	1.761	4.428	0.086	0.3008	0.0056	0.39267	1715	16	1694	28	1741	32	1741.0	32.0	2.7	
U1456D-13R-1 30-38 cm	18.811	141.3	1.351	0.720	0.019	0.0878	0.0009	0.34577	551	11	542.6	5.3	565	55	542.6	5.3	1.5	
U1456D-13R-1 30-38 cm	27.675	498	1.415	0.117	0.003	0.0167	0.0003	0.22843	111.9	3.1	106.7	1.7	229	63	106.7	1.7	4.6	
U1456D-13R-1 30-38 cm	27.675	98.5	1.037	0.078	0.008	0.0112	0.0003	0.05458	75.1	7	71.6	2	160	180	71.6	2.0	4.7	
U1456D-13R-1 30-38 cm	15.050	373.4	2.054	1.442	0.044	0.1469	0.0042	0.83203	903	18	882	24	957	41	957.0	41.0	7.8	
U1456D-13R-1 30-38 cm	27.674	313	2.510	0.069	0.004	0.0102	0.0002	0.22392	67.4	3.3	65.4	1.2	120	88	65.4	1.2	3.0	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-13R-1 30-38 cm	19.348	188	0.837	0.085	0.006	0.0126	0.0003	0.00607	83.2	5.3	80.6	1.6	160	130	80.6	1.6	3.1	Rim
U1456D-13R-1 30-38 cm	4.835	827	2.160	0.303	0.010	0.0396	0.0010	0.39518	268.7	7.7	250.3	5.9	421	74	250.3	5.9	6.8	Core
U1456D-13R-1 30-38 cm	27.674	581	1.080	0.048	0.002	0.0076	0.0002	0.17902	47.8	2.1	48.7	0.96	26	82	48.7	1.0	1.9	
U1456D-13R-1 30-38 cm	27.675	370	4.200	0.116	0.005	0.0174	0.0003	0.28818	110.7	4.3	111	2.1	133	81	111.0	2.1	0.3	
U1456D-13R-1 30-38 cm	27.674	39.08	1.046	0.152	0.016	0.0206	0.0007	0.24386	140	14	131.4	4.4	220	190	131.4	4.4	6.1	
U1456D-13R-1 30-38 cm	27.674	2230	1.310	0.023	0.001	0.0034	0.0001	0.28583	22.71	0.84	21.78	0.49	119	72	21.8	0.5	4.1	
U1456D-13R-1 30-38 cm	22.839	214.6	0.471	1.240	0.024	0.1307	0.0020	0.42160	817	11	791	11	884	38	791.0	11.0	3.2	
U1456D-13R-1 30-38 cm	14.783	1086	0.618	0.977	0.016	0.1060	0.0018	0.57596	691.6	8.3	649	11	833	28	649.0	11.0	6.2	
U1456D-13R-1 30-38 cm	5.640	598	26.200	0.159	0.012	0.0240	0.0013	0.63733	150	10	152.9	7.9	100	110	152.9	7.9	1.9	Rim
U1456D-13R-1 30-38 cm	13.976	220	1.970	1.593	0.043	0.1542	0.0034	0.73742	965	17	924	19	1050	39	1050.0	39.0	12.0	Core
U1456D-13R-1 30-38 cm	23.914	404	0.829	0.117	0.005	0.0168	0.0003	0.39115	111.9	4.5	107.2	2.1	194	77	107.2	2.1	4.2	
U1456D-13R-1 30-38 cm	12.634	56	0.555	0.094	0.018	0.0126	0.0005	0.11098	89	17	80.7	3.3	120	330	80.7	3.3	9.3	
U1456D-13R-1 30-38 cm	27.675	1858	0.458	0.780	0.010	0.0941	0.0011	0.70399	585	5.5	579.8	6.6	601	20	579.8	6.6	0.9	
U1456D-13R-1 30-38 cm	25.525	475	0.884	1.169	0.018	0.1321	0.0018	0.56370	784.7	8.6	800	10	744	28	800.0	10.0	1.9	
U1456D-13R-1 30-38 cm	8.067	461	3.230	0.735	0.025	0.0859	0.0035	0.61288	558	14	531	21	656	64	531.0	21.0	4.8	
U1456D-13R-1 30-38 cm	27.675	1353	0.485	0.069	0.001	0.0101	0.0001	0.25229	67.8	1.4	64.95	0.77	178	47	65.0	0.8	4.2	
U1456D-13R-1 30-38 cm	27.674	324	0.757	0.090	0.004	0.0135	0.0002	0.13578	86.9	3.9	86.5	1.4	103	87	86.5	1.4	0.5	
U1456D-13R-1 30-38 cm	4.566	940	11.650	0.325	0.022	0.0427	0.0026	0.59807	285	17	269	16	400	110	269.0	16.0	5.6	Rim
U1456D-13R-1 30-38 cm	15.319	1105	2.300	0.927	0.014	0.1028	0.0014	0.78116	665.5	7.4	630.9	8	781	20	630.9	8.0	5.2	Core
U1456D-13R-1 30-38 cm	6.993	373	60.000	0.175	0.009	0.0242	0.0007	0.31864	163.1	7.8	154.3	4.4	280	110	154.3	4.4	5.4	
U1456D-13R-1 30-38 cm	23.109	437	0.870	0.117	0.004	0.0175	0.0002	0.39599	112.5	3.8	112	1.4	128	67	112.0	1.4	0.4	
U1456D-13R-1 30-38 cm	6.724	744	1.800	0.123	0.007	0.0181	0.0006	0.52625	117.3	6.6	115.9	3.8	150	100	115.9	3.8	1.2	Rim
U1456D-13R-1 30-38 cm	5.909	324	2.044	3.350	0.110	0.2235	0.0064	0.82234	1491	25	1300	34	1772	34	1772.0	34.0	26.6	Core
U1456D-13R-1 30-38 cm	21.497	166.3	22.900	2.848	0.075	0.1846	0.0043	0.74503	1363	20	1091	23	1823	31	DISC	DISC	40.2	
U1456D-13R-1 30-38 cm	27.674	3440	1.466	0.051	0.002	0.0074	0.0001	0.58250	50.8	1.5	47.39	0.75	175	43	47.4	0.8	6.7	
U1456D-13R-1 30-38 cm	18.274	184.2	2.610	1.253	0.030	0.1379	0.0025	0.61202	822	14	832	14	810	39	832.0	14.0	1.2	
U1456D-13R-1 30-38 cm	12.365	287	1.206	0.122	0.010	0.0179	0.0007	0.06818	116.3	8.8	114.5	4.3	110	120	114.5	4.3	1.5	
U1456D-13R-1 30-38 cm	27.675	97.2	1.104	6.069	0.059	0.3556	0.0023	0.46540	1985	8.6	1961	11	2010	15	2010.0	15.0	2.4	
U1456D-13R-1 30-38 cm	14.783	1266	0.483	0.014	0.001	0.0016	0.0000	0.05264	13.8	1.2	10.05	0.26	610	170	DISC	DISC	27.2	
U1456D-13R-1 30-38 cm	18.274	1630	61.200	0.736	0.015	0.0893	0.0019	0.61897	559.3	8.6	551	11	591	35	551.0	11.0	1.5	Rim

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-13R-1 30-38 cm	4.566	337.5	1.892	1.670	0.041	0.1644	0.0036	0.59548	996	16	981	20	1023	46	1023.0	46.0	4.1	Core
U1456D-13R-1 30-38 cm	22.571	543	1.354	2.980	0.071	0.2199	0.0052	0.79599	1397	19	1280	28	1591	30	1591.0	30.0	19.5	
U1456D-13R-1 30-38 cm	27.675	1119	1.068	0.143	0.002	0.0207	0.0002	0.26537	136	2.1	132.1	1.1	202	35	132.1	1.1	2.9	
U1456D-13R-1 30-38 cm	27.674	4150	1.781	0.036	0.001	0.0053	0.0001	0.42963	35.7	0.92	34.1	0.51	160	50	34.1	0.5	4.5	
U1456D-13R-1 30-38 cm	27.674	553.9	0.943	0.052	0.003	0.0078	0.0001	0.02670	51.4	2.3	49.82	0.68	119	81	49.8	0.7	3.1	
U1456D-13R-1 30-38 cm	23.914	84.1	0.802	1.165	0.024	0.1253	0.0013	0.17416	783	11	760.8	7.2	834	43	760.8	7.2	2.8	
U1456D-15R-1 55-61 cm	25.729	83.4	0.602	0.077	0.008	0.0105	0.0003	0.15682	73.8	7.8	67.3	2.1	200	190	67.3	2.1	8.8	
U1456D-15R-1 55-61 cm	27.674	81.7	0.377	0.669	0.022	0.0808	0.0009	0.19239	517	13	500.9	5.4	550	69	500.9	5.4	3.1	
U1456D-15R-1 55-61 cm	22.323	370	1.207	0.165	0.006	0.0233	0.0003	0.29452	154.5	5	148.5	2	225	68	148.5	2.0	3.9	
U1456D-15R-1 55-61 cm	27.674	438	1.954	0.071	0.003	0.0103	0.0002	0.18708	69	2.9	65.9	1.2	167	83	65.9	1.2	4.5	
U1456D-15R-1 55-61 cm	27.674	511	2.859	0.051	0.003	0.0078	0.0001	0.15775	50.3	2.4	49.86	0.82	68	91	49.9	0.8	0.9	
U1456D-15R-1 55-61 cm	10.402	197.7	0.857	10.610	0.150	0.4628	0.0052	0.54118	2488	13	2451	23	2512	21	2512.0	21.0	2.4	
U1456D-15R-1 55-61 cm	27.675	1509	3.360	0.037	0.001	0.0056	0.0001	0.19057	37.2	1.1	36.06	0.35	119	61	36.1	0.4	3.1	
U1456D-15R-1 55-61 cm	22.809	1625	1.542	0.036	0.001	0.0055	0.0001	0.14914	35.6	1.1	35.46	0.42	59	62	35.5	0.4	0.4	
U1456D-15R-1 55-61 cm	27.917	1130	3.840	0.047	0.002	0.0071	0.0001	0.00514	46.7	1.8	45.36	0.71	140	81	45.4	0.7	2.9	
U1456D-15R-1 55-61 cm	21.836	1680	0.930	0.053	0.002	0.0082	0.0001	0.35549	52.6	1.5	52.89	0.84	36	52	52.9	0.8	0.6	
U1456D-15R-1 55-61 cm	26.215	140	2.440	0.812	0.020	0.0978	0.0016	0.23667	601	11	601.3	9.3	576	57	601.3	9.3	0.0	
U1456D-15R-1 55-61 cm	27.675	279	1.306	0.059	0.004	0.0085	0.0002	0.14404	57.6	3.4	54.8	1	160	120	54.8	1.0	4.9	
U1456D-15R-1 55-61 cm	20.376	200.4	1.760	2.103	0.035	0.1910	0.0028	0.64050	1148	12	1126	15	1191	26	1191.0	26.0	5.5	
U1456D-15R-1 55-61 cm	25.486	65.29	0.938	0.137	0.010	0.0200	0.0005	0.05131	129.2	8.5	127.9	2.9	170	140	127.9	2.9	1.0	
U1456D-15R-1 55-61 cm	9.429	1045	1.700	7.461	0.090	0.3627	0.0048	0.71437	2168	11	1994	22	2340	16	2340.0	16.0	14.8	
U1456D-15R-1 55-61 cm	27.674	1452	1.350	0.037	0.001	0.0055	0.0001	0.31835	36.4	1.3	35.21	0.71	139	69	35.2	0.7	3.3	
U1456D-15R-1 55-61 cm	27.675	428	5.800	4.229	0.078	0.2966	0.0048	0.64848	1675	15	1673	24	1685	28	1685.0	28.0	0.7	
U1456D-15R-1 55-61 cm	16.240	1190	10.800	0.631	0.011	0.0786	0.0012	0.63628	496.4	7	487.9	7.1	546	28	487.9	7.1	1.7	
U1456D-15R-1 55-61 cm	20.134	119	1.700	0.327	0.012	0.0432	0.0009	0.26202	285.7	9.3	272.4	5.5	380	80	272.4	5.5	4.7	
U1456D-15R-1 55-61 cm	14.051	163.2	1.895	1.104	0.033	0.1219	0.0020	0.46291	753	16	741	12	786	54	741.0	12.0	1.6	
U1456D-15R-1 55-61 cm	16.970	584	1.380	0.643	0.013	0.0863	0.0015	0.43936	503.3	8.1	533.3	9.1	376	45	533.3	9.1	6.0	
U1456D-15R-1 55-61 cm	9.186	362	4.070	0.333	0.013	0.0424	0.0013	0.37253	291.3	9.7	267.9	8.1	501	90	267.9	8.1	8.0	
U1456D-15R-1 55-61 cm	27.675	528	4.030	0.829	0.012	0.0998	0.0010	0.33434	612	6.7	613.2	6	611	31	613.2	6.0	0.2	
U1456D-15R-1 55-61 cm	9.672	380	1.311	0.213	0.013	0.0180	0.0004	0.05074	195	11	114.7	2.4	1290	120	DISC	DISC	41.2	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age			Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error	% Discordance*	
U1456D-15R-1 55-61 cm	23.052	1260	1.511	0.039	0.001	0.0059	0.0001	0.20802	38.5	1.3	38.15	0.65	109	72	38.2	0.7	0.9	Rim
U1456D-15R-1 55-61 cm	1.973	730	2.490	0.445	0.045	0.0488	0.0022	0.67434	372	31	307	13	790	200	DISC	DISC	17.5	
U1456D-15R-1 55-61 cm	7.483	137.3	6.200	2.310	0.060	0.2009	0.0032	0.22327	1214	18	1180	17	1282	51	1282.0	51.0	8.0	Core
U1456D-15R-1 55-61 cm	4.866	1181	11.130	0.124	0.009	0.0160	0.0008	0.61032	118.2	8.3	102.5	4.9	430	120	102.5	4.9	13.3	Rim
U1456D-15R-1 55-61 cm	7.969	247.1	0.721	0.601	0.017	0.0699	0.0018	0.43515	478	10	435	11	696	59	435.0	11.0	9.0	Core
U1456D-15R-1 55-61 cm	27.674	558	1.121	0.104	0.003	0.0161	0.0002	0.14633	100.4	2.9	102.6	1.3	89	62	102.6	1.3	2.2	Core
U1456D-15R-1 55-61 cm	15.998	438	0.717	0.070	0.003	0.0079	0.0002	0.28951	68.6	3.2	50.7	1.3	710	100	DISC	DISC	26.1	
U1456D-15R-1 55-61 cm	27.674	359	1.037	0.307	0.007	0.0433	0.0006	0.36083	271.2	5.1	272.9	3.4	260	48	272.9	3.4	0.6	Core
U1456D-15R-1 55-61 cm	27.675	1147	1.960	0.017	0.001	0.0026	0.0000	0.09437	16.82	0.86	16.72	0.29	70	100	16.7	0.3	0.6	
U1456D-15R-1 55-61 cm	21.107	138.5	0.325	0.711	0.019	0.0888	0.0014	0.29709	543	11	548.4	8.2	515	60	548.4	8.2	1.0	Core
U1456D-15R-1 55-61 cm	15.754	1789	2.494	0.230	0.005	0.0334	0.0007	0.58736	210.7	4.1	211.9	4.5	206	43	211.9	4.5	0.6	
U1456D-15R-1 55-61 cm	23.782	983	1.120	0.051	0.002	0.0073	0.0001	0.14761	50	1.9	46.97	0.73	185	79	47.0	0.7	6.1	Core
U1456D-15R-1 55-61 cm	27.675	289.1	1.547	4.270	0.120	0.2786	0.0078	0.63484	1678	22	1580	39	1823	41	1823.0	41.0	13.3	
U1456D-15R-1 55-61 cm	27.674	674	1.960	0.112	0.004	0.0167	0.0003	0.36304	108	3.2	106.5	2	139	54	106.5	2.0	1.4	Core
U1456D-15R-1 55-61 cm	11.677	563	43.000	0.651	0.023	0.0796	0.0023	0.42488	508	14	493	14	549	69	493.0	14.0	3.0	
U1456D-15R-1 55-61 cm	10.402	245	1.991	1.312	0.036	0.1392	0.0033	0.64598	853	17	840	19	886	49	840.0	19.0	1.5	Core
U1456D-15R-1 55-61 cm	25.485	221.6	4.870	4.540	0.110	0.3047	0.0073	0.63916	1732	20	1711	36	1763	37	1763.0	37.0	2.9	
U1456D-15R-1 55-61 cm	14.537	231	1.303	1.450	0.029	0.1468	0.0019	0.57685	909	12	883	11	966	34	966.0	34.0	8.6	Core
U1456D-15R-1 55-61 cm	20.863	293	1.782	0.094	0.006	0.0138	0.0005	0.21311	90.7	5.4	88.1	3.3	200	120	88.1	3.3	2.9	
U1456D-15R-1 55-61 cm	15.024	190.4	0.925	0.066	0.006	0.0091	0.0003	0.23398	64.5	5.3	58.3	2	240	160	58.3	2.0	9.6	Core
U1456D-15R-1 55-61 cm	27.674	289	1.724	1.310	0.031	0.1338	0.0031	0.45351	847	14	809	18	930	52	809.0	18.0	4.5	
U1456D-15R-1 55-61 cm	16.484	362.5	0.675	0.067	0.004	0.0102	0.0003	0.11510	65.2	3.6	65.1	1.6	70	100	65.1	1.6	0.2	Core
U1456D-15R-1 55-61 cm	27.674	815	1.790	0.702	0.012	0.0862	0.0011	0.51942	539.3	7	532.8	6.3	549	32	532.8	6.3	1.2	
U1456D-15R-1 55-61 cm	7.055	887	165.000	0.569	0.038	0.0661	0.0056	0.49316	461	27	412	34	720	160	412.0	34.0	10.6	Rim
U1456D-15R-1 55-61 cm	11.376	363	1.751	3.344	0.092	0.2377	0.0066	0.63743	1488	21	1373	34	1645	45	1645.0	45.0	16.5	Core
U1456D-15R-1 55-61 cm	27.674	176.4	2.185	1.914	0.042	0.1824	0.0034	0.53045	1082	14	1079	19	1072	38	1072.0	38.0	0.7	Core
U1456D-15R-1 55-61 cm	25.972	640	0.860	0.064	0.003	0.0097	0.0002	0.10194	63.1	2.4	62.36	0.97	89	79	62.4	1.0	1.2	
U1456D-15R-1 55-61 cm	18.673	121.2	0.662	3.032	0.071	0.2469	0.0044	0.72583	1415	17	1425	22	1386	31	1386.0	31.0	2.8	Core
U1456D-15R-1 55-61 cm	20.619	319	0.828	0.093	0.005	0.0133	0.0003	0.17346	89.7	4.3	85.4	1.9	180	100	85.4	1.9	4.8	
U1456D-15R-1 55-61 cm	27.675	1133	1.360	0.018	0.001	0.0024	0.0001	0.16924	18.16	0.98	15.52	0.51	320	110	15.5	0.5	14.5	Core

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1456D-15R-1 55-61 cm	6.023	354	3.680	0.054	0.007	0.0066	0.0005	0.38079	53.4	6.6	42.5	2.9	440	250	DISC	DISC	20.4	Core
U1456D-15R-1 55-61 cm	27.674	281	1.552	1.186	0.016	0.1298	0.0015	0.56926	793.1	7.6	786.5	8.5	805	25	786.5	8.5	0.8	
U1456D-15R-1 55-61 cm	24.025	891.3	0.689	0.099	0.002	0.0077	0.0001	0.25413	95.6	2.2	49.55	0.6	1464	47	DISC	DISC	48.2	
U1456D-15R-1 55-61 cm	27.675	176	1.237	0.093	0.006	0.0135	0.0003	0.02429	89.8	5.6	86.3	1.7	170	120	86.3	1.7	3.9	
U1456D-15R-1 55-61 cm	25.485	447	1.101	0.061	0.003	0.0093	0.0002	0.07524	59.8	2.6	59.9	1	104	93	59.9	1.0	0.2	
U1456D-15R-1 55-61 cm	18.430	268.9	1.504	6.908	0.070	0.3366	0.0030	0.52017	2099	9.1	1870	14	2340	16	2340.0	16.0	20.1	
U1456D-15R-1 55-61 cm	23.782	798	14.200	1.702	0.023	0.1684	0.0020	0.72492	1008	8.5	1003	11	1025	18	1025.0	18.0	2.1	
U1456D-15R-1 55-61 cm	18.673	148.8	1.774	9.860	0.140	0.4392	0.0061	0.71296	2420	13	2346	27	2494	18	2494.0	18.0	5.9	
U1456D-15R-1 55-61 cm	27.674	182	0.769	0.050	0.004	0.0079	0.0002	0.02958	49.2	3.4	50.9	1.3	20	130	50.9	1.3	3.5	
U1456D-15R-1 55-61 cm	27.675	552	0.799	0.046	0.002	0.0070	0.0001	0.03758	45.6	2.3	45.17	0.56	89	94	45.2	0.6	0.9	
U1456D-15R-1 55-61 cm	27.675	1510	3.441	0.121	0.002	0.0183	0.0002	0.31999	115.6	2	117	1.1	114	35	117.0	1.1	1.2	
U1456D-15R-1 55-61 cm	27.675	297	1.401	0.063	0.004	0.0101	0.0002	0.07362	61.8	3.3	65.1	1.3	7	99	65.1	1.3	5.3	
U1456D-15R-1 55-61 cm	8.271	641	23.100	0.698	0.034	0.0856	0.0019	0.21871	536	19	529	11	545	69	529.0	11.0	1.3	
U1456D-15R-1 55-61 cm	9.185	224.2	3.940	1.281	0.028	0.1383	0.0018	0.38091	836	13	835	10	863	45	835.0	10.0	0.1	
U1456D-15R-1 55-61 cm	27.674	595	4.270	0.590	0.011	0.0768	0.0013	0.63597	470.2	7.2	476.7	7.9	474	38	476.7	7.9	1.4	
U1456D-15R-1 55-61 cm	21.349	167	1.920	1.966	0.042	0.1603	0.0024	0.50124	1101	14	958	13	1422	36	DISC	DISC	32.6	
U1456D-15R-1 55-61 cm	20.620	372.5	3.620	1.491	0.029	0.1563	0.0028	0.59600	925	12	935	16	924	36	924.0	36.0	1.2	
U1456D-15R-1 55-61 cm	24.755	521	0.709	6.350	0.110	0.2915	0.0046	0.77553	2021	15	1648	23	2450	19	DISC	DISC	32.7	
U1456D-15R-1 55-61 cm	27.675	284	1.060	0.051	0.004	0.0082	0.0002	0.14062	50.5	3.6	52.7	1.3	70	140	52.7	1.3	4.4	
U1456D-15R-1 55-61 cm	10.947	103	2.620	0.112	0.013	0.0180	0.0007	0.06922	106	12	115.2	4.5	0	210	115.2	4.5	8.7	
U1456D-15R-1 55-61 cm	8.456	168.9	0.505	0.616	0.028	0.0763	0.0018	0.37829	485	18	474	11	556	96	474.0	11.0	2.3	
U1456D-15R-1 55-61 cm	27.674	900	0.510	0.052	0.002	0.0080	0.0002	0.32354	50.9	1.8	51.35	0.96	102	68	51.4	1.0	0.9	
U1456D-15R-1 55-61 cm	22.565	304	0.878	0.076	0.004	0.0121	0.0002	0.46123	74.6	3.3	77.3	1.2	63	89	77.3	1.2	3.6	
U1456D-15R-1 55-61 cm	27.674	139.7	0.743	0.074	0.005	0.0111	0.0003	0.19994	72.2	4.7	71.4	1.7	120	120	71.4	1.7	1.1	
U1456D-15R-1 55-61 cm	11.861	86.1	2.179	1.436	0.039	0.1524	0.0023	0.16380	902	16	914	13	890	61	890.0	61.0	2.7	
U1456D-15R-1 55-61 cm	24.999	733	2.947	9.820	0.110	0.4400	0.0048	0.64071	2418	11	2349	21	2497	15	2497.0	15.0	5.9	
U1456D-15R-1 55-61 cm	27.674	752	1.617	0.118	0.003	0.0178	0.0003	0.27007	113	2.4	113.8	1.6	143	49	113.8	1.6	0.7	
U1456D-15R-1 55-61 cm	27.675	314	2.790	0.660	0.012	0.0826	0.0009	0.43634	513.4	7.2	511.5	5.1	538	35	511.5	5.1	0.4	
U1456D-15R-1 55-61 cm	27.674	250	1.031	1.229	0.017	0.1364	0.0014	0.44995	812.7	8	824.1	8.1	792	29	824.1	8.1	1.4	
U1456D-15R-1 55-61 cm	27.674	207.4	1.132	0.060	0.004	0.0086	0.0002	0.05529	59	3.6	55.3	1.2	210	120	55.3	1.2	6.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-15R-1 55-61 cm	15.024	179.7	1.620	3.620	0.100	0.2406	0.0073	0.71617	1549	23	1388	38	1794	40	1794.0	40.0	22.6	Rim Core
U1456D-15R-1 55-61 cm	27.675	144	2.280	1.248	0.027	0.1326	0.0018	0.23898	820	12	802	10	876	45	802.0	10.0	2.2	
U1456D-15R-1 55-61 cm	27.674	272.8	1.008	0.051	0.003	0.0073	0.0002	0.04189	50.1	3.1	47.1	1	170	120	47.1	1.0	6.0	
U1456D-15R-1 55-61 cm	25.485	427	4.720	1.597	0.025	0.1512	0.0023	0.35310	967.5	9.6	907	13	1125	34	1125.0	34.0	19.4	
U1456D-15R-1 55-61 cm	27.674	1611	3.670	0.117	0.003	0.0177	0.0003	0.49797	112.2	2.5	113	1.9	107	44	113.0	1.9	0.7	
U1456D-15R-1 55-61 cm	9.185	1151	18.900	1.117	0.036	0.1268	0.0043	0.60374	760	17	769	24	722	66	769.0	24.0	1.2	
U1456D-15R-1 55-61 cm	4.806	660	0.581	0.629	0.025	0.0744	0.0021	0.68407	495	15	463	13	672	53	463.0	13.0	6.5	
U1456D-15R-1 55-61 cm	24.512	610	6.980	0.367	0.012	0.0428	0.0010	0.73954	316.3	9	270	6.4	657	49	270.0	6.4	14.6	
U1456D-15R-1 55-61 cm	27.674	52.5	0.639	0.065	0.006	0.0003	0.0015	0.00716	63.3	6	1.4	9.4	-30	180	DISC	DISC	97.8	
U1456D-15R-1 55-61 cm	22.906	49	0.911	0.090	0.010	0.0143	0.0006	0.03400	86.5	8.8	91.5	3.5	-10	180	91.5	3.5	5.8	
U1456D-15R-1 55-61 cm	27.675	276	0.680	0.060	0.003	0.0089	0.0002	0.14727	59	2.9	57	1.4	150	100	57.0	1.4	3.4	
U1456D-15R-1 55-61 cm	11.353	780	9.000	0.661	0.024	0.0837	0.0027	0.70412	514	15	518	16	482	60	518.0	16.0	0.8	
U1456D-15R-1 55-61 cm	7.702	541	2.057	1.577	0.044	0.1653	0.0050	0.65681	959	17	986	28	912	42	912.0	42.0	8.1	
U1456D-15R-1 55-61 cm	27.674	97.8	1.299	1.065	0.029	0.1189	0.0026	0.43986	733	14	724	15	741	56	724.0	15.0	1.2	
U1456D-15R-1 55-61 cm	27.674	226.7	0.977	1.459	0.056	0.1455	0.0054	0.47953	904	23	877	31	979	76	979.0	76.0	10.4	
U1456D-15R-1 55-61 cm	27.675	1469	1.332	0.069	0.002	0.0104	0.0002	0.41005	67.3	1.8	66.9	1.1	86	51	66.9	1.1	0.6	
U1456D-15R-1 55-61 cm	27.674	476	7.500	1.617	0.050	0.1653	0.0044	0.80919	975	20	987	24	944	35	944.0	35.0	4.6	
U1456D-15R-1 55-61 cm	27.674	511	0.999	0.054	0.002	0.0078	0.0002	0.18537	52.9	2	50.02	0.99	202	82	50.0	1.0	5.4	
U1456D-15R-1 55-61 cm	27.675	299	2.270	0.116	0.005	0.0181	0.0005	0.52492	110.8	4.5	115.7	3.2	44	66	115.7	3.2	4.4	
U1456D-15R-1 55-61 cm	9.519	573	8.370	0.202	0.006	0.0295	0.0007	0.46378	186.7	5.3	187.6	4.4	190	72	187.6	4.4	0.5	
U1456D-15R-1 55-61 cm	17.589	291	1.436	1.810	0.130	0.1490	0.0080	0.74405	1033	42	891	45	1360	90	DISC	DISC	34.5	
U1456D-15R-1 55-61 cm	6.052	168.4	1.564	0.743	0.042	0.0886	0.0036	0.54539	562	25	547	22	610	110	547.0	22.0	2.7	Rim Core
U1456D-15R-1 55-61 cm	13.737	988	23.600	1.300	0.046	0.1354	0.0041	0.87310	842	21	818	23	913	35	818.0	23.0	2.9	
U1456D-15R-1 55-61 cm	11.920	409	5.290	1.894	0.050	0.1821	0.0038	0.67739	1077	17	1078	20	1078	38	1078.0	38.0	0.0	
U1456D-15R-1 55-61 cm	2.651	3050	186.000	0.070	0.009	0.0107	0.0016	0.91794	68.1	8.8	68.4	9.9	110	120	DISC	DISC	0.4	
U1456D-15R-1 55-61 cm	27.674	272	1.193	1.623	0.029	0.1617	0.0025	0.53136	977	11	966	14	997	33	997.0	33.0	3.1	
U1456D-15R-1 55-61 cm	27.675	1337	1.057	0.068	0.002	0.0101	0.0001	0.35698	66.6	1.8	64.85	0.88	135	53	64.9	0.9	2.6	
U1456D-15R-1 55-61 cm	10.069	573	1.570	4.820	0.220	0.3090	0.0140	0.82003	1786	37	1731	69	1826	47	1826.0	47.0	5.2	
U1456D-15R-1 55-61 cm	14.471	442	0.746	0.266	0.009	0.0371	0.0007	0.54639	239	7.2	234.9	4.6	271	62	234.9	4.6	1.7	
U1456D-15R-1 55-61 cm	27.674	266.4	0.874	0.167	0.006	0.0238	0.0005	0.15309	156.1	4.9	151.6	3	238	74	151.6	3.0	2.9	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1456D-15R-1 55-61 cm	19.606	361	1.330	3.690	0.130	0.2432	0.0096	0.73513	1562	31	1398	49	1803	40	1803.0	40.0	22.5	Rim
U1456D-15R-1 55-61 cm	10.069	310	1.220	0.115	0.009	0.0168	0.0006	0.43214	109.7	7.7	107.6	3.6	130	130	107.6	3.6	1.9	
U1456D-15R-1 55-61 cm	5.502	666	9.990	7.190	0.380	0.3880	0.0220	0.64901	2142	42	2110	100	2155	83	2155.0	83.0	2.1	Rim
U1456D-15R-1 55-61 cm	17.588	89.7	1.810	12.940	0.280	0.4950	0.0100	0.76368	2670	20	2590	44	2737	24	2737.0	24.0	5.4	Core
U1456D-15R-1 55-61 cm	28.042	512	0.828	0.117	0.004	0.0168	0.0002	0.12508	111.9	3.1	107.3	1.5	205	62	107.3	1.5	4.1	Core
U1456D-15R-1 55-61 cm	27.674	65.1	0.522	6.430	0.130	0.3656	0.0068	0.61641	2030	18	2006	32	2061	32	2061.0	32.0	2.7	
U1456D-15R-1 55-61 cm	27.674	354	1.026	0.067	0.003	0.0100	0.0003	0.16661	65.5	2.8	64	1.6	130	88	64.0	1.6	2.3	Core
U1456D-15R-1 55-61 cm	27.674	2030	1.570	0.498	0.011	0.0004	0.0073	0.09830	409.4	7.4	-1	34	493	29	DISC	DISC	100.2	
U1456D-15R-1 55-61 cm	7.136	1280	1.382	0.132	0.010	0.0181	0.0012	0.64039	125.5	9.2	115.9	7.5	270	130	115.9	7.5	7.6	Core
U1456D-15R-1 55-61 cm	16.304	523	2.910	0.118	0.006	0.0171	0.0005	0.25324	112.6	5.3	109.5	3.1	200	100	109.5	3.1	2.8	
U1456D-15R-1 55-61 cm	27.674	616	0.892	0.109	0.005	0.0164	0.0005	0.62305	104.8	4.2	104.5	2.9	137	67	104.5	2.9	0.3	Core
U1456D-15R-1 55-61 cm	17.588	400	1.277	2.187	0.051	0.1966	0.0045	0.80005	1176	16	1156	25	1220	29	1220.0	29.0	5.2	
U1456D-15R-1 55-61 cm	27.674	2510	1.640	0.105	0.004	-0.0002	0.0014	0.00276	101.3	3.5	-1.5	9.1	201	51	DISC	DISC	101.5	Core
U1456D-15R-1 55-61 cm	17.221	402.5	0.993	1.313	0.031	0.1406	0.0022	0.59912	849	13	848	12	862	37	848.0	12.0	0.1	
U1456D-15R-1 55-61 cm	27.675	108.8	1.043	1.139	0.030	0.1268	0.0020	0.43299	768	14	769	11	759	56	769.0	11.0	0.1	Core
U1456D-15R-1 55-61 cm	27.675	857	0.601	0.176	0.006	0.0245	0.0005	0.59320	164.1	4.8	155.8	3.1	270	54	155.8	3.1	5.1	
U1456D-15R-1 55-61 cm	21.072	941	1.390	0.064	0.002	0.0093	0.0002	0.19071	62.4	2.3	59.4	1.2	171	79	59.4	1.2	4.8	Core
U1456D-19R-2 20-26 cm	27.675	1041	2.220	0.121	0.003	0.0178	0.0002	0.38983	115.7	2.5	113.7	1.4	165	43	113.7	1.4	1.7	
U1456D-19R-2 20-26 cm	27.674	430	1.377	1.972	0.021	0.1828	0.0014	0.40189	1105	7.3	1082	7.6	1155	21	1155.0	21.0	6.3	Rim
U1456D-19R-2 20-26 cm	4.866	360	3.500	0.623	0.083	0.0770	0.0058	0.53881	484	49	478	35	560	230	478.0	35.0	1.2	
U1456D-19R-2 20-26 cm	21.106	602	3.720	8.030	0.120	0.3766	0.0060	0.81141	2232	13	2059	28	2406	16	2406.0	16.0	14.4	Core
U1456D-19R-2 20-26 cm	7.055	196	1.410	0.119	0.015	0.0145	0.0007	0.08857	114	14	92.5	4.6	480	250	DISC	DISC	18.9	Core
U1456D-19R-2 20-26 cm	27.674	482	0.836	0.062	0.003	0.0089	0.0001	0.02348	60.5	2.4	57	0.72	206	82	57.0	0.7	5.8	
U1456D-19R-2 20-26 cm	23.052	21.61	1.840	0.174	0.024	0.0210	0.0009	0.09155	156	21	133.6	5.8	320	260	133.6	5.8	14.4	Core
U1456D-19R-2 20-26 cm	21.107	810	5.720	1.932	0.021	0.1855	0.0018	0.61040	1091	7.4	1097	9.7	1084	18	1084.0	18.0	1.2	
U1456D-19R-2 20-26 cm	27.674	170.9	0.628	0.088	0.005	0.0132	0.0003	0.03505	85.3	5	84.6	1.7	120	120	84.6	1.7	0.8	Core
U1456D-19R-2 20-26 cm	27.674	49.9	1.636	0.848	0.027	0.1016	0.0014	0.04721	623	15	623.6	8.1	599	72	623.6	8.1	0.1	
U1456D-19R-2 20-26 cm	28.161	465	1.180	0.062	0.003	0.0085	0.0001	0.02600	60.5	2.7	54.71	0.76	274	94	54.7	0.8	9.6	Core
U1456D-19R-2 20-26 cm	21.107	38.76	1.504	0.839	0.040	0.0998	0.0020	0.31115	612	22	615	11	591	96	615.0	11.0	0.5	
U1456D-19R-2 20-26 cm	23.295	433	1.886	7.710	0.130	0.3461	0.0046	0.74721	2194	16	1915	22	2464	20	2464.0	20.0	22.3	Core

Table 3

Sample Name	Duration (s)								207/235		206/238		207/206					Rim/C ore
		[U] ppm	U/Th	207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Best age (Ma)	2 σ error	% Discordance*	
U1456D-19R-2 20-26 cm	12.348	469	1.350	0.081	0.005	0.0122	0.0003	0.15919	79	4.8	78	1.8	110	120	78.0	1.8	1.3	Core
U1456D-19R-2 20-26 cm	16.728	398	0.859	10.470	0.160	0.4692	0.0077	0.76222	2477	15	2478	34	2470	19	2470.0	19.0	0.3	
U1456D-19R-2 20-26 cm	27.674	54.8	2.543	1.249	0.038	0.1282	0.0019	0.15739	817	18	777	11	892	70	777.0	11.0	4.9	
U1456D-19R-2 20-26 cm	19.403	784	3.290	1.424	0.021	0.1449	0.0017	0.27663	898.1	9	872	9.3	952	31	952.0	31.0	8.4	
U1456D-19R-2 20-26 cm	24.756	290	1.457	2.212	0.043	0.1972	0.0035	0.53043	1184	13	1160	19	1203	36	1203.0	36.0	3.6	
U1456D-19R-2 20-26 cm	27.674	389	2.650	0.994	0.017	0.1162	0.0017	0.55873	700.6	8.4	708.4	9.7	660	34	708.4	9.7	1.1	
U1456D-19R-2 20-26 cm	6.023	2560	42.300	0.084	0.004	0.0123	0.0003	0.38197	82.2	3.7	79.1	2	129	93	79.1	2.0	3.8	
U1456D-19R-2 20-26 cm	5.595	211.2	3.270	4.180	0.160	0.2065	0.0083	0.92048	1666	32	1209	45	2292	29	DISC	DISC	47.3	
U1456D-19R-2 20-26 cm	7.482	222	1.517	0.062	0.007	0.0090	0.0005	0.01693	61.2	6.4	58	3.1	210	240	58.0	3.1	5.2	
U1456D-19R-2 20-26 cm	27.675	31.02	0.287	0.227	0.018	0.0134	0.0006	0.03810	204	15	85.7	3.5	1710	200	DISC	DISC	58.0	
U1456D-19R-2 20-26 cm	27.674	625	2.170	0.245	0.007	0.0339	0.0006	0.08865	221.6	5.6	215	3.9	260	55	215.0	3.9	3.0	Core
U1456D-19R-2 20-26 cm	23.539	108.36	1.064	3.283	0.053	0.2539	0.0028	0.35017	1475	13	1458	15	1475	31	1475.0	31.0	1.2	
U1456D-19R-2 20-26 cm	7.785	134.7	1.499	1.083	0.044	0.1139	0.0026	0.00107	743	21	695	15	833	99	695.0	15.0	6.5	
U1456D-19R-2 20-26 cm	8.515	641	5.210	1.452	0.038	0.1482	0.0032	0.45900	909	16	891	18	921	53	921.0	53.0	3.3	Rim
U1456D-19R-2 20-26 cm	13.078	567	2.254	2.277	0.037	0.1831	0.0019	0.48381	1206	11	1084	10	1405	28	1405.0	28.0	22.8	Core
U1456D-19R-2 20-26 cm	20.134	477	4.230	2.668	0.045	0.2252	0.0027	0.63092	1318	12	1309	14	1300	26	1300.0	26.0	0.7	Core
U1456D-19R-2 20-26 cm	6.812	356	0.000	0.151	0.017	0.0223	0.0018	0.52378	146	16	142	11	190	180	142.0	11.0	2.7	
U1456D-19R-2 20-26 cm	9.186	537	3.350	4.292	0.084	0.2699	0.0062	0.64831	1690	16	1539	32	1862	33	1862.0	33.0	17.3	
U1456D-19R-2 20-26 cm	2.433	992	12.820	1.132	0.097	0.1240	0.0110	0.91654	766	46	752	64	782	84	752.0	64.0	1.8	Rim
U1456D-19R-2 20-26 cm	16.970	1868	15.620	5.708	0.091	0.2930	0.0033	0.83882	1930	14	1656	17	2214	16	2214.0	16.0	25.2	Core
U1456D-19R-2 20-26 cm	27.674	238	1.358	2.203	0.031	0.2002	0.0025	0.54636	1181	10	1176	14	1165	26	1165.0	26.0	0.9	Core
U1456D-19R-2 20-26 cm	21.593	251	1.374	8.321	0.085	0.3825	0.0030	0.59760	2265	9.3	2087	14	2407	15	2407.0	15.0	13.3	
U1456D-19R-2 20-26 cm	21.592	52	0.211	3.125	0.067	0.0432	0.0011	0.37283	1435	17	272.3	6.8	4297	39	DISC	DISC	81.0	
U1456D-19R-2 20-26 cm	26.701	20	0.166	1.297	0.067	0.1275	0.0034	0.07790	840	30	773	19	940	120	773.0	19.0	8.0	
U1456D-19R-2 20-26 cm	26.215	339	2.460	1.403	0.017	0.1410	0.0013	0.51030	889.3	7.3	849.9	7.6	973	24	849.9	7.6	4.4	
U1456D-19R-2 20-26 cm	27.674	1000	1.259	0.044	0.002	0.0067	0.0001	0.22329	43.7	1.9	42.7	0.77	108	85	42.7	0.8	2.3	
U1456D-19R-2 20-26 cm	13.079	189	3.850	0.223	0.013	0.0310	0.0008	0.27100	203	10	196.6	5.1	250	110	196.6	5.1	3.2	
U1456D-19R-2 20-26 cm	21.349	1466	1.145	0.124	0.003	0.0180	0.0002	0.28701	118.5	2.3	115.3	1.1	157	43	115.3	1.1	2.7	
U1456D-19R-2 20-26 cm	24.512	191	1.690	0.763	0.018	0.0923	0.0012	0.26581	574	10	568.9	7	572	49	568.9	7.0	0.9	
U1456D-19R-2 20-26 cm	25.241	652	1.920	7.260	0.160	0.3601	0.0075	0.76221	2143	19	1979	36	2285	25	2285.0	25.0	13.4	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1456D-19R-2 20-26 cm	25.728	565	0.864	0.083	0.003	0.0121	0.0002	0.35727	80.7	2.9	77.4	1.3	178	74	77.4	1.3	4.1	Core
U1456D-19R-2 20-26 cm	16.241	1670	1.560	0.088	0.003	0.0128	0.0002	0.28230	85.9	2.4	82.2	1.4	171	63	82.2	1.4	4.3	
U1456D-19R-2 20-26 cm	27.675	3110	2.440	0.219	0.003	0.0312	0.0003	0.77078	200.8	2.6	198	2	218	25	198.0	2.0	1.4	
U1456D-19R-2 20-26 cm	25.971	1047	3.400	0.213	0.004	0.0301	0.0004	0.41404	195.7	3.2	191.2	2.4	240	39	191.2	2.4	2.3	
U1456D-19R-2 20-26 cm	22.809	433	5.947	1.563	0.019	0.1592	0.0014	0.47369	954.7	7.7	952.2	7.7	949	23	949.0	23.0	0.3	
U1456D-19R-2 20-26 cm	27.675	977	0.721	0.051	0.002	0.0076	0.0001	0.23751	50.8	1.6	48.84	0.61	127	64	48.8	0.6	3.9	
U1456D-19R-2 20-26 cm	27.674	1576	19.380	4.778	0.089	0.2856	0.0066	0.43902	1781	16	1616	33	1980	41	1980.0	41.0	18.4	
U1456D-19R-2 20-26 cm	27.674	217.2	1.140	1.073	0.023	0.1226	0.0018	0.61149	739	11	745	10	716	37	745.0	10.0	0.8	
U1456D-19R-2 20-26 cm	21.835	222.1	0.635	5.530	0.110	0.3430	0.0052	0.64566	1901	17	1900	25	1900	27	1900.0	27.0	0.0	
U1456D-19R-2 20-26 cm	21.836	1847	6.360	0.211	0.004	0.0304	0.0005	0.53652	195	3.3	192.9	3.4	211	40	192.9	3.4	1.1	
U1456D-19R-2 20-26 cm	17.700	165.9	1.488	9.640	0.290	0.4320	0.0120	0.87478	2391	29	2312	52	2464	27	2464.0	27.0	6.2	Rim
U1456D-19R-2 20-26 cm	12.104	238	5.390	0.134	0.007	0.0199	0.0008	0.30600	127	6.4	126.7	4.9	150	100	126.7	4.9	0.2	
U1456D-19R-2 20-26 cm	7.298	565	3.510	0.493	0.014	0.0592	0.0015	0.64661	406.2	9.7	370.8	9.4	613	52	370.8	9.4	8.7	Core
U1456D-19R-2 20-26 cm	27.675	589	2.050	0.117	0.003	0.0173	0.0002	0.19182	112	3.1	110.6	1.5	154	59	110.6	1.5	1.3	
U1456D-19R-2 20-26 cm	11.861	850	1.815	0.065	0.004	0.0091	0.0003	0.35349	63.3	3.8	58.3	2.2	250	110	58.3	2.2	7.9	Rim
U1456D-19R-2 20-26 cm	27.675	210	1.320	0.077	0.004	0.0118	0.0003	0.29958	75.2	4.1	75.8	1.9	100	100	75.8	1.9	0.8	
U1456D-19R-2 20-26 cm	5.293	3080	1.470	0.119	0.005	0.0172	0.0006	0.46847	114.2	4.4	110	3.7	204	88	110.0	3.7	3.7	Core
U1456D-19R-2 20-26 cm	9.001	174.2	2.127	0.461	0.022	0.0548	0.0020	0.37932	383	16	344	12	630	100	344.0	12.0	10.2	
U1456D-19R-2 20-26 cm	27.675	160.7	1.417	0.096	0.005	0.0128	0.0003	0.21582	93.4	4.9	81.9	1.6	350	110	81.9	1.6	12.3	Rim
U1456D-19R-2 20-26 cm	25.971	53.38	0.884	1.442	0.052	0.1512	0.0019	0.51029	899	20	907	11	873	64	873.0	64.0	3.9	
U1456D-19R-2 20-26 cm	4.622	777	16.000	0.716	0.037	0.0800	0.0037	0.54852	547	22	496	22	769	76	496.0	22.0	9.3	Core
U1456D-19R-2 20-26 cm	15.755	633	4.320	5.120	0.230	0.2743	0.0097	0.81179	1824	38	1558	49	2158	48	2158.0	48.0	27.8	
U1456D-19R-2 20-26 cm	15.024	500	2.490	2.726	0.078	0.2187	0.0048	0.70505	1331	21	1274	26	1430	41	1430.0	41.0	10.9	Rim
U1456D-19R-2 20-26 cm	16.971	284.9	0.866	1.086	0.021	0.1220	0.0014	0.39472	746	10	741.8	7.8	759	39	741.8	7.8	0.6	
U1456D-19R-2 20-26 cm	9.244	362	60.000	0.123	0.010	0.0190	0.0008	0.23453	117.1	8.9	121	5.3	80	150	121.0	5.3	3.3	Core
U1456D-19R-2 20-26 cm	12.348	420	4.240	3.240	0.130	0.1570	0.0052	0.92464	1458	30	939	29	2340	25	DISC	DISC	59.9	
U1456D-19R-2 20-26 cm	27.675	442	1.656	11.210	0.160	0.4704	0.0078	0.78593	2537	14	2482	34	2593	17	2593.0	17.0	4.3	Rim
U1456D-19R-2 20-26 cm	24.998	367	4.950	2.198	0.061	0.1880	0.0034	0.65156	1174	20	1110	19	1316	41	1316.0	41.0	15.7	
U1456D-19R-2 20-26 cm	18.673	262	3.790	4.000	0.190	0.2480	0.0110	0.71949	1615	39	1421	55	1903	60	1903.0	60.0	25.3	
U1456D-19R-2 20-26 cm	27.674	1840	4.730	0.110	0.002	0.0162	0.0002	0.27878	106.1	1.8	103.5	1.3	168	38	103.5	1.3	2.5	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-19R-2 20-26 cm	27.675	418	2.670	1.570	0.021	0.1631	0.0017	0.55421	957.2	8.5	973.7	9.2	931	24	931.0	24.0	4.6	Rim
U1456D-19R-2 20-26 cm	9.429	156	2.120	1.101	0.064	0.1241	0.0053	0.75345	748	32	753	30	759	85	753.0	30.0	0.7	
U1456D-19R-2 20-26 cm	9.001	66.1	1.621	2.420	0.130	0.1911	0.0076	0.62580	1248	41	1126	41	1490	81	1490.0	81.0	24.4	Core
U1456D-19R-2 20-26 cm	27.674	351.9	1.273	0.075	0.003	0.0108	0.0002	0.17990	73.6	3.2	69.3	1.5	222	89	69.3	1.5	5.8	Core
U1456D-19R-2 20-26 cm	27.675	136.2	1.306	0.069	0.005	0.0091	0.0003	0.06494	67.2	4.5	58.1	1.7	340	130	58.1	1.7	13.5	
U1456D-19R-2 20-26 cm	23.296	603	0.822	4.093	0.056	0.2834	0.0041	0.81005	1652	11	1607	21	1718	16	1718.0	16.0	6.5	Core
U1456D-19R-2 20-26 cm	27.674	538	2.890	0.586	0.008	0.0747	0.0007	0.21569	467.5	5.2	464.5	4	483	32	464.5	4.0	0.6	
U1456D-19R-2 20-26 cm	27.674	206.7	1.020	0.136	0.007	0.0176	0.0003	0.05364	128.4	5.8	112.5	1.7	393	98	112.5	1.7	12.4	Core
U1456D-19R-2 20-26 cm	18.674	247.2	1.188	0.615	0.017	0.0707	0.0012	0.57427	485	11	440.1	7.4	692	53	440.1	7.4	9.3	
U1456D-19R-2 20-26 cm	27.674	447	0.641	0.085	0.003	0.0123	0.0002	0.00164	82.7	2.5	78.59	0.97	206	67	78.6	1.0	5.0	Core
U1456D-19R-2 20-26 cm	7.726	299	30.100	0.127	0.007	0.0197	0.0013	0.35691	120.7	6.6	125.5	8.1	80	130	125.5	8.1	4.0	
U1456D-19R-2 20-26 cm	14.052	289	2.020	0.746	0.023	0.0885	0.0024	0.45650	564	13	546	14	634	65	546.0	14.0	3.2	Rim
U1456D-19R-2 20-26 cm	7.055	400	28.800	0.244	0.025	0.0326	0.0036	0.55932	220	20	207	22	400	190	DISC	DISC	5.9	
U1456D-19R-2 20-26 cm	19.160	250	5.670	0.633	0.029	0.0765	0.0036	0.60766	496	19	474	21	610	90	474.0	21.0	4.4	Core
U1456D-19R-2 20-26 cm	28.647	541	5.230	1.554	0.026	0.1521	0.0022	0.35596	956	12	912	12	1052	36	1052.0	36.0	13.3	Core
U1456D-19R-2 20-26 cm	27.675	272	24.600	0.363	0.013	0.0484	0.0016	0.72629	313.6	9.8	304.4	9.7	380	59	304.4	9.7	2.9	
U1456D-19R-2 20-26 cm	5.536	401	65.000	0.033	0.004	0.0055	0.0004	0.04339	33.1	3.8	35.1	2.3	50	260	35.1	2.3	6.0	Core
U1456D-19R-2 20-26 cm	15.511	203.9	1.527	0.185	0.009	0.0160	0.0006	0.42941	172	7.9	102.3	3.5	1300	100	DISC	DISC	40.5	
U1456D-19R-2 20-26 cm	27.674	546	2.300	1.875	0.077	0.1844	0.0072	0.71671	1061	28	1086	39	1051	58	1051.0	58.0	3.3	Core
U1456D-19R-2 20-26 cm	24.999	315	1.934	10.020	0.340	0.4390	0.0150	0.68339	2421	31	2333	65	2509	45	2509.0	45.0	7.0	
U1456D-19R-2 20-26 cm	25.728	412	0.772	0.099	0.004	0.0147	0.0002	0.08643	96	3.2	94	1.4	157	73	94.0	1.4	2.1	Core
U1456D-19R-2 20-26 cm	27.674	3140	2.280	0.039	0.001	0.0058	0.0001	0.44842	38.55	0.94	36.98	0.61	144	48	37.0	0.6	4.1	
U1456D-19R-2 20-26 cm	7.239	85.8	0.894	0.079	0.014	0.0113	0.0009	0.27148	76	13	72.1	5.6	170	280	72.1	5.6	5.1	Core
U1456D-19R-2 20-26 cm	9.915	267	1.230	0.096	0.010	0.0135	0.0005	0.42917	92.3	9	86.3	3.4	220	170	86.3	3.4	6.5	
U1456D-19R-2 20-26 cm	27.674	1318	2.520	0.111	0.003	0.0168	0.0003	0.35234	106.4	2.5	107.1	1.7	117	50	107.1	1.7	0.7	Core
U1456D-19R-2 20-26 cm	27.674	2040	3.190	0.817	0.011	0.0984	0.0012	0.64442	605.5	5.9	605.1	7.1	622	25	605.1	7.1	0.1	
U1456D-19R-2 20-26 cm	27.674	148	1.260	0.882	0.023	0.1039	0.0025	0.46237	639	12	636	15	669	53	636.0	15.0	0.5	Core
U1456D-19R-2 20-26 cm	27.675	831	2.720	0.241	0.008	0.0341	0.0010	0.53059	219.2	6.2	215.9	6.1	255	63	215.9	6.1	1.5	
U1456D-19R-2 20-26 cm	27.674	424	0.539	1.942	0.025	0.1847	0.0021	0.73066	1094	8.9	1092	11	1117	19	1117.0	19.0	2.2	Core
U1456D-19R-2 20-26 cm	27.675	3360	2.040	0.016	0.001	0.0025	0.0001	0.35602	16.58	0.69	15.86	0.35	138	71	15.9	0.4	4.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1456D-19R-2 20-26 cm	27.675	1817	0.672	0.055	0.001	0.0079	0.0001	0.43973	54.7	1.4	50.91	0.89	243	51	50.9	0.9	6.9	Core
U1456D-19R-2 20-26 cm	15.510	651	0.835	6.992	0.085	0.3818	0.0050	0.59248	2109	11	2084	23	2145	20	2145.0	20.0	2.8	
U1456D-19R-2 20-26 cm	11.376	335	2.240	10.250	0.150	0.4093	0.0054	0.65472	2456	13	2211	25	2675	19	2675.0	19.0	17.3	
U1456D-19R-2 20-26 cm	19.889	265.8	2.211	0.219	0.008	0.0308	0.0006	0.27062	200.7	6.7	195.2	3.5	289	78	195.2	3.5	2.7	
U1456D-19R-2 20-26 cm	19.889	274.5	3.650	5.060	0.170	0.2715	0.0083	0.73119	1822	30	1551	43	2157	45	2157.0	45.0	28.1	
U1456D-19R-2 20-26 cm	27.675	830	4.810	0.122	0.003	0.0181	0.0003	0.31450	116.4	2.9	115.6	2.2	159	56	115.6	2.2	0.7	
U1456D-19R-2 20-26 cm	18.916	360	3.590	0.268	0.008	0.0363	0.0008	0.62141	240.9	6.5	229.5	5.1	376	53	229.5	5.1	4.7	
U1456D-19R-2 20-26 cm	18.673	699	7.700	0.523	0.013	0.0557	0.0012	0.69119	427.3	9.2	349.4	7.2	891	39	DISC	DISC	18.2	
U1456D-19R-2 20-26 cm	27.674	695	15.100	1.208	0.018	0.1296	0.0016	0.62870	802.7	8.5	786.3	8.8	857	25	786.3	8.8	2.0	
U1456D-19R-2 20-26 cm	25.972	596	67.200	0.168	0.006	0.0230	0.0005	0.67626	156.8	4.9	146.5	3	304	53	146.5	3.0	6.6	
U1456D-19R-2 20-26 cm	27.674	229.9	1.396	0.064	0.004	0.0091	0.0002	0.10587	63.2	4.1	58.4	1.4	250	130	58.4	1.4	7.6	
U1456D-19R-2 20-26 cm	20.377	1349	15.590	0.680	0.009	0.0841	0.0008	0.71246	526.3	5.2	520.6	4.6	553	22	520.6	4.6	1.1	
U1456D-19R-2 20-26 cm	27.674	129	1.337	0.082	0.006	0.0122	0.0004	0.25031	80.1	5.3	78.2	2.8	180	130	78.2	2.8	2.4	
U1456D-19R-2 20-26 cm	6.266	712	2.690	1.206	0.081	0.1308	0.0073	0.73257	797	38	791	41	814	96	791.0	41.0	0.8	
U1456D-19R-2 20-26 cm	27.675	1346	1.500	0.047	0.002	0.0070	0.0001	0.43726	46.6	1.6	44.99	0.87	148	62	45.0	0.9	3.5	
U1456D-19R-2 20-26 cm	27.674	117	1.677	1.212	0.025	0.1332	0.0017	0.30490	804	12	805.5	9.7	797	44	805.5	9.7	0.2	
U1456D-19R-2 20-26 cm	27.675	80.6	2.710	1.417	0.034	0.1528	0.0025	0.39730	892	14	916	14	832	48	832.0	14.0	2.7	
U1456D-19R-2 20-26 cm	25.485	974	0.904	1.065	0.020	0.1129	0.0022	0.72907	735	10	689	12	887	24	689.0	12.0	6.3	
U1456D-19R-2 20-26 cm	27.675	1027	1.187	0.112	0.003	0.0166	0.0003	0.47681	108	2.7	106.2	2.1	162	49	106.2	2.1	1.7	
U1456D-19R-2 20-26 cm	27.674	320	1.334	0.097	0.004	0.0143	0.0003	0.28379	93.8	3.7	91.2	1.8	165	79	91.2	1.8	2.8	
U1456D-19R-2 20-26 cm	27.674	534	2.810	0.064	0.003	0.0093	0.0002	0.43993	62.5	2.5	59.4	1.4	189	77	59.4	1.4	5.0	
U1456D-19R-2 20-26 cm	27.674	518	6.850	0.017	0.001	0.0027	0.0001	0.19308	17.1	1.3	17.49	0.49	30	140	17.5	0.5	2.3	
U1456D-19R-2 20-26 cm	27.675	80.6	1.320	0.077	0.006	0.0097	0.0003	0.02350	74.4	5.9	62.4	1.8	380	160	DISC	DISC	16.1	
U1456D-19R-2 20-26 cm	16.484	1510	1.360	0.066	0.002	0.0075	0.0002	0.37010	65.1	2.3	48.22	0.99	710	69	DISC	DISC	25.9	
U1456D-19R-2 20-26 cm	27.674	271.2	0.950	0.047	0.003	0.0073	0.0002	0.12976	46.1	2.7	47.1	1	30	110	47.1	1.0	2.2	
U1456D-19R-2 20-26 cm	11.619	728	51.200	0.725	0.013	0.0896	0.0013	0.33118	553.1	7.5	552.8	7.5	547	38	552.8	7.5	0.1	Rim
U1456D-19R-2 20-26 cm	3.649	38.5	1.100	6.300	0.300	0.3470	0.0100	0.46228	2014	44	1921	50	2109	77	2109.0	77.0	8.9	Core
U1456D-19R-2 20-26 cm	21.106	859	34.600	0.618	0.010	0.0803	0.0011	0.56742	488	6.4	497.7	6.8	436	32	497.7	6.8	2.0	
U1456D-19R-2 20-26 cm	15.025	528	8.010	0.626	0.016	0.0803	0.0019	0.63047	493	10	498	11	460	48	498.0	11.0	1.0	
U1456D-19R-2 20-26 cm	27.674	224.7	0.627	0.661	0.011	0.0826	0.0009	0.24264	514.7	6.8	511.5	5.1	524	38	511.5	5.1	0.6	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-19R-2 20-26 cm	27.675	66.7	1.064	0.081	0.008	0.0127	0.0004	0.09352	78.4	7.1	81.5	2.3	40	170	81.5	2.3	4.0	Rim
U1456D-19R-2 20-26 cm	9.244	512	9.030	6.180	0.110	0.3556	0.0064	0.65153	2000	15	1960	30	2034	26	2034.0	26.0	3.6	
U1456D-19R-2 20-26 cm	11.131	336	7.100	11.520	0.180	0.4720	0.0060	0.72498	2564	15	2492	26	2618	18	2618.0	18.0	4.8	Core
U1456D-19R-2 20-26 cm	22.566	776	2.820	0.069	0.003	0.0102	0.0002	0.37912	67.7	2.6	65.5	1.5	145	74	65.5	1.5	3.2	
U1456D-19R-2 20-26 cm	24.025	656	20.600	0.924	0.021	0.1051	0.0019	0.60349	662	11	644	11	718	38	644.0	11.0	2.7	
U1456D-19R-2 20-26 cm	27.675	330	0.784	0.125	0.004	0.0184	0.0002	0.10987	119.3	3.8	117.5	1.5	163	71	117.5	1.5	1.5	
U1456D-19R-2 20-26 cm	12.834	399	5.000	0.616	0.018	0.0790	0.0022	0.46280	486	11	490	13	454	66	490.0	13.0	0.8	
U1456D-20R-1 95-103 cm	12.594	2720	2.257	0.017	0.001	0.0026	0.0001	0.21752	17.59	0.92	16.98	0.44	130	100	17.0	0.4	3.5	
U1456D-20R-1 95-103 cm	20.531	99.4	1.285	1.018	0.026	0.1164	0.0015	0.14084	711	13	709.4	8.8	724	59	709.4	8.8	0.2	
U1456D-20R-1 95-103 cm	27.674	779	0.446	0.053	0.002	0.0083	0.0001	0.12758	52.3	1.7	53.39	0.72	55	65	53.4	0.7	2.1	
U1456D-20R-1 95-103 cm	27.674	190	1.046	0.676	0.015	0.0842	0.0008	0.08777	524	9	521	5	537	54	521.0	5.0	0.6	
U1456D-20R-1 95-103 cm	27.675	32.21	0.837	1.430	0.051	0.1470	0.0024	0.19258	895	21	884	13	914	80	914.0	80.0	3.3	
U1456D-20R-1 95-103 cm	8.824	342	1.388	0.083	0.007	0.0126	0.0003	0.02422	80.8	6.2	80.8	2	140	170	80.8	2.0	0.0	
U1456D-20R-1 95-103 cm	27.675	445	0.902	0.061	0.004	0.0068	0.0001	0.21957	60.2	3.8	43.52	0.76	690	130	DISC	DISC	27.7	
U1456D-20R-1 95-103 cm	27.674	124.8	0.617	0.090	0.006	0.0136	0.0003	0.00489	86.7	5.2	86.8	1.7	80	110	86.8	1.7	0.1	
U1456D-20R-1 95-103 cm	13.784	357.4	1.171	0.318	0.011	0.0434	0.0007	0.45327	280	8.3	273.7	4.5	330	66	273.7	4.5	2.3	
U1456D-20R-1 95-103 cm	4.564	1462	1.782	0.040	0.003	0.0053	0.0001	0.54547	39.6	3.1	34.09	0.91	350	150	34.1	0.9	13.9	
U1456D-20R-1 95-103 cm	27.675	398	4.610	0.236	0.007	0.0153	0.0002	0.28707	214.8	5.5	97.8	1.2	1811	50	DISC	DISC	54.5	
U1456D-20R-1 95-103 cm	27.674	118.3	1.010	4.324	0.051	0.3029	0.0026	0.50097	1696	9.7	1705	13	1695	20	1695.0	20.0	0.6	
U1456D-20R-1 95-103 cm	27.675	362	1.300	0.078	0.003	0.0120	0.0002	0.20756	76.5	2.9	76.9	1.4	108	80	76.9	1.4	0.5	
U1456D-20R-1 95-103 cm	12.104	515	3.440	1.622	0.034	0.1345	0.0021	0.64854	977	13	814	12	1390	31	DISC	DISC	16.7	Rim
U1456D-20R-1 95-103 cm	8.031	251.4	0.993	2.818	0.057	0.2236	0.0034	0.44451	1359	15	1301	18	1477	38	1477.0	38.0	11.9	Core
U1456D-20R-1 95-103 cm	27.674	234.2	1.363	0.054	0.003	0.0077	0.0002	0.20036	53.3	3	49.1	1.1	250	110	49.1	1.1	7.9	
U1456D-20R-1 95-103 cm	27.674	1245	2.534	0.221	0.004	0.0315	0.0003	0.33833	202.9	2.9	199.8	1.7	275	33	199.8	1.7	1.5	
U1456D-20R-1 95-103 cm	27.674	60.4	0.863	0.092	0.009	0.0136	0.0004	0.00211	90.4	8.6	86.8	2.7	200	180	86.8	2.7	4.0	
U1456D-20R-1 95-103 cm	20.730	322	0.695	0.076	0.005	0.0098	0.0002	0.03956	74.3	4.5	62.9	1.2	420	130	DISC	DISC	15.3	
U1456D-20R-1 95-103 cm	24.896	300	0.874	1.601	0.022	0.1594	0.0016	0.39507	970.4	8.4	953	9.1	1016	27	1016.0	27.0	6.2	
U1456D-20R-1 95-103 cm	12.594	722	3.475	1.994	0.028	0.1508	0.0019	0.63132	1113	9.5	905	11	1543	22	DISC	DISC	41.3	
U1456D-20R-1 95-103 cm	27.674	1244	9.440	0.294	0.005	0.0398	0.0003	0.31917	261.8	3.6	251.8	2	323	34	251.8	2.0	3.8	
U1456D-20R-1 95-103 cm	27.675	73.1	6.540	0.747	0.024	0.0902	0.0013	0.14088	564	14	556.7	7.6	546	72	556.7	7.6	1.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1456D-20R-1 95-103 cm	14.181	1434	1.954	1.326	0.017	0.1370	0.0015	0.67588	857.8	7.2	827.6	8.3	906	19	827.6	8.3	3.5	Rim
U1456D-20R-1 95-103 cm	3.969	1480	28.500	0.632	0.031	0.0766	0.0030	0.79352	496	20	476	18	572	65	476.0	18.0	4.0	
U1456D-20R-1 95-103 cm	16.562	295	2.517	2.298	0.042	0.1986	0.0027	0.71430	1210	13	1167	15	1265	26	1265.0	26.0	7.7	Core
U1456D-20R-1 95-103 cm	27.675	216.1	0.587	0.080	0.004	0.0114	0.0002	0.06975	77.5	4.1	72.9	1.5	200	110	72.9	1.5	5.9	
U1456D-20R-1 95-103 cm	27.674	1272	2.678	0.086	0.002	0.0130	0.0002	0.19679	83.6	2.2	83.3	1.3	103	54	83.3	1.3	0.4	Core
U1456D-20R-1 95-103 cm	27.674	278.2	1.357	0.108	0.005	0.0166	0.0003	0.04799	103.6	4.1	106.2	1.6	64	80	106.2	1.6	2.5	
U1456D-20R-1 95-103 cm	6.244	1029	2.260	1.704	0.043	0.1666	0.0040	0.84536	1009	16	993	22	1047	29	1047.0	29.0	5.2	Core
U1456D-20R-1 95-103 cm	27.674	8450	2.940	0.080	0.001	0.0123	0.0001	0.45009	78.4	0.77	78.49	0.53	94	21	78.5	0.5	0.1	
U1456D-20R-1 95-103 cm	27.674	873	7.440	1.950	0.020	0.1873	0.0018	0.67427	1098	7.2	1106	9.9	1105	17	1105.0	17.0	0.1	Core
U1456D-20R-1 95-103 cm	16.959	463	2.494	1.436	0.027	0.1523	0.0025	0.61350	903	11	913	14	907	33	907.0	33.0	0.7	
U1456D-20R-1 95-103 cm	10.014	323.7	0.555	0.089	0.007	0.0107	0.0003	0.34598	86.2	6.3	68.7	2	620	170	DISC	DISC	20.3	Core
U1456D-20R-1 95-103 cm	27.675	6150	8.750	0.017	0.000	0.0026	0.0000	0.14447	16.85	0.49	16.87	0.31	62	61	16.9	0.3	0.1	
U1456D-20R-1 95-103 cm	19.539	833	2.198	2.427	0.027	0.1796	0.0017	0.65411	1250	8	1065	9.3	1576	16	DISC	DISC	32.4	Core
U1456D-20R-1 95-103 cm	14.976	335.4	7.120	0.215	0.008	0.0314	0.0004	0.13588	197.3	6.3	199.2	2.5	179	77	199.2	2.5	1.0	
U1456D-20R-1 95-103 cm	27.675	987	5.800	0.849	0.010	0.1016	0.0009	0.47405	624.3	5.2	623.7	5.2	608	22	623.7	5.2	0.1	Core
U1456D-20R-1 95-103 cm	8.228	927	2.204	1.298	0.032	0.1276	0.0028	0.77016	844	14	774	16	1040	36	774.0	16.0	8.3	
U1456D-20R-1 95-103 cm	27.674	403	1.336	1.531	0.021	0.1595	0.0017	0.65342	941.4	8.7	953.9	9.4	916	26	916.0	26.0	4.1	Core
U1456D-20R-1 95-103 cm	10.411	804	0.713	0.313	0.009	0.0437	0.0007	0.27910	276.2	7.2	275.5	4.2	289	64	275.5	4.2	0.3	
U1456D-20R-1 95-103 cm	18.944	147	2.324	1.322	0.035	0.1407	0.0028	0.37085	853	15	848	16	866	55	848.0	16.0	0.6	Core
U1456D-20R-1 95-103 cm	28.468	2210	4.010	0.975	0.026	0.0927	0.0026	0.91533	689	13	571	15	1119	22	DISC	DISC	17.1	
U1456D-20R-1 95-103 cm	27.278	133.7	0.953	0.056	0.006	0.0078	0.0003	0.01117	55.1	5.3	50.1	1.8	210	180	50.1	1.8	9.1	Core
U1456D-20R-1 95-103 cm	14.380	62.5	0.397	1.551	0.052	0.1481	0.0031	0.25405	947	21	890	18	1066	73	1066.0	73.0	16.5	
U1456D-20R-1 95-103 cm	5.754	631	2.110	0.105	0.006	0.0164	0.0004	0.28432	101	5.2	104.7	2.2	40	120	104.7	2.2	3.7	Rim
U1456D-20R-1 95-103 cm	18.150	819	0.745	2.988	0.042	0.2214	0.0032	0.79059	1403	11	1292	18	1563	19	1563.0	19.0	17.3	
U1456D-20R-1 95-103 cm	24.647	533	1.530	10.410	0.110	0.4566	0.0046	0.76051	2471	9.9	2424	20	2511	12	2511.0	12.0	3.5	Core
U1456D-20R-1 95-103 cm	15.291	887	1.500	0.051	0.003	0.0077	0.0002	0.00777	50	2.7	49.6	1.1	90	110	49.6	1.1	0.8	
U1456D-20R-1 95-103 cm	27.674	85.1	0.629	0.080	0.006	0.0116	0.0003	0.18334	77.6	6	74.6	2.2	150	150	74.6	2.2	3.9	Core
U1456D-20R-1 95-103 cm	25.748	141	1.477	1.740	0.045	0.1713	0.0033	0.51402	1021	17	1021	17	1012	48	1012.0	48.0	0.9	
U1456D-20R-1 95-103 cm	27.674	620	2.240	0.108	0.005	0.0163	0.0003	0.22660	103.7	4.6	104.1	1.6	95	84	104.1	1.6	0.4	Core
U1456D-20R-1 95-103 cm	17.218	354	0.509	0.059	0.004	0.0086	0.0002	0.06830	58.3	3.5	55.5	1.3	170	120	55.5	1.3	4.8	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-20R-1 95-103 cm	27.674	443	1.282	1.174	0.015	0.1303	0.0011	0.28593	788.3	7.1	789.4	6.3	781	28	789.4	6.3	0.1	Rim Core
U1456D-20R-1 95-103 cm	24.372	520	0.996	1.368	0.044	0.1279	0.0040	0.90669	869	19	774	23	1135	26	774.0	23.0	10.9	
U1456D-20R-1 95-103 cm	27.674	375	0.597	0.049	0.003	0.0075	0.0002	0.10084	48.2	2.5	48.03	0.99	110	110	48.0	1.0	0.4	
U1456D-20R-1 95-103 cm	27.675	316.8	5.600	6.070	0.100	0.3598	0.0051	0.68056	1981	15	1979	24	1985	22	1985.0	22.0	0.3	
U1456D-20R-1 95-103 cm	26.023	528	2.319	5.169	0.053	0.3300	0.0039	0.76999	1846	8.8	1837	19	1864	15	1864.0	15.0	1.4	
U1456D-20R-1 95-103 cm	6.486	213	5.600	0.122	0.011	0.0177	0.0006	0.05511	116.8	9.6	113	3.8	190	180	113.0	3.8	3.3	
U1456D-20R-1 95-103 cm	18.988	1300	7.500	0.212	0.005	0.0301	0.0004	0.53544	195.6	4.1	191.2	2.8	240	44	191.2	2.8	2.2	
U1456D-20R-1 95-103 cm	27.674	86.1	1.642	0.128	0.009	0.0198	0.0005	0.11917	121.5	7.7	126.4	2.9	60	120	126.4	2.9	4.0	
U1456D-20R-1 95-103 cm	19.694	526	0.693	0.051	0.004	0.0074	0.0003	0.00756	50.2	3.6	47.5	1.6	220	150	47.5	1.6	5.4	
U1456D-20R-1 95-103 cm	24.922	726	2.490	2.164	0.040	0.1904	0.0037	0.71094	1170	13	1122	20	1260	28	1260.0	28.0	11.0	
U1456D-20R-1 95-103 cm	25.473	476	1.654	0.171	0.005	0.0253	0.0005	0.16294	159.7	4.1	160.9	3.1	168	63	160.9	3.1	0.8	
U1456D-20R-1 95-103 cm	16.392	16.77	-5.900	0.065	0.017	0.0038	0.0006	0.08627	67	18	24.5	3.5	880	690	DISC	DISC	63.4	
U1456D-20R-1 95-103 cm	27.674	354	0.940	0.114	0.005	0.0169	0.0003	0.04949	109	4.6	108.1	1.7	140	90	108.1	1.7	0.8	
U1456D-20R-1 95-103 cm	27.675	375	1.175	0.065	0.003	0.0092	0.0002	0.16613	63.7	3	59	1.2	236	96	59.0	1.2	7.4	
U1456D-20R-1 95-103 cm	20.519	900	1.929	0.162	0.005	0.0231	0.0007	0.51133	151.7	4.7	147.2	4.4	208	66	147.2	4.4	3.0	
U1456D-20R-1 95-103 cm	20.519	272	3.770	0.799	0.016	0.0964	0.0012	0.32509	595.1	8.9	593.3	7.1	605	44	593.3	7.1	0.3	
U1456D-20R-1 95-103 cm	11.164	927	44.300	0.119	0.005	0.0176	0.0005	0.37169	113.9	4.7	112.3	2.9	147	85	112.3	2.9	1.4	
U1456D-20R-1 95-103 cm	24.647	1010	9.750	0.621	0.009	0.0776	0.0009	0.59842	489.7	5.3	481.9	5.3	526	25	481.9	5.3	1.6	
U1456D-20R-1 95-103 cm	17.493	400	0.783	0.049	0.003	0.0070	0.0002	0.05269	48.3	3.1	45	1	210	130	45.0	1.0	6.8	
U1456D-20R-1 95-103 cm	27.674	296	0.446	0.157	0.006	0.0230	0.0006	0.20664	147.6	5.4	146.4	3.5	187	80	146.4	3.5	0.8	
U1456D-20R-1 95-103 cm	27.674	677	1.590	0.091	0.003	0.0133	0.0003	0.30277	87.9	3	84.9	1.8	158	72	84.9	1.8	3.4	
U1456D-20R-1 95-103 cm	27.675	110.1	1.754	0.089	0.007	0.0134	0.0005	0.04015	85.4	6.2	86	2.9	140	140	86.0	2.9	0.7	
U1456D-20R-1 95-103 cm	27.674	473	0.876	0.054	0.003	0.0080	0.0002	0.21716	53.3	2.6	51.4	1.2	144	95	51.4	1.2	3.6	
U1456D-20R-1 95-103 cm	27.674	594	0.585	0.055	0.003	0.0087	0.0002	0.13792	54.3	2.7	55.7	1.2	57	95	55.7	1.2	2.6	
U1456D-20R-1 95-103 cm	12.814	3180	121.000	0.581	0.009	0.0736	0.0010	0.71846	464.7	5.6	457.7	6.2	486	25	457.7	6.2	1.5	
U1456D-20R-1 95-103 cm	27.674	178	2.140	0.813	0.019	0.0987	0.0015	0.28471	602	11	606.6	8.9	578	54	606.6	8.9	0.8	
U1456D-20R-1 95-103 cm	25.198	207.3	1.806	1.911	0.031	0.1853	0.0025	0.52810	1083	11	1095	13	1064	32	1064.0	32.0	2.9	
U1456D-20R-1 95-103 cm	14.288	119	0.750	8.730	0.230	0.4136	0.0088	0.69407	2305	24	2229	40	2374	32	2374.0	32.0	6.1	
U1456D-20R-1 95-103 cm	5.301	570	10.000	0.669	0.030	0.0813	0.0023	0.30340	519	18	504	14	610	110	504.0	14.0	2.9	
U1456D-20R-1 95-103 cm	27.674	175.1	0.737	21.770	0.260	0.6061	0.0065	0.65368	3171	12	3052	26	3243	15	3243.0	15.0	5.9	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-20R-1 95-103 cm	27.674	496	1.275	0.112	0.004	0.0169	0.0004	0.37147	108.4	3.7	107.8	2.4	123	65	107.8	2.4	0.6	Core
U1456D-20R-1 95-103 cm	12.086	417.3	0.835	0.048	0.003	0.0070	0.0002	0.05912	47.9	3.3	44.7	1.3	210	150	44.7	1.3	6.7	
U1456D-20R-1 95-103 cm	27.674	207	1.337	0.067	0.004	0.0107	0.0004	0.19878	65.5	4.1	68.5	2.5	50	120	68.5	2.5	4.6	
U1456D-20R-1 95-103 cm	20.890	192	0.822	2.470	0.045	0.2215	0.0029	0.64956	1261	13	1289	16	1207	28	1207.0	28.0	6.8	
U1456D-20R-1 95-103 cm	18.321	549	0.914	0.031	0.002	0.0048	0.0001	0.08913	31.3	1.8	30.7	0.83	120	120	30.7	0.8	1.9	
U1456D-20R-1 95-103 cm	24.007	296	1.183	0.086	0.005	0.0131	0.0003	0.27895	83.3	4.4	84	1.9	74	98	84.0	1.9	0.8	
U1456D-20R-1 95-103 cm	27.674	484	0.687	0.118	0.004	0.0167	0.0002	0.36684	112.8	3.2	106.5	1.5	240	61	106.5	1.5	5.6	
U1456D-20R-1 95-103 cm	27.674	190.2	13.930	0.103	0.005	0.0144	0.0004	0.35632	98.8	4.8	92	2.6	266	97	92.0	2.6	6.9	
U1456D-20R-1 95-103 cm	5.851	537	2.060	0.124	0.010	0.0175	0.0010	0.51217	118.5	9.4	111.8	6.2	260	150	111.8	6.2	5.7	
U1456D-20R-1 95-103 cm	27.674	159.5	1.016	0.048	0.004	0.0075	0.0002	0.02071	47.7	3.4	47.8	1.2	90	140	47.8	1.2	0.2	
U1456D-20R-1 95-103 cm	20.339	170.1	0.523	1.124	0.024	0.1229	0.0018	0.33711	763	11	747	11	811	45	747.0	11.0	2.1	
U1456D-20R-1 95-103 cm	27.674	1937	1.990	0.104	0.002	0.0158	0.0003	0.53480	99.9	2.2	101.1	2	101	44	101.1	2.0	1.2	
U1456D-20R-1 95-103 cm	27.674	323.4	5.030	0.075	0.003	0.0117	0.0002	0.31830	73.7	2.8	75.1	1.3	64	74	75.1	1.3	1.9	
U1456D-20R-1 95-103 cm	27.675	264.5	1.530	0.045	0.003	0.0071	0.0002	0.04024	44.3	2.6	45.33	0.95	40	110	45.3	1.0	2.3	
U1456D-20R-1 95-103 cm	3.301	1253	29.100	0.066	0.004	0.0098	0.0004	0.23158	64.7	4.1	62.6	2.3	170	140	62.6	2.3	3.2	Rim
U1456D-20R-1 95-103 cm	14.653	87.8	1.448	1.200	0.043	0.1304	0.0034	0.55051	804	20	790	19	843	66	790.0	19.0	1.7	Core
U1456D-20R-1 95-103 cm	24.399	72.6	2.453	1.309	0.038	0.1411	0.0031	0.46068	845	17	853	18	812	61	812.0	18.0	0.9	Core
U1456D-20R-1 95-103 cm	17.143	1465	3.940	1.992	0.036	0.1851	0.0032	0.84431	1111	12	1094	17	1153	20	1153.0	20.0	5.1	
U1456D-20R-1 95-103 cm	27.674	688	1.959	0.093	0.005	-0.0002	0.0012	0.04794	90.3	4.2	-1.7	8	218	73	DISC	DISC	101.9	
U1456D-20R-1 95-103 cm	27.675	716	1.734	0.114	0.003	0.0172	0.0003	0.30541	109	2.5	110	1.6	119	50	110.0	1.6	0.9	
U1456D-20R-1 95-103 cm	27.674	157	0.668	2.118	0.052	0.1983	0.0040	0.65919	1149	17	1165	21	1137	39	1137.0	39.0	2.5	
U1456D-20R-1 95-103 cm	27.674	600	1.942	0.255	0.006	0.0359	0.0005	0.57653	230.4	4.6	227.4	3.3	273	41	227.4	3.3	1.3	
U1456D-20R-1 95-103 cm	17.143	258	1.991	0.111	0.007	0.0167	0.0004	0.30838	106.8	5.9	106.7	2.7	140	110	106.7	2.7	0.1	
U1456D-20R-1 95-103 cm	27.675	45.6	2.164	0.113	0.010	0.0164	0.0006	0.11722	107.3	9.2	104.6	3.7	170	160	104.6	3.7	2.5	
U1456D-20R-1 95-103 cm	15.973	167	1.214	0.330	0.016	0.0444	0.0012	0.32983	288	12	280.2	7.5	357	95	280.2	7.5	2.7	
U1456D-20R-1 95-103 cm	27.674	1568	1.668	0.017	0.001	0.0026	0.0001	0.18171	16.76	0.73	16.45	0.35	103	85	16.5	0.4	1.8	
U1456D-20R-1 95-103 cm	27.674	423	2.060	0.075	0.004	0.0115	0.0005	0.49541	73.3	4.1	73.4	2.8	116	91	73.4	2.8	0.1	Rim
U1456D-20R-1 95-103 cm	8.251	1780	18.300	0.610	0.022	0.0791	0.0025	0.43598	482	14	490	15	465	80	490.0	15.0	1.7	
U1456D-20R-1 95-103 cm	15.446	417	1.880	1.113	0.030	0.1254	0.0031	0.58534	758	14	761	18	780	51	761.0	18.0	0.4	Core
U1456D-20R-1 95-103 cm	27.674	424	1.584	1.892	0.041	0.1851	0.0035	0.70711	1076	14	1094	19	1057	30	1057.0	30.0	3.5	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-20R-1 95-103 cm	27.674	227.4	0.776	2.096	0.038	0.1935	0.0024	0.66202	1145	12	1140	13	1172	27	1172.0	27.0	2.7	Core
U1456D-20R-1 95-103 cm	10.297	121.6	1.299	0.060	0.008	0.0096	0.0006	0.32305	60.2	7.9	61.5	4.1	70	230	61.5	4.1	2.2	
U1456D-20R-1 95-103 cm	14.101	193.7	1.930	1.901	0.072	0.1866	0.0064	0.83242	1075	26	1101	35	1058	38	1058.0	38.0	4.1	
U1456D-20R-1 95-103 cm	11.293	64.4	1.330	0.753	0.046	0.0887	0.0026	0.53161	565	26	547	16	630	110	547.0	16.0	3.2	
U1456D-20R-1 95-103 cm	19.015	662	2.390	0.548	0.018	0.0713	0.0021	0.60186	442	12	444	13	473	64	444.0	13.0	0.5	
U1456D-20R-1 95-103 cm	27.674	451	15.220	0.723	0.013	0.0900	0.0014	0.65928	551.2	7.4	556.1	8.2	555	31	556.1	8.2	0.9	
U1456D-20R-1 95-103 cm	18.079	485	0.753	0.086	0.004	0.0121	0.0003	0.32494	83.3	3.8	77.3	1.6	255	92	77.3	1.6	7.2	
U1456D-20R-1 95-103 cm	26.036	598	1.131	0.058	0.003	0.0080	0.0002	0.33571	57.3	2.5	51.4	1.1	289	84	51.4	1.1	10.3	
U1456D-20R-1 95-103 cm	13.632	1210	3.630	0.591	0.011	-0.0041	0.0001	0.54251	470.8	6.9	-26.7	0.43	514	34	DISC	DISC	105.7	
U1456D-20R-1 95-103 cm	17.845	1358	1.920	0.112	0.004	0.0168	0.0005	0.64223	107.4	3.7	107.1	2.9	139	61	107.1	2.9	0.3	
U1456D-20R-1 95-103 cm	13.165	164.8	1.088	0.030	0.004	0.0039	0.0002	0.12506	29.5	4	24.7	1.3	320	260	DISC	DISC	16.3	
U1456D-20R-1 95-103 cm	6.612	968	1.806	0.125	0.008	0.0180	0.0006	0.53863	119.1	7.5	114.9	3.9	200	110	114.9	3.9	3.5	
U1456D-20R-1 95-103 cm	17.612	265.3	0.851	0.174	0.007	0.0251	0.0005	0.33886	162.8	6	160	2.9	213	77	160.0	2.9	1.7	
U1456D-20R-1 95-103 cm	27.674	149	1.021	0.634	0.017	0.0798	0.0012	0.42909	497	10	494.6	7.1	535	58	494.6	7.1	0.5	
U1456D-20R-1 95-103 cm	27.674	38.4	1.412	0.137	0.013	0.0193	0.0007	0.00350	130	11	123.3	4.3	240	170	123.3	4.3	5.2	
U1456D-20R-1 95-103 cm	11.292	161	0.606	1.232	0.071	0.1342	0.0058	0.62054	807	32	811	33	820	100	811.0	33.0	0.5	
U1457C-51R-4 80-88 cm	27.674	481.6	0.667	0.051	0.002	0.0077	0.0001	0.10289	50.4	2.2	49.69	0.76	99	87	49.7	0.8	1.4	Core
U1457C-51R-4 80-88 cm	27.674	696	18.360	1.305	0.018	0.1398	0.0019	0.72643	846.8	8	843	11	863	21	843.0	11.0	0.4	
U1457C-51R-4 80-88 cm	20.298	309	0.605	0.057	0.004	0.0086	0.0002	0.19831	55.8	3.6	55.2	1.1	80	120	55.2	1.1	1.1	
U1457C-51R-4 80-88 cm	27.674	343	0.576	0.050	0.003	0.0078	0.0001	0.05352	49.2	2.7	49.84	0.88	50	100	49.8	0.9	1.3	
U1457C-51R-4 80-88 cm	27.674	405.2	1.183	1.520	0.019	0.1536	0.0018	0.55525	937.2	7.6	922	10	980	23	980.0	23.0	5.9	
U1457C-51R-4 80-88 cm	19.887	415	27.600	7.180	0.180	0.3687	0.0053	0.80315	2127	22	2022	25	2240	27	2240.0	27.0	9.7	
U1457C-51R-4 80-88 cm	27.675	208	0.906	0.173	0.007	0.0255	0.0004	0.00478	161.7	5.7	162.2	2.3	175	80	162.2	2.3	0.3	
U1457C-51R-4 80-88 cm	20.502	124.6	1.054	0.335	0.018	0.0469	0.0008	0.76911	294	14	295.4	5	274	94	295.4	5.0	0.5	
U1457C-51R-4 80-88 cm	6.558	126.2	1.110	1.267	0.049	0.1051	0.0025	0.53915	829	22	644	15	1375	64	DISC	DISC	22.3	
U1457C-51R-4 80-88 cm	16.609	155	0.870	10.610	0.120	0.4628	0.0037	0.61496	2489	10	2454	17	2528	15	2528.0	15.0	2.9	
U1457C-51R-4 80-88 cm	5.338	2493	1.950	0.603	0.015	0.0639	0.0016	0.40237	479	9.5	399.1	9.9	896	58	DISC	DISC	16.7	
U1457C-51R-4 80-88 cm	27.674	141.1	0.582	1.107	0.016	0.1265	0.0009	0.19420	756.4	8.1	768	5.1	727	33	768.0	5.1	1.5	
U1457C-51R-4 80-88 cm	6.558	182.2	0.439	1.144	0.041	0.1196	0.0029	0.42112	773	20	728	16	912	70	728.0	16.0	5.8	
U1457C-51R-4 80-88 cm	13.534	457	3.340	3.376	0.041	0.2519	0.0027	0.69676	1498	9.6	1448	14	1582	18	1582.0	18.0	8.5	Rim
																		Core

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-51R-4 80-88 cm	27.674	487	1.105	0.097	0.003	0.0145	0.0002	0.09192	94.1	2.6	92.8	1.2	147	61	92.8	1.2	1.4	Rim Core
U1457C-51R-4 80-88 cm	19.272	408	1.084	1.053	0.017	0.1092	0.0016	0.63750	729.3	8.4	668.2	9.1	927	28	668.2	9.1	8.4	
U1457C-51R-4 80-88 cm	22.346	444	0.458	3.421	0.053	0.2493	0.0038	0.74836	1509	12	1434	20	1628	21	1628.0	21.0	11.9	
U1457C-51R-4 80-88 cm	21.936	181.2	0.566	1.686	0.027	0.1696	0.0016	0.59580	1002	10	1010	9	988	27	988.0	27.0	2.2	
U1457C-51R-4 80-88 cm	23.371	44.31	0.954	0.144	0.015	0.0202	0.0006	0.06669	134	13	129	4	220	190	129.0	4.0	3.7	
U1457C-51R-4 80-88 cm	27.674	294	3.570	1.890	0.019	0.1836	0.0015	0.51381	1077	6.8	1087	8.1	1067	18	1067.0	18.0	1.8	
U1457C-51R-4 80-88 cm	27.675	103.6	1.132	0.072	0.007	0.0095	0.0002	0.13848	69.9	6.9	61.1	1.3	270	190	61.1	1.3	12.6	
U1457C-51R-4 80-88 cm	22.346	368	0.538	0.225	0.012	0.0248	0.0003	0.54862	204.7	9.5	157.8	1.9	752	91	DISC	DISC	22.9	
U1457C-51R-4 80-88 cm	27.674	500	0.953	0.120	0.004	0.0177	0.0002	0.22912	114.8	3.3	113.1	1.4	161	60	113.1	1.4	1.5	
U1457C-51R-4 80-88 cm	5.132	222.9	1.573	0.110	0.011	0.0160	0.0005	0.16038	105	10	102	3.3	160	200	102.0	3.3	2.9	
U1457C-51R-4 80-88 cm	8.812	282.6	3.109	0.505	0.018	0.0622	0.0018	0.66552	414	12	389	11	566	61	389.0	11.0	6.0	
U1457C-51R-4 80-88 cm	21.731	928	0.627	0.048	0.002	0.0073	0.0001	0.24051	48.1	1.7	46.72	0.77	131	70	46.7	0.8	2.9	
U1457C-51R-4 80-88 cm	26.445	140.6	0.448	9.310	0.100	0.4275	0.0040	0.64140	2367	10	2294	18	2443	15	2443.0	15.0	6.1	
U1457C-51R-4 80-88 cm	24.190	83.5	0.433	4.473	0.067	0.3079	0.0039	0.54308	1724	12	1730	19	1726	24	1726.0	24.0	0.2	
U1457C-51R-4 80-88 cm	27.674	753	10.400	1.479	0.016	0.1546	0.0015	0.58614	922	6.6	926.3	8.6	920	20	920.0	20.0	0.7	
U1457C-51R-4 80-88 cm	27.674	581	0.977	0.055	0.002	0.0082	0.0001	0.06952	54	2	52.91	0.67	125	78	52.9	0.7	2.0	
U1457C-51R-4 80-88 cm	27.674	779	0.562	0.048	0.003	0.0076	0.0001	0.12517	47.9	2.4	48.81	0.78	43	88	48.8	0.8	1.9	
U1457C-51R-4 80-88 cm	27.674	366.1	1.139	0.067	0.003	0.0098	0.0001	0.01070	65.9	2.6	62.63	0.84	203	84	62.6	0.8	5.0	
U1457C-51R-4 80-88 cm	27.674	515	2.350	0.110	0.003	0.0163	0.0002	0.12153	105.5	2.7	103.9	1.3	164	58	103.9	1.3	1.5	
U1457C-51R-4 80-88 cm	20.298	566	0.746	2.960	0.140	0.2060	0.0092	0.97604	1382	33	1202	48	1713	17	1713.0	17.0	29.8	
U1457C-51R-4 80-88 cm	27.674	552	0.980	0.022	0.002	0.0027	0.0001	0.14689	22.3	1.6	17.49	0.38	470	140	DISC	DISC	21.6	
U1457C-51R-4 80-88 cm	12.715	661	3.240	1.463	0.021	0.1536	0.0017	0.66659	916.5	9.3	920.8	9.7	916	26	916.0	26.0	0.5	
U1457C-51R-4 80-88 cm	23.986	470	2.386	0.208	0.006	0.0301	0.0003	0.27417	191.1	4.7	191.2	1.9	210	55	191.2	1.9	0.1	
U1457C-51R-4 80-88 cm	23.371	552	0.947	3.977	0.038	0.2748	0.0020	0.72071	1631	8.2	1565	10	1727	13	1727.0	13.0	9.4	
U1457C-51R-4 80-88 cm	7.172	497.1	20.400	0.131	0.006	0.0191	0.0003	0.27816	124.7	5.7	121.7	2	182	98	121.7	2.0	2.4	
U1457C-51R-4 80-88 cm	27.265	536	0.564	0.046	0.002	0.0070	0.0001	0.11760	45.8	2.3	44.84	0.69	129	96	44.8	0.7	2.1	
U1457C-51R-4 80-88 cm	22.346	230	2.050	9.430	0.140	0.4393	0.0041	0.85253	2378	14	2347	18	2418	14	2418.0	14.0	2.9	
U1457C-51R-4 80-88 cm	14.559	626	0.923	0.116	0.004	0.0171	0.0003	0.08655	111	3.9	109.6	1.7	161	79	109.6	1.7	1.3	
U1457C-51R-4 80-88 cm	27.674	121	0.947	0.072	0.009	0.0112	0.0003	0.00208	69.2	8	71.9	2	10	190	71.9	2.0	3.9	
U1457C-51R-4 80-88 cm	14.354	374	2.770	0.866	0.028	0.1031	0.0021	0.70618	631	15	632	12	634	50	632.0	12.0	0.2	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-51R-4 80-88 cm	26.855	687	4.120	0.547	0.007	0.0698	0.0007	0.62594	442.3	4.7	434.9	4.2	503	23	434.9	4.2	1.7	Rim
U1457C-51R-4 80-88 cm	27.674	271.7	0.854	0.064	0.004	0.0084	0.0002	0.15812	62.3	3.6	54.08	0.96	360	120	54.1	1.0	13.2	
U1457C-51R-4 80-88 cm	27.674	612	0.636	0.051	0.002	0.0076	0.0001	0.12497	50.2	1.9	48.93	0.6	135	82	48.9	0.6	2.5	Core
U1457C-51R-4 80-88 cm	7.172	879	29.600	0.201	0.009	0.0291	0.0009	0.64077	185.4	7.3	184.8	5.8	214	74	184.8	5.8	0.3	
U1457C-51R-4 80-88 cm	12.100	396.4	1.754	0.549	0.011	0.0713	0.0007	0.36916	444	7.4	443.7	4.4	467	46	443.7	4.4	0.1	
U1457C-51R-4 80-88 cm	27.674	421	1.015	0.654	0.009	0.0816	0.0008	0.43774	510.1	5.6	505.3	4.6	553	29	505.3	4.6	0.9	
U1457C-51R-4 80-88 cm	17.634	476	44.000	0.771	0.013	0.0942	0.0010	0.61857	579.6	7.4	580.2	5.7	588	30	580.2	5.7	0.1	
U1457C-51R-4 80-88 cm	27.674	1196	3.250	0.111	0.002	0.0164	0.0001	0.35448	106.7	1.9	105.1	0.9	168	38	105.1	0.9	1.5	
U1457C-51R-4 80-88 cm	8.616	1830	54.900	0.519	0.011	0.0688	0.0013	0.68148	424.5	7.5	428.7	7.6	430	35	428.7	7.6	1.0	
U1457C-51R-4 80-88 cm	17.634	494	1.496	5.110	0.190	0.2891	0.0084	0.94385	1825	33	1634	42	2074	25	2074.0	25.0	21.2	
U1457C-51R-4 80-88 cm	27.674	387	2.650	0.593	0.009	0.0762	0.0008	0.54726	473.6	6	473	4.6	492	30	473.0	4.6	0.1	Rim
U1457C-51R-4 80-88 cm	17.829	334	15.800	0.251	0.009	0.0347	0.0005	0.23507	226.8	7.3	219.7	3.3	299	74	219.7	3.3	3.1	
U1457C-51R-4 80-88 cm	7.592	304.6	2.420	0.469	0.016	0.0604	0.0012	0.35647	390	11	378	7.3	471	70	378.0	7.3	3.1	Core
U1457C-51R-4 80-88 cm	27.674	2546	1.810	0.047	0.002	0.0072	0.0002	0.81581	46.6	1.5	46.3	1.3	88	41	46.3	1.3	0.6	
U1457C-51R-4 80-88 cm	27.675	708	0.636	0.051	0.002	0.0077	0.0001	0.09498	50.8	2	49.59	0.62	132	79	49.6	0.6	2.4	
U1457C-51R-4 80-88 cm	11.280	390	3.065	0.885	0.023	0.1049	0.0023	0.53282	642	12	643	13	649	49	643.0	13.0	0.2	
U1457C-51R-4 80-88 cm	18.862	657	0.901	9.851	0.095	0.4298	0.0040	0.77239	2420	9	2304	18	2528	10	2528.0	10.0	8.9	
U1457C-51R-4 80-88 cm	27.674	94.2	0.744	0.062	0.007	0.0089	0.0002	0.11235	59.9	6.6	56.9	1.5	110	190	56.9	1.5	5.0	
U1457C-51R-4 80-88 cm	8.402	594	2.590	0.715	0.031	0.0881	0.0036	0.74516	546	18	544	21	541	69	544.0	21.0	0.4	Rim
U1457C-51R-4 80-88 cm	16.814	257	3.000	1.108	0.029	0.1231	0.0027	0.52503	755	14	748	16	787	52	748.0	16.0	0.9	Core
U1457C-51R-4 80-88 cm	27.674	774	5.050	0.061	0.002	0.0091	0.0002	0.51270	60.4	2.3	58.2	1.5	157	71	58.2	1.5	3.6	
U1457C-51R-4 80-88 cm	27.675	160.7	0.990	0.069	0.005	0.0093	0.0002	0.16963	67	5.2	59.7	1.5	320	150	59.7	1.5	10.9	
U1457C-51R-4 80-88 cm	18.247	337	1.280	6.900	0.100	0.3735	0.0058	0.77444	2098	13	2045	27	2151	18	2151.0	18.0	4.9	
U1457C-51R-4 80-88 cm	27.675	1112	0.493	0.049	0.001	0.0071	0.0001	0.11542	48.9	1.2	45.53	0.48	223	58	45.5	0.5	6.9	
U1457C-51R-4 80-88 cm	27.674	227.8	0.810	0.096	0.005	0.0135	0.0003	0.02532	92.7	4.3	86.4	1.6	240	100	86.4	1.6	6.8	
U1457C-51R-4 80-88 cm	2.639	1352	40.500	0.158	0.021	0.0227	0.0023	0.66105	148	18	145	15	200	210	DISC	DISC	2.0	Rim
U1457C-51R-4 80-88 cm	12.101	713	1.279	1.517	0.034	0.1366	0.0029	0.76991	936	14	825	17	1209	31	825.0	17.0	11.9	Core
U1457C-51R-4 80-88 cm	27.674	59.1	0.797	0.075	0.011	0.0109	0.0004	0.03908	71	10	69.6	2.5	50	250	69.6	2.5	2.0	
U1457C-51R-4 80-88 cm	13.945	573	0.682	0.569	0.013	0.0701	0.0013	0.60721	456.8	8.7	436.4	8	562	41	436.4	8.0	4.5	
U1457C-51R-4 80-88 cm	27.674	340	1.167	0.175	0.005	0.0259	0.0003	0.02007	163.6	4.3	165	1.9	144	61	165.0	1.9	0.9	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-51R-4 80-88 cm	24.395	791	1.699	10.161	0.084	0.4595	0.0032	0.68921	2449	7.7	2437	14	2458	10	2458.0	10.0	0.9	Rim Core Core Rim Core
U1457C-51R-4 80-88 cm	11.280	309	1.942	5.180	0.150	0.2736	0.0080	0.78280	1844	26	1557	40	2193	33	2193.0	33.0	29.0	
U1457C-51R-4 80-88 cm	18.042	2850	0.814	0.036	0.001	0.0053	0.0001	0.43496	35.9	1	34.19	0.58	166	62	34.2	0.6	4.8	
U1457C-51R-4 80-88 cm	6.976	210.4	14.000	8.400	0.380	0.3750	0.0180	0.77705	2268	42	2050	84	2495	47	2495.0	47.0	17.8	
U1457C-51R-4 80-88 cm	13.944	2570	2.880	0.054	0.003	0.0080	0.0003	0.80329	53.5	2.9	51.5	1.9	169	68	51.5	1.9	3.7	
U1457C-51R-4 80-88 cm	2.254	1071	30.100	0.258	0.019	0.0336	0.0019	0.87330	233	16	213	12	437	90	213.0	12.0	8.6	
U1457C-51R-4 80-88 cm	10.041	650	1.940	1.707	0.038	0.1686	0.0038	0.75466	1010	14	1004	21	1015	35	1015.0	35.0	1.1	
U1457C-51R-4 80-88 cm	11.895	212	1.843	2.122	0.050	0.1971	0.0027	0.63331	1154	16	1160	15	1141	37	1141.0	37.0	1.7	
U1457C-51R-4 80-88 cm	27.675	1368	0.960	0.120	0.002	0.0180	0.0001	0.26926	115	1.9	114.8	0.85	131	36	114.8	0.9	0.2	
U1457C-51R-4 80-88 cm	27.674	424	1.200	9.806	0.068	0.4378	0.0029	0.70498	2416	6.4	2340	13	2483	8.9	2483.3	8.9	5.8	
U1457C-51R-4 80-88 cm	27.674	1031	2.190	0.225	0.003	0.0322	0.0003	0.28399	206.1	2.6	204.4	1.8	226	32	204.4	1.8	0.8	
U1457C-51R-4 80-88 cm	18.863	145.8	0.966	0.835	0.023	0.0982	0.0014	0.39993	618	14	603.9	7.9	664	59	603.9	7.9	2.3	
U1457C-51R-4 80-88 cm	19.272	1058	0.392	0.041	0.002	0.0062	0.0001	0.30884	40.4	1.6	40.11	0.77	88	82	40.1	0.8	0.7	
U1457C-51R-4 80-88 cm	19.683	29.31	0.596	5.440	0.110	0.3398	0.0045	0.19450	1888	17	1885	21	1890	40	1890.0	40.0	0.3	
U1457C-51R-4 80-88 cm	23.371	65.1	0.719	0.098	0.018	0.0110	0.0004	0.00343	93	16	70.6	2.6	490	300	DISC	DISC	24.1	
U1457C-51R-4 80-88 cm	20.706	1221	1.050	4.075	0.043	0.2680	0.0027	0.65717	1650	8.2	1530	14	1803	15	1803.0	15.0	15.1	
U1457C-51R-4 80-88 cm	20.297	367	0.690	0.098	0.004	0.0116	0.0002	0.08473	94.8	4.2	74.6	1.4	590	100	DISC	DISC	21.3	
U1457C-51R-4 80-88 cm	5.328	295.3	6.800	0.430	0.020	0.0532	0.0019	0.37375	362	14	334	12	540	100	334.0	12.0	7.7	
U1457C-51R-4 80-88 cm	14.150	437	1.077	0.971	0.016	0.1110	0.0016	0.44760	688.1	8.3	678.2	9	720	35	678.2	9.0	1.4	
U1457C-51R-4 80-88 cm	27.674	509	0.753	0.072	0.003	0.0107	0.0002	0.11463	70.6	2.5	68.64	0.97	143	73	68.6	1.0	2.8	
U1457C-51R-4 80-88 cm	27.674	1231	9.430	0.692	0.006	0.0866	0.0005	0.35852	533.7	3.8	535.3	3.1	519	20	535.3	3.1	0.3	
U1457C-51R-4 80-88 cm	27.674	349	1.023	0.054	0.003	0.0082	0.0001	0.05118	53.4	2.9	52.5	0.73	110	110	52.5	0.7	1.7	
U1457C-51R-4 80-88 cm	27.675	179	0.783	0.050	0.005	0.0079	0.0002	0.01602	48.7	4.5	50.8	1.2	-30	160	50.8	1.2	4.3	Rim Core
U1457C-51R-4 80-88 cm	4.279	3680	22.100	0.117	0.004	0.0174	0.0003	0.18733	112.3	3.5	110.9	1.7	139	72	110.9	1.7	1.2	
U1457C-51R-4 80-88 cm	27.674	144	4.030	1.830	0.028	0.1787	0.0020	0.44320	1056	9.7	1060	11	1032	29	1032.0	29.0	2.7	
U1457C-51R-4 80-88 cm	27.675	420	2.657	2.793	0.039	0.1910	0.0023	0.71040	1352	10	1126	13	1719	19	DISC	DISC	34.5	
U1457C-51R-4 80-88 cm	17.634	651	90.000	0.144	0.006	0.0212	0.0006	0.72474	136.2	5.2	135.5	4	152	61	135.5	4.0	0.5	
U1457C-51R-4 80-88 cm	27.674	920	3.550	0.121	0.002	0.0177	0.0002	0.22787	116.2	2.1	113.1	0.94	175	41	113.1	0.9	2.7	
U1457C-51R-4 80-88 cm	23.781	333	9.440	0.131	0.006	0.0193	0.0004	0.47054	124.7	4.9	123.3	2.8	144	73	123.3	2.8	1.1	
U1457C-51R-4 80-88 cm	9.640	2350	0.732	0.040	0.001	0.0058	0.0001	0.25922	39.3	1.3	37.2	0.66	175	78	37.2	0.7	5.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1457C-51R-4 80-88 cm	27.674	729	2.620	0.774	0.008	0.0948	0.0008	0.44980	582.5	4.2	583.9	4.5	563	20	583.9	4.5	0.2	
U1457C-51R-4 80-88 cm	3.484	948	2.880	1.312	0.063	0.1346	0.0052	0.79754	849	28	814	30	937	61	814.0	30.0	4.1	
U1457C-51R-4 80-88 cm	15.173	303.9	2.460	0.540	0.013	0.0630	0.0008	0.33918	437.6	8.5	393.9	4.6	651	49	393.9	4.6	10.0	
U1457C-51R-4 80-88 cm	27.675	635	0.845	0.102	0.003	0.0151	0.0002	0.17818	98.5	2.5	96.32	0.97	137	56	96.3	1.0	2.2	
U1457C-51R-4 80-88 cm	1.615	2600	2.290	0.091	0.010	0.0088	0.0008	0.91865	88.1	9.8	56.7	5.4	1037	98	DISC	DISC	35.6	Rim
U1457C-51R-4 80-88 cm	15.378	155.5	1.078	9.110	0.100	0.4151	0.0042	0.61920	2348	10	2237	19	2436	16	2436.0	16.0	8.2	Core
U1457C-51R-4 80-88 cm	27.675	624	0.965	0.881	0.009	0.1040	0.0008	0.32328	641	4.6	638	4.4	644	22	638.0	4.4	0.5	
U1457C-51R-4 80-88 cm	4.312	1560	4.620	0.022	0.002	0.0033	0.0001	0.65733	22.4	2	21.02	0.76	190	170	21.0	0.8	6.2	
U1457C-51R-4 80-88 cm	26.035	2020	1.590	0.041	0.001	0.0057	0.0001	0.05866	40.2	1.1	36.4	0.33	250	60	36.4	0.3	9.5	
U1457C-51R-4 80-88 cm	27.674	357.2	0.484	0.089	0.005	0.0074	0.0001	0.07368	86.3	4.1	47.64	0.75	1260	100	DISC	DISC	44.8	
U1457C-51R-4 80-88 cm	27.674	125.1	0.492	0.114	0.008	0.0161	0.0004	0.07349	108.6	7.5	103.1	2.2	250	130	103.1	2.2	5.1	
U1457C-51R-4 80-88 cm	4.508	833	2.070	1.008	0.026	0.1131	0.0028	0.68078	707	13	691	16	756	41	691.0	16.0	2.3	Rim
U1457C-51R-4 80-88 cm	10.870	385	0.887	1.580	0.027	0.1632	0.0021	0.62962	961	10	975	12	927	29	927.0	29.0	5.2	Core
U1457C-51R-4 80-88 cm	27.675	4800	1.283	0.043	0.001	0.0064	0.0001	0.59619	42.55	0.81	41.27	0.66	125	36	41.3	0.7	3.0	
U1457C-51R-4 80-88 cm	27.674	220	0.740	0.068	0.005	0.0099	0.0002	0.14129	66.7	4.7	63.3	1.3	200	130	63.3	1.3	5.1	
U1457C-51R-4 80-88 cm	27.675	230.9	0.596	0.119	0.005	0.0173	0.0002	0.10271	113.7	4.2	110.6	1.4	190	83	110.6	1.4	2.7	
U1457C-51R-4 80-88 cm	17.838	761	1.838	0.795	0.019	0.0674	0.0014	0.78778	593	11	420.3	8.7	1308	30	DISC	DISC	29.1	
U1457C-51R-4 80-88 cm	27.675	591	0.587	0.118	0.003	0.0169	0.0002	0.36271	113.1	3.1	108	1.3	205	56	108.0	1.3	4.5	
U1457C-51R-4 80-88 cm	27.675	40	0.447	11.100	0.130	0.4814	0.0045	0.45254	2529	11	2532	19	2514	20	2514.0	20.0	0.7	
U1456D-26R-2 37-43 cm	27.674	111	0.792	1.656	0.035	0.1663	0.0019	0.13113	989	13	991	10	971	47	971.0	47.0	2.1	
U1456D-26R-2 37-43 cm	25.208	770	2.338	0.755	0.014	0.0876	0.0014	0.63088	571.2	7.9	541.4	8.6	678	34	541.4	8.6	5.2	
U1456D-26R-2 37-43 cm	24.503	80	4.620	0.102	0.011	0.0158	0.0005	0.05325	96.9	9.7	101	3.4	60	180	101.0	3.4	4.2	
U1456D-26R-2 37-43 cm	10.406	1630	2.158	0.239	0.015	0.0337	0.0013	0.54804	217	12	213.7	8.1	260	110	213.7	8.1	1.5	
U1456D-26R-2 37-43 cm	10.407	301	1.335	10.700	0.400	0.4490	0.0120	0.76744	2489	34	2387	52	2566	39	2566.0	39.0	7.0	
U1456D-26R-2 37-43 cm	3.877	2510	26.400	0.132	0.006	0.0182	0.0006	0.49947	125.6	5.3	116	3.5	296	87	116.0	3.5	7.6	Rim
U1456D-26R-2 37-43 cm	5.472	638	3.500	16.940	0.810	0.4700	0.0230	0.91974	2923	47	2480	100	3253	35	3253.0	35.0	23.8	Core
U1456D-26R-2 37-43 cm	27.674	516	1.217	0.232	0.008	0.0334	0.0007	0.53881	211.4	6.5	211.9	4.6	208	59	211.9	4.6	0.2	
U1456D-26R-2 37-43 cm	27.675	219	0.272	2.049	0.037	0.1903	0.0023	0.58761	1131	12	1124	13	1142	30	1142.0	30.0	1.6	
U1456D-26R-2 37-43 cm	27.674	68.4	0.626	0.667	0.027	0.0826	0.0015	0.13878	514	17	511.1	8.8	523	91	511.1	8.8	0.6	
U1456D-26R-2 37-43 cm	17.454	682	1.748	9.840	0.130	0.4368	0.0052	0.77803	2418	13	2335	23	2490	14	2490.0	14.0	6.2	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1456D-26R-2 37-43 cm	22.035	256.7	0.829	0.099	0.006	0.0111	0.0003	0.01372	95.5	5	71.1	1.6	700	120	DISC	DISC	25.5	Rim Core
U1456D-26R-2 37-43 cm	22.741	123	1.378	1.655	0.044	0.1643	0.0026	0.56291	987	17	980	15	1014	47	1014.0	47.0	3.4	
U1456D-26R-2 37-43 cm	23.797	461	15.900	2.197	0.028	0.1961	0.0025	0.65308	1179	8.9	1154	14	1222	22	1222.0	22.0	5.6	
U1456D-26R-2 37-43 cm	8.644	1071	0.489	0.047	0.004	0.0063	0.0002	0.29538	46.3	3.9	40.5	1.4	310	160	40.5	1.4	12.5	
U1456D-26R-2 37-43 cm	27.675	388.7	0.588	0.112	0.004	0.0163	0.0003	0.14646	107.4	3.6	104.5	1.8	185	75	104.5	1.8	2.7	
U1456D-26R-2 37-43 cm	27.675	216	1.035	1.839	0.032	0.1702	0.0020	0.51295	1060	11	1013	11	1156	30	1156.0	30.0	12.4	
U1456D-26R-2 37-43 cm	27.674	470	0.759	0.131	0.004	0.0198	0.0003	0.17346	125	3.7	126.4	1.8	105	63	126.4	1.8	1.1	
U1456D-26R-2 37-43 cm	27.675	498	1.057	0.063	0.003	0.0093	0.0002	0.18061	61.3	3.3	59.4	1.3	140	100	59.4	1.3	3.1	
U1456D-26R-2 37-43 cm	7.586	576	3.170	0.705	0.030	0.0846	0.0028	0.65634	540	18	523	17	602	72	523.0	17.0	3.1	
U1456D-26R-2 37-43 cm	27.674	689	7.070	0.684	0.014	0.0829	0.0017	0.62104	527.7	8.3	513	10	585	40	513.0	10.0	2.8	
U1456D-26R-2 37-43 cm	27.674	163.5	0.575	1.722	0.045	0.1712	0.0029	0.58509	1014	17	1018	16	992	43	992.0	43.0	2.6	
U1456D-26R-2 37-43 cm	10.759	1390	39.600	0.300	0.021	0.0394	0.0028	0.76214	265	16	249	17	419	99	249.0	17.0	6.0	
U1456D-26R-2 37-43 cm	24.855	572	0.882	0.017	0.002	0.0024	0.0001	0.19730	16.9	1.6	15.43	0.6	160	170	15.4	0.6	8.7	
U1456D-26R-2 37-43 cm	19.217	112.5	1.826	0.129	0.012	0.0113	0.0005	0.20621	124	11	72.3	3.3	1070	190	DISC	DISC	41.7	
U1456D-26R-2 37-43 cm	13.225	246	0.405	1.152	0.039	0.1291	0.0029	0.60198	775	18	782	17	747	59	782.0	17.0	0.9	
U1456D-26R-2 37-43 cm	27.674	1707	6.350	0.215	0.004	0.0308	0.0004	0.42041	197.1	3.4	195.6	2.5	212	39	195.6	2.5	0.8	
U1456D-26R-2 37-43 cm	18.865	436	2.200	0.108	0.009	0.0148	0.0008	0.62058	103.2	8	94.7	5.2	290	120	94.7	5.2	8.2	
U1456D-26R-2 37-43 cm	13.226	2800	2.290	0.238	0.008	0.0318	0.0009	0.60566	216.3	6.2	201.7	5.8	371	58	201.7	5.8	6.7	
U1456D-26R-2 37-43 cm	6.696	711	7.320	0.698	0.027	0.0833	0.0023	0.30512	537	16	516	14	614	86	516.0	14.0	3.9	
U1456D-26R-2 37-43 cm	14.282	435.4	1.483	8.160	0.130	0.3711	0.0057	0.75278	2246	14	2034	27	2448	19	2448.0	19.0	16.9	
U1456D-26R-2 37-43 cm	27.675	377.6	3.920	0.063	0.004	0.0093	0.0002	0.25177	61.6	3.4	59.6	1.2	130	100	59.6	1.2	3.2	
U1456D-26R-2 37-43 cm	27.674	241	1.485	0.114	0.006	0.0165	0.0003	0.02210	109	5.3	105.5	2	170	100	105.5	2.0	3.2	
U1456D-26R-2 37-43 cm	20.979	810	3.194	2.972	0.042	0.2436	0.0030	0.77161	1399	11	1405	16	1387	17	1387.0	17.0	1.3	
U1456D-26R-2 37-43 cm	27.674	224.8	0.881	0.058	0.005	0.0093	0.0003	0.14126	56.5	4.7	59.9	1.9	-20	140	59.9	1.9	6.0	
U1456D-26R-2 37-43 cm	27.675	75.9	0.754	4.198	0.073	0.2973	0.0035	0.23793	1672	14	1677	17	1657	35	1657.0	35.0	1.2	
U1456D-26R-2 37-43 cm	23.094	108.8	1.115	1.176	0.029	0.1295	0.0017	0.22436	788	14	784.9	9.5	777	53	784.9	9.5	0.4	
U1456D-26R-2 37-43 cm	27.675	153.2	0.692	0.088	0.006	0.0131	0.0003	0.00410	85.8	6	83.6	1.7	170	140	83.6	1.7	2.6	
U1456D-26R-2 37-43 cm	9.701	398	7.630	0.755	0.034	0.0861	0.0026	0.50427	569	19	532	16	722	76	532.0	16.0	6.5	
U1456D-26R-2 37-43 cm	14.282	1465	94.000	2.087	0.030	0.1870	0.0021	0.68362	1145	10	1105	12	1214	22	1214.0	22.0	9.0	
U1456D-26R-2 37-43 cm	27.674	670	0.977	0.080	0.004	0.0118	0.0002	0.16446	77.5	3.6	75.9	1.3	128	91	75.9	1.3	2.1	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1456D-26R-2 37-43 cm	27.675	1071	0.862	0.112	0.003	0.0164	0.0002	0.24221	107.6	2.8	104.6	1.4	177	55	104.6	1.4	2.8	Rim Core
U1456D-26R-2 37-43 cm	27.674	1070	3.030	0.108	0.003	0.0166	0.0003	0.38658	104	2.9	106	1.8	82	56	106.0	1.8	1.9	
U1456D-26R-2 37-43 cm	25.561	72.4	0.696	0.067	0.009	0.0098	0.0004	0.02967	66	8.6	63	2.5	110	230	63.0	2.5	4.5	
U1456D-26R-2 37-43 cm	19.568	233.3	0.774	0.062	0.005	0.0093	0.0003	0.07415	61.1	5.2	59.4	1.8	140	160	59.4	1.8	2.8	
U1456D-26R-2 37-43 cm	27.675	438	1.180	0.117	0.005	0.0173	0.0002	0.17836	112.1	4.3	110.5	1.5	157	79	110.5	1.5	1.4	
U1456D-26R-2 37-43 cm	25.912	362.4	2.017	1.625	0.025	0.1630	0.0021	0.55075	978.2	9.7	973	12	988	29	988.0	29.0	1.5	
U1456D-26R-2 37-43 cm	24.502	450	0.624	0.177	0.005	0.0256	0.0003	0.08413	165.5	4.7	163.2	2	205	66	163.2	2.0	1.4	
U1456D-26R-2 37-43 cm	12.520	3770	0.998	0.094	0.003	0.0126	0.0002	0.33434	91.2	2.4	80.6	1	359	56	80.6	1.0	11.6	
U1456D-26R-2 37-43 cm	19.569	1039	2.143	1.657	0.017	0.1672	0.0015	0.61177	991.5	6.6	996.3	8.2	982	17	982.0	17.0	1.5	
U1456D-26R-2 37-43 cm	27.322	2869	22.300	4.445	0.079	0.2804	0.0048	0.85069	1719	14	1592	25	1862	17	1862.0	17.0	14.5	
U1456D-26R-2 37-43 cm	27.674	119.8	0.850	0.069	0.007	0.0101	0.0003	0.04974	66.9	6.3	64.7	1.9	90	170	64.7	1.9	3.3	
U1456D-26R-2 37-43 cm	7.401	1599	30.300	0.299	0.010	0.0384	0.0007	0.59191	265	8	243.1	4.5	434	64	243.1	4.5	8.3	
U1456D-26R-2 37-43 cm	12.873	680.9	12.160	0.623	0.012	0.0696	0.0009	0.31355	491.2	7.6	433.5	5.4	766	41	433.5	5.4	11.7	
U1456D-26R-2 37-43 cm	27.674	349.3	0.708	0.054	0.003	0.0082	0.0002	0.02424	53.6	3.3	52.6	1.1	100	110	52.6	1.1	1.9	
U1456D-26R-2 37-43 cm	27.674	670	0.839	0.114	0.004	0.0162	0.0004	0.31492	109.3	3.7	103.2	2.7	260	74	103.2	2.7	5.6	
U1456D-26R-2 37-43 cm	13.225	576	0.651	1.237	0.030	0.0977	0.0013	0.57482	816	13	600.8	7.5	1454	37	DISC	DISC	26.4	
U1456D-26R-2 37-43 cm	27.674	2390	1.911	0.122	0.003	0.0185	0.0002	0.28087	116.4	2.2	118	1.2	83	40	118.0	1.2	1.4	
U1456D-26R-2 37-43 cm	11.816	2234	7.200	0.551	0.026	0.0724	0.0036	0.59264	443	17	450	22	418	98	450.0	22.0	1.6	
U1456D-26R-2 37-43 cm	8.645	1470	7.100	0.106	0.006	0.0155	0.0005	0.37706	102.2	5	99	3	170	100	99.0	3.0	3.1	
U1456D-26R-2 37-43 cm	22.740	264	3.120	0.904	0.024	0.1066	0.0021	0.48889	651	13	653	12	660	52	653.0	12.0	0.3	
U1456D-26R-2 37-43 cm	12.521	677	10.210	0.050	0.004	0.0072	0.0002	0.01732	49.3	3.4	46.5	1.3	190	140	46.5	1.3	5.7	
U1456D-26R-2 37-43 cm	26.617	79.6	1.364	13.700	0.180	0.5223	0.0060	0.65908	2726	12	2707	25	2739	17	2739.0	17.0	1.2	
U1456D-26R-2 37-43 cm	5.121	900	1.510	1.325	0.053	0.1329	0.0039	0.84684	855	23	804	22	982	46	804.0	22.0	6.0	Rim Core
U1456D-26R-2 37-43 cm	23.093	73.5	0.464	1.179	0.038	0.1303	0.0021	0.24227	786	18	789	12	751	71	789.0	12.0	0.4	
U1456D-26R-2 37-43 cm	27.675	1420	1.667	0.050	0.002	0.0074	0.0001	0.23257	49.1	1.6	47.21	0.7	142	66	47.2	0.7	3.8	
U1456D-26R-2 37-43 cm	19.568	711	0.720	0.166	0.005	0.0237	0.0004	0.16966	155.4	4.4	151.1	2.3	217	66	151.1	2.3	2.8	
U1456D-26R-2 37-43 cm	5.991	424	4.400	0.733	0.029	0.0871	0.0016	0.16884	562	15	538.6	9.3	648	72	538.6	9.3	4.2	Rim Core
U1456D-26R-2 37-43 cm	20.274	724	1.718	0.882	0.015	0.1059	0.0010	0.70799	641.2	7.9	648.6	5.7	614	31	648.6	5.7	1.2	
U1456D-26R-2 37-43 cm	14.282	112.2	0.788	2.673	0.095	0.2039	0.0037	0.39688	1324	27	1196	20	1530	63	1530.0	63.0	21.8	Rim
U1456D-26R-2 37-43 cm	9.515	163.3	1.190	0.120	0.013	0.0177	0.0007	0.12500	115	11	112.8	4.5	160	200	112.8	4.5	1.9	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1456D-26R-2 37-43 cm	18.511	371.5	1.731	0.263	0.013	0.0335	0.0009	0.60056	236	10	212.3	5.6	436	83	212.3	5.6	10.0	Core
U1456D-26R-2 37-43 cm	27.674	1399	11.440	0.275	0.005	0.0382	0.0005	0.41078	246.2	3.9	241.7	2.9	280	38	241.7	2.9	1.8	
U1456D-26R-2 37-43 cm	27.674	193	1.427	10.570	0.140	0.4751	0.0048	0.71903	2483	12	2505	21	2466	16	2466.0	16.0	1.6	
U1456D-26R-2 37-43 cm	27.674	103.7	0.831	0.095	0.008	0.0134	0.0004	0.09430	92.4	7.5	86	2.7	220	160	86.0	2.7	6.9	
U1456D-26R-2 37-43 cm	27.674	505	1.522	0.111	0.004	0.0165	0.0003	0.24250	106.5	3.6	105.3	1.7	142	70	105.3	1.7	1.1	
U1456D-26R-2 37-43 cm	27.674	142.7	1.786	2.180	0.064	0.2046	0.0054	0.75548	1169	20	1197	29	1112	40	1112.0	40.0	7.6	
U1456D-26R-2 37-43 cm	27.674	393	0.995	1.268	0.027	0.1418	0.0031	0.55792	829	12	854	17	772	44	772.0	17.0	3.0	
U1456D-26R-2 37-43 cm	27.675	1500	1.270	0.052	0.002	0.0072	0.0001	0.16815	51	2	46.27	0.59	256	79	46.3	0.6	9.3	
U1456D-26R-2 37-43 cm	5.472	3050	0.907	0.025	0.002	0.0036	0.0003	0.31617	25.4	2.1	23.2	1.6	300	200	23.2	1.6	8.7	
U1456D-26R-2 37-43 cm	19.569	853	21.600	1.581	0.035	0.1615	0.0035	0.66226	960	14	965	20	952	36	952.0	36.0	1.4	Rim
U1456D-26R-2 37-43 cm	8.458	366.3	1.588	2.369	0.062	0.2158	0.0046	0.34490	1231	18	1259	24	1182	51	1182.0	51.0	6.5	Core
U1456D-26R-2 37-43 cm	27.674	626	3.090	0.947	0.018	0.1128	0.0018	0.52927	674.9	9.2	689	11	623	38	689.0	11.0	2.1	
U1456D-26R-2 37-43 cm	16.398	227	1.880	0.762	0.030	0.0894	0.0020	0.25724	572	18	552	12	631	89	552.0	12.0	3.5	
U1456D-26R-2 37-43 cm	27.674	277.2	1.120	0.045	0.004	0.0071	0.0002	0.06344	44.5	3.6	45.8	1.2	0	140	45.8	1.2	2.9	
U1456D-26R-2 37-43 cm	27.675	244.9	1.328	0.837	0.023	0.1083	0.0027	0.57545	616	13	662	16	459	53	662.0	16.0	7.5	
U1456D-26R-2 37-43 cm	11.463	408	0.970	0.106	0.007	0.0156	0.0006	0.30522	101.6	6.4	100	3.9	160	120	100.0	3.9	1.6	
U1456D-26R-2 37-43 cm	9.702	90.4	0.928	1.355	0.065	0.1360	0.0029	0.37319	865	27	822	17	957	90	822.0	17.0	5.0	
U1456D-26R-2 37-43 cm	15.339	620	2.262	0.361	0.015	0.0451	0.0015	0.15652	312	11	284	9.5	535	85	284.0	9.5	9.0	
U1456D-26R-2 37-43 cm	27.674	187	0.851	0.093	0.006	0.0130	0.0004	0.15751	89.7	5.8	83.4	2.7	250	130	83.4	2.7	7.0	
U1456D-26R-2 37-43 cm	16.044	1770	2.290	0.059	0.004	0.0090	0.0003	0.34906	57.8	3.3	57.5	2	100	110	57.5	2.0	0.5	
U1456D-26R-2 37-43 cm	27.675	407	1.399	0.056	0.004	0.0085	0.0003	0.21308	55.1	3.3	54.8	1.6	80	110	54.8	1.6	0.5	
U1456D-26R-2 37-43 cm	20.626	283	4.480	0.703	0.034	0.0814	0.0029	0.54945	538	21	504	17	645	92	504.0	17.0	6.3	
U1456D-26R-2 37-43 cm	22.389	540	1.514	1.469	0.027	0.1478	0.0024	0.60513	916	11	888	13	983	32	983.0	32.0	9.7	
U1456D-26R-2 37-43 cm	27.674	212	0.967	0.891	0.035	0.1111	0.0035	0.61815	641	19	678	20	507	65	678.0	20.0	5.8	
U1456D-26R-2 37-43 cm	27.675	1401	1.217	0.064	0.002	0.0094	0.0001	0.27530	62.5	2	60.46	0.8	145	64	60.5	0.8	3.3	
U1456D-26R-2 37-43 cm	3.877	2290	69.000	0.198	0.018	0.0297	0.0018	0.75921	183	15	189	11	110	130	189.0	11.0	3.3	Rim
U1456D-26R-2 37-43 cm	18.159	525	1.617	1.147	0.044	0.1314	0.0046	0.76984	770	21	795	26	691	54	795.0	26.0	3.2	Core
U1456D-26R-2 37-43 cm	5.991	678	33.500	0.265	0.025	0.0341	0.0026	0.64457	237	20	216	16	430	150	216.0	16.0	8.9	Rim
U1456D-26R-2 37-43 cm	17.454	336	2.770	0.831	0.025	0.0980	0.0025	0.58111	614	15	602	14	654	56	602.0	14.0	2.0	Core
U1456D-26R-2 37-43 cm	26.265	448	1.256	0.049	0.004	0.0079	0.0003	0.23752	48.7	3.4	50.8	2	10	120	50.8	2.0	4.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age		% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error	(Ma)	2 σ error		
U1456D-26R-2 37-43 cm	27.674	613	1.811	0.091	0.004	0.0135	0.0004	0.48546	88.2	3.6	86.4	2.7	163	74	86.4	2.7	2.0	
U1456D-26R-2 37-43 cm	26.265	54.6	1.170	0.104	0.013	0.0146	0.0006	0.12622	98	12	93.2	3.9	100	210	93.2	3.9	4.9	
U1456D-26R-2 37-43 cm	24.151	272	0.990	0.056	0.004	0.0084	0.0002	0.18334	55.3	3.9	53.7	1.4	150	140	53.7	1.4	2.9	
U1456D-26R-2 37-43 cm	27.674	1490	1.318	0.120	0.003	0.0173	0.0002	0.12814	114.7	2.8	110.4	1.2	202	54	110.4	1.2	3.7	
U1456D-26R-2 37-43 cm	7.586	4460	6.840	0.057	0.002	0.0070	0.0002	0.28023	56.6	1.8	44.7	1	580	75	DISC	DISC	21.0	
U1456D-26R-2 37-43 cm	27.674	214.9	0.743	5.056	0.065	0.3229	0.0033	0.44249	1826	11	1803	16	1857	21	1857.0	21.0	2.9	
U1456D-26R-2 37-43 cm	27.675	126.5	1.021	0.089	0.007	0.0128	0.0005	0.04796	86	6.5	82.2	3	210	160	82.2	3.0	4.4	
U1456D-26R-2 37-43 cm	23.093	2533	23.400	0.177	0.003	0.0256	0.0004	0.56563	165.1	2.8	163.1	2.3	195	36	163.1	2.3	1.2	
U1456D-26R-2 37-43 cm	27.675	620	2.306	1.766	0.034	0.1652	0.0029	0.52492	1030	12	985	16	1119	36	1119.0	36.0	12.0	
U1456D-26R-2 37-43 cm	27.674	543	3.500	0.831	0.020	0.1030	0.0016	0.61313	612	11	631.4	9.5	515	41	631.4	9.5	3.2	
U1456D-26R-2 37-43 cm	17.455	675	1.632	1.374	0.023	0.1477	0.0017	0.51602	876.8	9.7	888.1	9.5	850	30	850.0	30.0	1.3	
U1456D-26R-2 37-43 cm	10.406	644	0.413	0.063	0.005	0.0090	0.0004	0.34621	61.5	4.4	57.7	2.8	230	150	57.7	2.8	6.2	
U1456D-26R-2 37-43 cm	24.855	846	2.509	1.509	0.021	0.1595	0.0021	0.50640	932.8	8.6	954	12	884	28	884.0	28.0	7.9	
U1456D-26R-2 37-43 cm	27.674	447	0.917	0.052	0.003	0.0080	0.0002	0.00693	51.3	3.2	51.4	1.2	80	120	51.4	1.2	0.2	
U1456D-26R-2 37-43 cm	26.969	299	1.173	0.126	0.006	0.0173	0.0003	0.04971	119.4	5.6	110.4	1.8	280	100	110.4	1.8	7.5	
U1456D-26R-2 37-43 cm	27.675	1603	1.527	0.037	0.001	0.0057	0.0001	0.10064	37.2	1.3	36.39	0.45	100	70	36.4	0.5	2.2	
U1456D-26R-2 37-43 cm	27.674	237	0.933	0.590	0.015	0.0754	0.0008	0.09810	468.8	9.9	468.7	5.1	459	60	468.7	5.1	0.0	
U1456D-26R-2 37-43 cm	27.674	1240	0.768	0.155	0.004	0.0248	0.0005	0.42523	146.1	3.9	157.7	3.3	12	52	157.7	3.3	7.9	
U1456D-26R-2 37-43 cm	7.939	160.9	0.473	0.067	0.009	0.0079	0.0005	0.13453	65.3	8.8	50.9	3	510	270	DISC	DISC	22.1	
U1456D-26R-2 37-43 cm	23.446	506	1.830	0.799	0.018	0.0983	0.0010	0.23504	595	10	604.2	5.8	553	49	604.2	5.8	1.5	
U1456D-26R-2 37-43 cm	25.207	820	2.380	0.769	0.013	0.0886	0.0010	0.51758	578	7.7	547.4	6	706	33	547.4	6.0	5.3	
U1456D-26R-2 37-43 cm	17.455	1130	2.080	0.135	0.005	0.0172	0.0003	0.34349	128.4	4.2	109.7	1.8	467	71	109.7	1.8	14.6	
U1456D-26R-2 37-43 cm	27.674	1077	0.618	0.078	0.003	0.0109	0.0002	0.05118	75.9	2.5	70.1	1.1	255	73	70.1	1.1	7.6	
U1456D-27R-2 100-106 cm	27.675	1001	1.407	0.212	0.003	0.0304	0.0003	0.41428	194.8	2.7	192.9	1.6	210	31	192.9	1.6	1.0	
U1456D-27R-2 100-106 cm	27.675	247.1	0.807	0.667	0.010	0.0822	0.0006	0.13646	518.4	6.2	508.9	3.7	548	36	508.9	3.7	1.8	
U1456D-27R-2 100-106 cm	27.674	613	1.063	0.051	0.002	0.0077	0.0001	0.16329	50.1	1.6	49.67	0.58	90	67	49.7	0.6	0.9	
U1456D-27R-2 100-106 cm	27.675	381	1.105	0.104	0.003	0.0156	0.0002	0.10286	100.5	3.1	99.8	1.1	128	66	99.8	1.1	0.7	
U1456D-27R-2 100-106 cm	27.674	74.4	0.677	1.675	0.040	0.1559	0.0023	0.47089	995	15	934	13	1134	44	1134.0	44.0	17.6	
U1456D-27R-2 100-106 cm	11.290	224	0.564	0.073	0.006	0.0079	0.0003	0.06166	71.1	5.6	50.8	1.7	770	190	DISC	DISC	28.6	
U1456D-27R-2 100-106 cm	27.675	188	1.546	0.895	0.016	0.1054	0.0011	0.25762	647.6	8.7	645.7	6.6	644	40	645.7	6.6	0.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-27R-2 100-106 cm	6.372	448	0.606	0.113	0.006	0.0116	0.0004	0.04450	108.1	5.7	74.3	2.4	910	130	DISC	DISC	31.3	
U1456D-27R-2 100-106 cm	15.588	366.7	5.620	0.814	0.014	0.0867	0.0008	0.47248	604	7.6	536.1	5	787	31	536.1	5.0	11.2	
U1456D-27R-2 100-106 cm	27.674	261	3.076	0.908	0.015	0.1047	0.0009	0.22486	654.8	7.9	641.5	5	694	35	641.5	5.0	2.0	
U1456D-27R-2 100-106 cm	18.005	308	0.779	0.059	0.003	0.0085	0.0002	0.00692	58.4	3.4	54.8	1.1	200	120	54.8	1.1	6.2	
U1456D-27R-2 100-106 cm	17.199	731	1.299	0.125	0.004	0.0184	0.0004	0.34794	120.2	3.3	117.7	2.3	156	57	117.7	2.3	2.1	
U1456D-27R-2 100-106 cm	24.721	350	0.882	1.588	0.022	0.1614	0.0018	0.69795	964.2	8.5	964	10	960	23	960.0	23.0	0.4	
U1456D-27R-2 100-106 cm	27.674	173.1	1.320	0.858	0.014	0.0990	0.0010	0.27673	629	8	608.2	6.1	696	37	608.2	6.1	3.3	
U1456D-27R-2 100-106 cm	27.675	588	1.109	0.466	0.009	0.0618	0.0010	0.67211	388	6.2	386.3	6.1	386	34	386.3	6.1	0.4	
U1456D-27R-2 100-106 cm	27.674	245	1.540	1.560	0.042	0.1636	0.0036	0.66818	949	17	975	20	890	43	890.0	43.0	9.6	
U1456D-27R-2 100-106 cm	26.601	117.9	0.922	3.955	0.046	0.2921	0.0024	0.40263	1623	9.3	1652	12	1585	21	1585.0	21.0	4.2	
U1456D-27R-2 100-106 cm	16.662	216	0.683	0.063	0.006	0.0081	0.0002	0.00714	62	5.3	51.8	1.3	380	180	DISC	DISC	16.5	
U1456D-27R-2 100-106 cm	21.228	3520	0.564	0.043	0.001	0.0064	0.0001	0.22827	42.8	0.84	41.23	0.47	108	42	41.2	0.5	3.7	
U1456D-27R-2 100-106 cm	20.692	59.1	1.031	8.320	0.240	0.3740	0.0100	0.87738	2256	28	2043	48	2467	27	2467.0	27.0	17.2	
U1456D-27R-2 100-106 cm	18.543	218	1.370	1.267	0.022	0.1352	0.0020	0.66302	830	10	817	11	858	29	817.0	11.0	1.6	
U1456D-27R-2 100-106 cm	27.674	600	0.615	0.019	0.001	0.0028	0.0001	0.08818	18.7	1.1	18.07	0.4	110	110	18.1	0.4	3.4	
U1456D-27R-2 100-106 cm	23.108	1033	3.330	0.719	0.012	0.0858	0.0013	0.62977	549.5	6.9	530.3	7.5	627	28	530.3	7.5	3.5	
U1456D-27R-2 100-106 cm	23.915	869	0.881	0.061	0.002	0.0092	0.0001	0.20368	60.5	1.7	59.22	0.78	112	60	59.2	0.8	2.1	
U1456D-27R-2 100-106 cm	27.675	123.5	1.164	0.056	0.005	0.0081	0.0002	0.09760	55.3	4.6	51.7	1.3	190	160	51.7	1.3	6.5	
U1456D-27R-2 100-106 cm	27.674	2360	0.755	0.053	0.001	0.0075	0.0001	0.15525	51.9	1.4	48.08	0.76	217	57	48.1	0.8	7.4	
U1456D-27R-2 100-106 cm	17.468	363	0.776	0.123	0.005	0.0168	0.0003	0.02902	117.4	4.1	107.7	1.6	303	82	107.7	1.6	8.3	
U1456D-27R-2 100-106 cm	22.303	208	1.020	9.050	0.150	0.4280	0.0071	0.79767	2339	15	2294	32	2382	17	2382.0	17.0	3.7	
U1456D-27R-2 100-106 cm	27.675	305.8	2.518	4.289	0.040	0.2999	0.0025	0.51910	1690	7.6	1690	13	1691	16	1691.0	16.0	0.1	
U1456D-27R-2 100-106 cm	19.079	150.2	1.062	0.840	0.020	0.0954	0.0014	0.30360	619	11	587.5	8.3	740	51	587.5	8.3	5.1	
U1456D-27R-2 100-106 cm	22.302	141.6	0.945	0.649	0.016	0.0830	0.0011	0.38536	508	10	513.7	6.8	482	54	513.7	6.8	1.1	
U1456D-27R-2 100-106 cm	27.675	95.1	1.375	1.430	0.032	0.1460	0.0026	0.42633	900	14	878	15	948	47	948.0	47.0	7.4	
U1456D-27R-2 100-106 cm	27.675	74.5	0.786	0.199	0.012	0.0282	0.0006	0.20871	183	10	179.2	3.5	210	110	179.2	3.5	2.1	
U1456D-27R-2 100-106 cm	27.674	327	0.771	0.054	0.003	0.0079	0.0002	0.09153	53.6	2.8	50.8	1	180	100	50.8	1.0	5.2	
U1456D-27R-2 100-106 cm	13.439	616	1.038	2.043	0.026	0.1905	0.0016	0.52209	1129	8.7	1124	8.6	1140	22	1140.0	22.0	1.4	
U1456D-27R-2 100-106 cm	20.960	2140	2.145	0.111	0.002	0.0162	0.0002	0.54816	106.8	1.8	103.7	1.3	176	33	103.7	1.3	2.9	
U1456D-27R-2 100-106 cm	27.674	192	0.665	4.481	0.047	0.3082	0.0027	0.54395	1726	8.8	1731	14	1715	17	1715.0	17.0	0.9	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-27R-2 100-106 cm	27.675	1050	1.440	0.099	0.003	0.0147	0.0003	0.50058	95.9	2.7	94	2.1	156	52	94.0	2.1	2.0	
U1456D-27R-2 100-106 cm	27.674	179	0.531	0.080	0.005	0.0117	0.0002	0.01564	77.5	4.6	75.2	1.4	140	120	75.2	1.4	3.0	
U1456D-27R-2 100-106 cm	11.559	355	0.716	0.709	0.022	0.0861	0.0018	0.63308	543	13	532	10	578	55	532.0	10.0	2.0	
U1456D-27R-2 100-106 cm	19.079	376	9.230	1.384	0.030	0.1429	0.0021	0.65272	880	12	861	12	933	30	933.0	30.0	7.7	
U1456D-27R-2 100-106 cm	27.674	351	1.100	1.915	0.018	0.1805	0.0013	0.47095	1086	6.2	1070	6.9	1112	18	1112.0	18.0	3.8	
U1456D-27R-2 100-106 cm	3.760	477	2.860	0.129	0.010	0.0181	0.0008	0.11709	123.2	9	115.5	4.9	260	170	115.5	4.9	6.3	
U1456D-27R-2 100-106 cm	10.485	266	0.813	0.872	0.021	0.0994	0.0018	0.46604	638	12	611	11	731	51	611.0	11.0	4.2	Rim
U1456D-27R-2 100-106 cm	27.675	336.9	1.254	0.753	0.015	0.0909	0.0013	0.56977	569.6	8.2	560.8	7.8	596	34	560.8	7.8	1.5	Core
U1456D-27R-2 100-106 cm	4.835	1640	25.900	0.293	0.020	0.0376	0.0026	0.80355	260	16	238	16	460	100	238.0	16.0	8.5	Rim
U1456D-27R-2 100-106 cm	19.885	372	0.245	1.122	0.016	0.1219	0.0011	0.31896	762.9	7.9	741.1	6	831	32	741.1	6.0	2.9	Core
U1456D-27R-2 100-106 cm	19.616	322.4	0.917	7.031	0.072	0.3846	0.0034	0.76972	2114	9.2	2097	16	2129	13	2129.0	13.0	1.5	
U1456D-27R-2 100-106 cm	27.675	123.7	0.811	0.068	0.006	0.0091	0.0003	0.10188	66.6	5.1	58.3	1.6	280	140	58.3	1.6	12.5	
U1456D-27R-2 100-106 cm	27.674	156.2	0.488	1.301	0.020	0.1405	0.0013	0.30880	844.4	9.1	847.5	7.4	833	34	847.5	7.4	0.4	
U1456D-27R-2 100-106 cm	27.674	1117	0.749	0.121	0.002	0.0177	0.0001	0.30210	115.7	2	113	0.82	175	37	113.0	0.8	2.3	
U1456D-27R-2 100-106 cm	27.674	245.7	1.126	1.444	0.022	0.1572	0.0024	0.43589	906	9	941	13	818	34	818.0	13.0	3.9	
U1456D-27R-2 100-106 cm	27.675	905	0.460	0.041	0.001	0.0062	0.0001	0.17249	40.8	1.4	39.64	0.5	119	68	39.6	0.5	2.8	
U1456D-27R-2 100-106 cm	27.674	177.3	1.034	0.079	0.005	0.0126	0.0004	0.30096	76.7	4.5	80.4	2.2	20	110	80.4	2.2	4.8	
U1456D-27R-2 100-106 cm	27.674	84.5	0.569	10.940	0.120	0.4792	0.0050	0.69598	2516	10	2522	22	2514	15	2514.0	15.0	0.3	
U1456D-27R-2 100-106 cm	27.675	380.1	1.293	0.118	0.004	0.0176	0.0003	0.16126	113	3.7	112.5	1.9	149	72	112.5	1.9	0.4	
U1456D-27R-2 100-106 cm	27.674	260	1.780	0.118	0.005	0.0177	0.0003	0.16535	113.2	4.2	113.2	1.8	131	77	113.2	1.8	0.0	
U1456D-27R-2 100-106 cm	21.765	162.8	0.887	1.167	0.027	0.1233	0.0022	0.39795	783	12	749	13	875	48	749.0	13.0	4.3	
U1456D-27R-2 100-106 cm	27.674	258.2	0.968	11.620	0.120	0.4908	0.0046	0.70586	2573	9.4	2573	20	2571	14	2571.0	14.0	0.1	
U1456D-27R-2 100-106 cm	12.633	850	0.656	0.054	0.004	0.0081	0.0002	0.13559	54	3.7	51.7	1.1	160	120	51.7	1.1	4.3	
U1456D-27R-2 100-106 cm	15.857	177	0.644	0.081	0.008	0.0116	0.0005	0.22723	78.7	7.4	74.1	3.1	210	170	74.1	3.1	5.8	
U1456D-27R-2 100-106 cm	27.674	487	0.484	0.128	0.004	0.0187	0.0002	0.30754	122.4	3.6	119.2	1.2	189	59	119.2	1.2	2.6	
U1456D-27R-2 100-106 cm	8.874	58.2	0.495	0.607	0.037	0.0778	0.0016	0.13448	478	23	482.9	9.8	430	130	482.9	9.8	1.0	
U1456D-27R-2 100-106 cm	27.674	59	0.677	0.062	0.010	0.0094	0.0003	0.14323	59.7	9.1	60.4	2	10	240	60.4	2.0	1.2	
U1456D-27R-2 100-106 cm	24.183	436	1.900	1.144	0.014	0.1258	0.0010	0.48035	773.9	6.4	763.9	5.7	800	23	763.9	5.7	1.3	
U1456D-27R-2 100-106 cm	27.674	700	1.033	0.884	0.008	0.1040	0.0008	0.48066	642.6	4.4	637.4	4.7	658	19	637.4	4.7	0.8	
U1456D-27R-2 100-106 cm	27.674	156	1.165	0.124	0.008	0.0183	0.0004	0.10081	117.6	7.5	117.1	2.3	120	120	117.1	2.3	0.4	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-27R-2 100-106 cm	27.674	317	7.200	0.985	0.015	0.1114	0.0013	0.55531	695.3	7.5	680.6	7.7	753	29	680.6	7.7	2.1	Rim Core
U1456D-27R-2 100-106 cm	27.674	161	0.854	0.088	0.006	0.0124	0.0003	0.13094	84.9	5.4	79.5	1.6	220	130	79.5	1.6	6.4	
U1456D-27R-2 100-106 cm	8.336	2830	4.000	0.042	0.001	0.0057	0.0002	0.34811	41.2	1.3	36.8	1	323	77	36.8	1.0	10.7	
U1456D-27R-2 100-106 cm	21.229	460	0.960	0.123	0.004	0.0185	0.0003	0.22832	118.1	3.4	118.2	1.8	120	66	118.2	1.8	0.1	
U1456D-27R-2 100-106 cm	15.856	502	3.350	1.436	0.024	0.1445	0.0020	0.79670	903	10	870	11	971	22	971.0	22.0	10.4	
U1456D-27R-2 100-106 cm	12.634	1420	0.889	0.064	0.003	0.0083	0.0002	0.39749	63.3	2.9	53.5	1.2	422	92	DISC	DISC	15.5	
U1456D-27R-2 100-106 cm	11.559	643	0.501	1.383	0.021	0.1310	0.0012	0.58774	881.3	8.9	793.3	6.8	1109	25	793.3	6.8	10.0	
U1456D-27R-2 100-106 cm	27.675	276	0.723	0.051	0.003	0.0075	0.0001	0.05756	50.7	2.8	48.01	0.88	180	110	48.0	0.9	5.3	
U1456D-27R-2 100-106 cm	27.675	252.4	1.270	0.805	0.013	0.0952	0.0010	0.43461	598.9	7.1	586.3	5.6	640	31	586.3	5.6	2.1	
U1456D-27R-2 100-106 cm	27.674	179.8	0.627	0.091	0.005	0.0126	0.0003	0.15077	87.8	4.2	80.5	1.6	270	100	80.5	1.6	8.3	
U1456D-27R-2 100-106 cm	19.080	2400	62.700	0.121	0.002	0.0180	0.0001	0.35162	115.8	1.6	115.2	0.9	134	31	115.2	0.9	0.6	
U1456D-27R-2 100-106 cm	27.675	860	3.580	0.099	0.003	0.0150	0.0002	0.45459	95.7	2.3	96.1	1.4	95	46	96.1	1.4	0.4	
U1456D-27R-2 100-106 cm	24.720	195.6	0.870	0.051	0.004	0.0077	0.0002	0.03699	50.5	4.2	49.5	1.1	70	140	49.5	1.1	2.0	
U1456D-27R-2 100-106 cm	18.811	244.6	1.262	0.104	0.006	0.0159	0.0004	0.17622	100.4	5.2	101.4	2.6	100	100	101.4	2.6	1.0	
U1456D-27R-2 100-106 cm	4.029	881	1.738	4.681	0.075	0.3065	0.0067	0.51133	1763	13	1723	33	1808	36	1808.0	36.0	4.7	
U1456D-27R-2 100-106 cm	21.229	377	1.070	1.526	0.027	0.1548	0.0029	0.75590	941	10	927	16	971	26	971.0	26.0	4.5	
U1456D-27R-2 100-106 cm	27.674	334	0.726	0.096	0.004	0.0138	0.0002	0.15526	93	3.4	88.6	1.2	202	76	88.6	1.2	4.7	
U1456D-27R-2 100-106 cm	7.800	531	10.290	0.529	0.017	0.0661	0.0014	0.55847	430	11	412.6	8.4	519	56	412.6	8.4	4.0	
U1456D-27R-2 100-106 cm	9.401	70.2	0.781	3.640	0.110	0.2472	0.0051	0.54994	1555	24	1423	26	1734	48	1734.0	48.0	17.9	
U1456D-27R-2 100-106 cm	18.542	144.6	1.105	8.620	0.150	0.3880	0.0068	0.74467	2295	16	2112	31	2470	20	2470.0	20.0	14.5	
U1456D-27R-2 100-106 cm	18.274	643	0.345	0.047	0.002	0.0072	0.0001	0.02218	46.2	2.1	46.15	0.67	88	95	46.2	0.7	0.1	
U1456D-27R-2 100-106 cm	13.170	287.4	4.520	0.117	0.006	0.0172	0.0005	0.28730	112.4	5.2	109.6	2.9	175	97	109.6	2.9	2.5	
U1456D-27R-2 100-106 cm	27.674	263	1.104	0.064	0.004	0.0093	0.0002	0.33745	62.4	3.7	59.7	1.3	180	110	59.7	1.3	4.3	
U1456D-27R-2 100-106 cm	27.675	872	0.469	0.090	0.002	0.0134	0.0002	0.29577	87.3	1.7	85.8	1.1	141	43	85.8	1.1	1.7	
U1456D-27R-2 100-106 cm	20.422	152.7	0.886	0.104	0.008	0.0127	0.0003	0.19458	99.8	7.1	81	2.1	480	140	DISC	DISC	18.8	
U1456D-27R-2 100-106 cm	16.931	613	1.297	3.285	0.050	0.2251	0.0028	0.84107	1476	12	1308	15	1720	15	1720.0	15.0	24.0	
U1456D-27R-2 100-106 cm	27.675	465	0.633	0.056	0.002	0.0082	0.0001	0.13526	55.3	2.1	52.3	0.67	172	78	52.3	0.7	5.4	
U1456D-27R-2 100-106 cm	8.067	478	0.876	1.049	0.037	0.1141	0.0041	0.77479	727	18	696	23	825	50	696.0	23.0	4.3	
U1456D-27R-2 100-106 cm	18.273	160.9	0.603	1.127	0.025	0.1256	0.0017	0.49389	765	12	762.3	9.5	780	40	762.3	9.5	0.4	
U1456D-27R-2 100-106 cm	27.674	149.8	0.878	0.113	0.006	0.0166	0.0003	0.04433	108.2	5.2	106.4	1.8	154	99	106.4	1.8	1.7	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-27R-2 100-106 cm	27.675	86.4	0.769	0.083	0.007	0.0125	0.0003	0.03846	81.3	6.9	80	1.8	80	150	80.0	1.8	1.6	Rim Core
U1456D-27R-2 100-106 cm	27.674	402	0.772	0.049	0.002	0.0074	0.0001	0.02061	48.6	2.4	47.58	0.69	108	96	47.6	0.7	2.1	
U1456D-27R-2 100-106 cm	27.675	250	7.000	22.250	0.290	0.6323	0.0093	0.61277	3192	13	3159	36	3217	18	3217.0	18.0	1.8	
U1456D-27R-2 100-106 cm	9.401	1132	59.000	0.201	0.006	0.0282	0.0008	0.59588	186.1	5.4	179.4	4.9	270	62	179.4	4.9	3.6	
U1456D-27R-2 100-106 cm	8.605	162.7	1.751	1.069	0.029	0.1156	0.0024	0.52723	741	15	705	14	842	54	705.0	14.0	4.9	
U1456D-27R-2 100-106 cm	11.022	134.2	1.053	0.084	0.008	0.0120	0.0005	0.19798	81.8	7.6	76.7	3	220	180	76.7	3.0	6.2	
U1456D-27R-2 100-106 cm	27.675	977	1.540	0.116	0.003	0.0173	0.0003	0.32741	111.6	2.3	110.2	1.6	151	46	110.2	1.6	1.3	
U1456D-27R-2 100-106 cm	8.604	5110	0.946	0.017	0.001	0.0021	0.0000	0.36653	16.76	0.81	13.63	0.3	450	100	DISC	DISC	18.7	
U1456D-27R-2 100-106 cm	27.674	169.4	1.064	0.791	0.014	0.0940	0.0009	0.28658	590.5	8.1	579	5.2	629	40	579.0	5.2	1.9	
U1456D-27R-2 100-106 cm	27.674	130.4	1.018	0.059	0.006	0.0089	0.0002	0.03718	57.3	5.4	57	1.3	50	160	57.0	1.3	0.5	
U1456D-27R-2 100-106 cm	25.258	265	0.907	0.449	0.011	0.0573	0.0007	0.29752	376.8	7.7	359.3	4.3	482	54	359.3	4.3	4.6	
U1456D-27R-2 100-106 cm	27.674	1620	2.100	0.093	0.002	0.0137	0.0002	0.47901	90	1.9	87.8	1.1	121	39	87.8	1.1	2.4	
U1456D-27R-2 100-106 cm	27.674	779	1.153	0.105	0.003	0.0152	0.0002	0.26848	101.5	2.5	97.2	1.2	206	54	97.2	1.2	4.2	
U1456D-27R-2 100-106 cm	25.794	541	6.840	0.428	0.008	0.0559	0.0009	0.60300	361.6	5.6	350.5	5.5	427	34	350.5	5.5	3.1	
U1456D-27R-2 100-106 cm	14.246	642	5.440	0.450	0.013	0.0567	0.0012	0.76354	376.6	8.8	355.5	7.6	505	40	355.5	7.6	5.6	
U1456D-27R-2 100-106 cm	10.216	79.6	0.949	5.620	0.120	0.3525	0.0088	0.73522	1917	18	1945	42	1876	39	1876.0	39.0	3.7	
U1456D-27R-2 100-106 cm	15.319	239.8	0.480	1.620	0.034	0.1608	0.0025	0.53356	976	13	961	14	1010	37	1010.0	37.0	4.9	
U1456D-27R-2 100-106 cm	15.857	809	1.185	6.431	0.074	0.3486	0.0038	0.80943	2035	10	1927	18	2147	12	2147.0	12.0	10.2	
U1456D-27R-2 100-106 cm	13.440	445	0.763	0.062	0.004	0.0088	0.0002	0.06103	60.5	3.9	56.4	1.4	260	140	56.4	1.4	6.8	
U1456D-27R-2 100-106 cm	21.765	497	2.220	0.120	0.004	0.0176	0.0002	0.06590	114.7	3.8	112.5	1.4	166	76	112.5	1.4	1.9	
U1456D-27R-2 100-106 cm	27.674	757	0.529	0.059	0.002	0.0088	0.0001	0.09671	57.8	1.8	56.49	0.64	128	65	56.5	0.6	2.3	
U1456D-27R-2 100-106 cm	25.258	523	1.120	0.668	0.009	0.0831	0.0008	0.52817	519.2	5.2	514.7	5	537	25	514.7	5.0	0.9	
U1456D-28R-1 40-46 cm	27.674	291	0.998	0.069	0.003	0.0107	0.0002	0.23273	67.7	3.1	68.3	1.4	43	84	68.3	1.4	0.9	
U1456D-28R-1 40-46 cm	13.649	293.9	0.967	0.114	0.005	0.0160	0.0004	0.26478	109.9	5	102.6	2.6	248	96	102.6	2.6	6.6	
U1456D-28R-1 40-46 cm	27.674	622	0.981	0.025	0.001	0.0040	0.0001	0.06574	25.1	1.3	25.54	0.51	0	100	25.5	0.5	1.8	
U1456D-28R-1 40-46 cm	12.840	388	2.368	1.013	0.021	0.1121	0.0019	0.57751	709	10	685	11	788	36	685.0	11.0	3.4	
U1456D-28R-1 40-46 cm	28.484	475	1.008	0.053	0.003	0.0072	0.0001	0.06023	52.5	2.4	46.37	0.92	328	99	46.4	0.9	11.7	
U1456D-28R-1 40-46 cm	16.346	163.3	1.408	1.710	0.045	0.1622	0.0030	0.65584	1009	17	968	17	1100	39	1100.0	39.0	12.0	
U1456D-28R-1 40-46 cm	27.674	1782	1.810	0.226	0.004	0.0313	0.0005	0.76303	206.5	3.3	198.5	3	294	27	198.5	3.0	3.9	
U1456D-28R-1 40-46 cm	12.570	170.2	1.005	2.809	0.074	0.1850	0.0047	0.77898	1355	19	1093	25	1808	31	DISC	DISC	39.5	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-28R-1 40-46 cm	17.964	1619	2.650	0.108	0.003	0.0155	0.0003	0.41959	104	2.4	99	1.6	222	48	99.0	1.6	4.8	
U1456D-28R-1 40-46 cm	21.471	544	1.391	0.118	0.005	0.0164	0.0003	0.36443	112.5	4.6	104.6	1.9	289	82	104.6	1.9	7.0	
U1456D-28R-1 40-46 cm	27.674	176.1	0.620	0.054	0.004	0.0089	0.0002	0.09208	53.3	3.7	56.9	1.5	-20	120	56.9	1.5	6.8	
U1456D-28R-1 40-46 cm	10.952	248.5	0.724	0.058	0.006	0.0083	0.0003	0.16696	56.8	5.8	53.1	2.2	210	190	53.1	2.2	6.5	
U1456D-28R-1 40-46 cm	14.188	5110	0.486	0.045	0.001	0.0066	0.0001	0.62388	45	1.3	42.29	0.83	236	58	42.3	0.8	6.0	
U1456D-28R-1 40-46 cm	27.674	1196	0.448	0.047	0.002	0.0066	0.0001	0.46539	46.7	1.6	42.1	0.87	300	66	42.1	0.9	9.9	
U1456D-28R-1 40-46 cm	19.043	274.8	1.618	3.673	0.087	0.2633	0.0059	0.85138	1561	19	1505	30	1648	23	1648.0	23.0	8.7	
U1456D-28R-1 40-46 cm	20.122	488	2.080	7.700	0.140	0.3847	0.0067	0.83404	2193	16	2096	31	2291	18	2291.0	18.0	8.5	
U1456D-28R-1 40-46 cm	27.674	1602	0.610	0.092	0.002	0.0136	0.0002	0.40252	89.2	2	87.1	1.3	152	45	87.1	1.3	2.4	
U1456D-28R-1 40-46 cm	27.674	674	27.540	5.127	0.064	0.3247	0.0043	0.85465	1839	11	1811	21	1870	13	1870.0	13.0	3.2	
U1456D-28R-1 40-46 cm	20.932	627	1.530	0.538	0.011	0.0680	0.0011	0.63486	436.2	7.3	424.9	6.6	490	36	424.9	6.6	2.6	
U1456D-28R-1 40-46 cm	19.852	3180	2.120	0.044	0.001	0.0065	0.0001	0.58240	43.4	1.3	41.79	0.69	126	52	41.8	0.7	3.7	
U1456D-28R-1 40-46 cm	27.675	139.2	0.625	0.060	0.004	0.0078	0.0002	0.07980	59	4.2	49.8	1.4	370	150	DISC	DISC	15.6	
U1456D-28R-1 40-46 cm	26.595	663	1.304	0.112	0.003	0.0162	0.0003	0.37086	107.3	3	103.9	1.7	174	55	103.9	1.7	3.2	
U1456D-28R-1 40-46 cm	25.246	532	0.706	0.058	0.003	0.0090	0.0002	0.28819	57.3	2.6	57.4	1.2	66	80	57.4	1.2	0.2	
U1456D-28R-1 40-46 cm	27.675	141.5	1.158	1.179	0.027	0.1324	0.0023	0.61975	789	13	801	13	739	42	801.0	13.0	1.5	
U1456D-28R-1 40-46 cm	25.247	578	2.120	1.406	0.030	0.1479	0.0028	0.73788	889	12	888	16	893	30	893.0	30.0	0.6	
U1456D-28R-1 40-46 cm	16.615	440	0.490	0.634	0.014	0.0805	0.0014	0.59641	497.4	9	499	8.3	490	41	499.0	8.3	0.3	
U1456D-28R-1 40-46 cm	18.234	630	0.852	0.117	0.004	0.0169	0.0003	0.18844	112.3	3.4	107.7	1.9	213	68	107.7	1.9	4.1	
U1456D-28R-1 40-46 cm	19.044	37.93	1.107	0.140	0.017	0.0202	0.0008	0.09439	133	15	128.8	5.1	170	210	128.8	5.1	3.2	
U1456D-28R-1 40-46 cm	13.110	555	1.496	1.302	0.028	0.1362	0.0025	0.71374	845	12	823	14	914	31	823.0	14.0	2.6	
U1456D-28R-1 40-46 cm	5.826	135.5	0.446	4.160	0.120	0.2721	0.0071	0.78622	1663	24	1550	36	1816	34	1816.0	34.0	14.6	
U1456D-28R-1 40-46 cm	16.347	275.6	2.540	1.006	0.033	0.1055	0.0025	0.72510	704	17	646	14	897	47	646.0	14.0	8.2	
U1456D-28R-1 40-46 cm	27.674	200.6	1.713	0.270	0.008	0.0386	0.0005	0.24356	242.3	6.3	243.8	3	223	58	243.8	3.0	0.6	
U1456D-28R-1 40-46 cm	4.478	404	0.891	8.750	0.390	0.4060	0.0150	0.92033	2307	41	2194	70	2420	28	2420.0	28.0	9.3	
U1456D-28R-1 40-46 cm	27.675	573	1.019	0.051	0.002	0.0078	0.0002	0.11294	50.8	2.2	50.1	1	93	79	50.1	1.0	1.4	
U1456D-28R-1 40-46 cm	27.404	2182	1.320	0.049	0.002	0.0068	0.0001	0.48305	48.2	1.7	43.52	0.78	276	60	43.5	0.8	9.7	
U1456D-28R-1 40-46 cm	27.674	177.1	4.810	0.834	0.018	0.1000	0.0012	0.40813	615	10	614.5	7.2	605	44	614.5	7.2	0.1	
U1456D-28R-1 40-46 cm	4.479	1161	6.500	0.115	0.008	0.0166	0.0005	0.52930	110.2	7.3	106.3	3.4	190	120	106.3	3.4	3.5	
U1456D-28R-1 40-46 cm	12.300	129.7	0.540	0.070	0.008	0.0100	0.0004	0.04395	67.9	7.2	64.1	2.4	160	200	64.1	2.4	5.6	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-28R-1 40-46 cm	27.674	302.8	1.936	0.901	0.019	0.1057	0.0014	0.13178	650.3	9.7	647.8	8.4	650	37	647.8	8.4	0.4	
U1456D-28R-1 40-46 cm	27.674	3660	3.740	0.110	0.002	0.0165	0.0002	0.67384	105.9	1.6	105.3	1.4	119	27	105.3	1.4	0.6	
U1456D-28R-1 40-46 cm	27.135	112.4	0.917	10.210	0.150	0.4574	0.0062	0.76517	2452	13	2426	27	2466	17	2466.0	17.0	1.6	
U1456D-28R-1 40-46 cm	11.221	2970	2.380	0.022	0.001	0.0033	0.0001	0.53794	22.1	1.1	20.99	0.7	157	85	21.0	0.7	5.0	
U1456D-28R-1 40-46 cm	21.740	2150	0.467	0.045	0.001	0.0069	0.0001	0.28673	44.9	1.2	44.28	0.66	93	52	44.3	0.7	1.4	
U1456D-28R-1 40-46 cm	4.208	302	1.300	0.089	0.010	0.0133	0.0008	0.34555	86.3	9.5	85.2	5.2	120	200	85.2	5.2	1.3	
U1456D-28R-1 40-46 cm	27.674	210	0.783	1.598	0.027	0.1625	0.0022	0.61931	968	10	970	12	964	28	964.0	28.0	0.6	
U1456D-28R-1 40-46 cm	22.549	853	17.900	1.426	0.036	0.1416	0.0029	0.79513	897	15	853	16	1029	34	1029.0	34.0	17.1	
U1456D-28R-1 40-46 cm	27.674	510	1.815	2.035	0.033	0.1898	0.0029	0.73761	1125	11	1120	16	1143	22	1143.0	22.0	2.0	
U1456D-28R-1 40-46 cm	27.674	357	0.614	0.111	0.004	0.0163	0.0003	0.30914	106.9	3.8	104.1	2	189	72	104.1	2.0	2.6	
U1456D-28R-1 40-46 cm	27.675	1660	0.942	0.570	0.011	0.0733	0.0013	0.79980	456.9	6.8	455.5	7.9	480	25	455.5	7.9	0.3	
U1456D-28R-1 40-46 cm	27.674	68.8	0.870	0.087	0.007	0.0127	0.0004	0.05340	85.2	7	81.4	2.7	200	160	81.4	2.7	4.5	
U1456D-28R-1 40-46 cm	27.675	570	0.786	0.107	0.003	0.0164	0.0003	0.31518	102.9	2.7	104.8	2	79	53	104.8	2.0	1.8	
U1456D-28R-1 40-46 cm	12.839	314	7.500	4.990	0.140	0.3125	0.0091	0.87373	1812	24	1750	45	1886	25	1886.0	25.0	7.2	
U1456D-28R-1 40-46 cm	28.214	825	27.900	3.188	0.063	0.2204	0.0039	0.74505	1450	15	1282	20	1702	18	1702.0	18.0	24.7	
U1456D-28R-1 40-46 cm	19.582	554	3.180	1.463	0.034	0.1462	0.0027	0.70208	913	14	879	15	998	29	998.0	29.0	11.9	
U1456D-28R-1 40-46 cm	27.674	137.9	1.860	1.471	0.024	0.1505	0.0019	0.45778	917	10	903	11	928	32	928.0	32.0	2.7	
U1456D-28R-1 40-46 cm	21.740	2390	1.473	0.043	0.002	0.0059	0.0001	0.37062	42.7	1.4	37.67	0.69	316	70	37.7	0.7	11.8	
U1456D-28R-1 40-46 cm	11.760	379	3.870	2.353	0.070	0.2056	0.0061	0.88346	1225	21	1204	33	1257	29	1257.0	29.0	4.2	
U1456D-28R-1 40-46 cm	27.674	1600	18.900	0.220	0.004	0.0319	0.0005	0.57615	201.9	3.4	202.3	3.1	187	34	202.3	3.1	0.2	
U1456D-28R-1 40-46 cm	27.674	431	1.830	1.634	0.029	0.1646	0.0025	0.78220	981	11	982	14	968	22	968.0	22.0	1.4	
U1456D-28R-1 40-46 cm	19.043	617	0.784	0.051	0.002	0.0077	0.0001	0.04667	50.6	2.4	49.7	0.88	97	97	49.7	0.9	1.8	
U1456D-28R-1 40-46 cm	19.044	1003	6.240	0.459	0.010	0.0571	0.0012	0.75807	383.1	7	357.8	7.2	537	35	357.8	7.2	6.6	
U1456D-28R-1 40-46 cm	13.648	326	1.681	0.823	0.031	0.0919	0.0025	0.74284	607	18	566	15	748	56	566.0	15.0	6.8	
U1456D-28R-1 40-46 cm	27.675	178.6	0.796	0.055	0.004	0.0080	0.0002	0.15186	54.3	3.4	51.6	1.3	190	130	51.6	1.3	5.0	
U1456D-28R-1 40-46 cm	27.674	243	1.025	0.052	0.004	0.0076	0.0002	0.16422	50.8	3.4	48.9	1.1	130	120	48.9	1.1	3.7	
U1456D-28R-1 40-46 cm	22.819	204.7	0.512	0.067	0.005	0.0093	0.0002	0.14737	65.1	4.2	59.7	1.5	250	130	59.7	1.5	8.3	
U1456D-28R-1 40-46 cm	15.806	165	2.592	1.095	0.027	0.1219	0.0025	0.37297	749	13	741	14	761	58	741.0	14.0	1.1	
U1456D-28R-1 40-46 cm	19.852	361.8	0.651	0.304	0.008	0.0424	0.0007	0.40003	268.9	6.4	267.6	4.5	279	55	267.6	4.5	0.5	
U1456D-28R-1 40-46 cm	17.424	227.6	0.848	0.267	0.010	0.0372	0.0009	0.40616	241.1	8.4	235.6	5.6	293	74	235.6	5.6	2.3	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2 σ error	% Discordance*	Rim/C ore
				207/235	2 σ error	206/238	2 σ error	RHO	Age (Ma)	2 σ error	Age (Ma)	2 σ error	Age (Ma)	2 σ error				
U1456D-28R-1 40-46 cm	27.136	1197	9.760	0.150	0.005	0.0224	0.0006	0.74098	141.5	4	142.9	3.8	137	43	142.9	3.8	1.0	Core
U1456D-28R-1 40-46 cm	27.674	576	0.816	0.033	0.002	0.0050	0.0001	0.12413	33.3	2	32.17	0.74	160	110	32.2	0.7	3.4	
U1456D-28R-1 40-46 cm	19.044	489	0.702	1.326	0.027	0.1368	0.0021	0.77323	855	12	827	12	929	26	827.0	12.0	3.3	
U1456D-28R-1 40-46 cm	27.674	208	1.505	0.121	0.006	0.0185	0.0004	0.15659	115.3	5.5	117.8	2.3	86	95	117.8	2.3	2.2	
U1456D-28R-1 40-46 cm	27.674	339	2.110	0.754	0.016	0.0898	0.0015	0.68704	569.1	9.3	554	8.7	622	34	554.0	8.7	2.7	
U1456D-28R-1 40-46 cm	21.740	191.1	0.634	0.239	0.010	0.0340	0.0008	0.30319	216.7	7.8	215.6	5	216	80	215.6	5.0	0.5	
U1456D-28R-1 40-46 cm	25.246	139.1	1.582	0.289	0.012	0.0386	0.0008	0.29773	255.8	9.6	243.9	4.6	336	83	243.9	4.6	4.7	
U1456D-28R-1 40-46 cm	19.313	275	0.620	0.038	0.002	0.0058	0.0002	0.04459	38	2.3	37.1	1	140	130	37.1	1.0	2.4	
U1456D-28R-1 40-46 cm	27.674	82.2	0.754	0.056	0.006	0.0083	0.0003	0.11203	54.3	5.4	53	1.7	60	170	53.0	1.7	2.4	
U1456D-28R-1 40-46 cm	23.898	664	1.544	8.950	0.150	0.4051	0.0062	0.86805	2329	15	2194	28	2447	13	2447.0	13.0	10.3	
U1456D-28R-1 40-46 cm	27.675	1439	8.180	0.035	0.001	0.0053	0.0001	0.40292	35.3	1.2	34.27	0.7	103	64	34.3	0.7	2.9	Rim
U1456D-28R-1 40-46 cm	16.076	386	2.970	3.795	0.083	0.2526	0.0047	0.82558	1591	18	1451	24	1769	23	1769.0	23.0	18.0	
U1456D-28R-1 40-46 cm	7.283	1015	174.000	0.121	0.006	0.0179	0.0007	0.42698	115.9	5	114.2	4.4	150	91	114.2	4.4	1.5	Core
U1456D-28R-1 40-46 cm	5.558	168.6	0.685	1.017	0.046	0.1126	0.0031	0.39585	710	23	688	18	756	90	688.0	18.0	3.1	
U1456D-28R-1 40-46 cm	9.063	323	1.440	0.101	0.008	0.0146	0.0008	0.45735	97.4	7.7	93.3	5.1	190	150	93.3	5.1	4.2	Core
U1456D-28R-1 40-46 cm	14.459	1060	1.346	0.054	0.003	0.0076	0.0001	0.06275	53.5	2.4	48.99	0.92	250	100	49.0	0.9	8.4	
U1456D-28R-1 40-46 cm	27.674	527	2.600	0.067	0.003	0.0101	0.0003	0.19349	65.9	2.9	64.8	1.6	121	89	64.8	1.6	1.7	
U1456D-28R-1 40-46 cm	9.873	714	0.443	0.200	0.008	0.0219	0.0006	0.62388	185.1	7.1	139.4	3.9	794	70	DISC	DISC	24.7	
U1456D-28R-1 40-46 cm	18.235	328	0.851	0.087	0.004	0.0123	0.0003	0.24560	84.5	3.9	79	1.8	227	95	79.0	1.8	6.5	
U1456D-28R-1 40-46 cm	4.855	1401	91.000	0.819	0.052	0.0949	0.0054	0.76548	605	30	584	32	690	93	584.0	32.0	3.5	Rim
U1456D-28R-1 40-46 cm	9.064	174.9	2.132	4.350	0.170	0.2887	0.0090	0.75549	1696	32	1633	45	1791	41	1791.0	41.0	8.8	Core
U1456D-28R-1 40-46 cm	27.674	2090	1.510	0.066	0.002	0.0100	0.0001	0.46095	64.6	1.5	63.84	0.82	102	42	63.8	0.8	1.2	
U1456D-28R-1 40-46 cm	20.122	825	7.760	1.116	0.017	0.1258	0.0017	0.63539	760	8.2	763.9	9.7	753	26	763.9	9.7	0.5	Core
U1456D-28R-1 40-46 cm	19.582	958	1.133	0.052	0.002	0.0078	0.0002	0.22374	51.5	2.1	50.3	1.1	139	86	50.3	1.1	2.3	
U1456D-28R-1 40-46 cm	10.143	384	0.608	0.111	0.008	0.0149	0.0005	0.47444	106.1	7	95.2	2.9	330	120	95.2	2.9	10.3	
U1456D-28R-1 40-46 cm	27.674	1621	0.940	0.116	0.002	0.0168	0.0002	0.30840	111.2	2.1	107.2	1.3	209	44	107.2	1.3	3.6	
U1456D-28R-1 40-46 cm	27.674	419	0.864	0.024	0.002	0.0032	0.0001	0.09063	23.7	1.8	20.39	0.65	320	140	20.4	0.7	14.0	
U1456D-28R-1 40-46 cm	11.491	841	5.930	0.639	0.016	0.0787	0.0018	0.73729	501	10	488	11	564	39	488.0	11.0	2.6	
U1456D-28R-1 40-46 cm	27.675	1037	5.980	0.605	0.017	0.0777	0.0021	0.81315	479	10	482	12	472	36	482.0	12.0	0.6	
U1456D-28R-1 40-46 cm	27.674	895	1.232	0.058	0.003	0.0057	0.0001	0.35593	56.9	2.7	36.67	0.67	952	90	DISC	DISC	35.6	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age (Ma)	2σ error	% Discordance*	Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error				
U1456D-28R-1 40-46 cm	27.674	2760	1.685	0.156	0.003	0.0226	0.0003	0.67602	146.9	2.4	144.2	2.2	198	31	144.2	2.2	1.8	
U1456D-28R-1 40-46 cm	18.504	972	1.393	0.119	0.004	0.0167	0.0003	0.50764	113.7	3.3	106.4	2	286	59	106.4	2.0	6.4	
U1456D-28R-1 40-46 cm	27.675	229	1.435	0.669	0.015	0.0821	0.0012	0.43071	518.3	9.3	508.4	7.4	573	46	508.4	7.4	1.9	
U1456D-28R-1 40-46 cm	27.674	256	0.756	0.049	0.003	0.0076	0.0002	0.12393	48.8	3.2	48.9	1.1	110	120	48.9	1.1	0.2	
U1456D-28R-1 40-46 cm	27.674	572	3.440	1.099	0.018	0.1206	0.0016	0.72573	751.6	8.8	733.7	9.4	827	24	733.7	9.4	2.4	
U1456D-28R-1 40-46 cm	27.675	101.3	1.490	1.129	0.028	0.1258	0.0017	0.45947	764	13	763.8	9.7	773	48	763.8	9.7	0.0	
U1456D-28R-1 40-46 cm	17.694	344.2	1.330	0.900	0.024	0.0999	0.0019	0.62273	654	13	613	11	803	45	613.0	11.0	6.3	
U1456D-28R-1 40-46 cm	11.760	106.6	16.800	0.883	0.031	0.0998	0.0022	0.51018	640	17	613	13	754	71	613.0	13.0	4.2	
U1456D-28R-1 40-46 cm	27.674	167.9	1.003	0.144	0.007	0.0203	0.0004	0.23649	136.2	6.1	129.3	2.5	246	88	129.3	2.5	5.1	
U1456D-28R-1 40-46 cm	27.675	691	1.380	0.123	0.004	0.0180	0.0003	0.35902	117.1	3.8	114.8	1.7	185	65	114.8	1.7	2.0	
U1456D-28R-1 40-46 cm	13.918	2010	1.450	0.524	0.011	0.0665	0.0012	0.75671	428.4	7.7	415	7.5	502	31	415.0	7.5	3.1	
U1456D-28R-1 40-46 cm	27.674	1384	0.796	0.053	0.002	0.0081	0.0001	0.33490	52.4	1.4	52.1	0.85	87	54	52.1	0.9	0.6	
U1456D-28R-1 40-46 cm	27.674	2290	5.110	0.624	0.009	0.0789	0.0011	0.79842	491.8	5.7	489.6	6.6	502	20	489.6	6.6	0.4	
U1456D-28R-1 40-46 cm	27.674	580	1.120	0.171	0.004	0.0247	0.0004	0.40254	160.4	3.8	157.4	2.8	208	51	157.4	2.8	1.9	
U1456D-28R-1 40-46 cm	27.675	315	1.030	0.137	0.005	0.0199	0.0003	0.07926	130.2	4.3	126.7	1.8	208	76	126.7	1.8	2.7	
U1456D-28R-1 40-46 cm	13.648	457	2.153	4.514	0.098	0.2634	0.0059	0.75877	1734	19	1506	30	2023	28	2023.0	28.0	25.6	
U1456D-28R-1 40-46 cm	27.674	725	1.490	0.115	0.003	0.0165	0.0002	0.34614	110	3.1	105.6	1.5	200	58	105.6	1.5	4.0	
U1456D-28R-1 40-46 cm	27.674	210	2.105	1.574	0.027	0.1578	0.0018	0.50664	959	11	944	10	983	30	983.0	30.0	4.0	
U1456D-28R-1 40-46 cm	27.675	884	1.000	1.464	0.017	0.1499	0.0018	0.71550	914.9	7	900	9.8	943	17	943.0	17.0	4.6	
U1456D-28R-1 40-46 cm	23.089	216.8	1.210	4.194	0.075	0.2981	0.0052	0.81365	1669	15	1680	26	1648	24	1648.0	24.0	1.9	
U1456D-28R-1 40-46 cm	20.931	154.9	4.360	7.390	0.130	0.3713	0.0056	0.78519	2157	15	2038	25	2266	18	2266.0	18.0	10.1	
U1456D-28R-1 40-46 cm	13.110	301.7	0.547	0.057	0.005	0.0083	0.0002	0.00368	56.1	4.5	53.5	1.4	140	150	53.5	1.4	4.6	
U1456D-28R-1 40-46 cm	7.315	554	4.830	2.354	0.093	0.2092	0.0072	0.41816	1225	28	1224	38	1274	52	1274.0	52.0	3.9	
U1456D-28R-1 40-46 cm	18.079	337.6	1.708	2.565	0.043	0.2131	0.0036	0.60246	1289	12	1245	19	1381	27	1381.0	27.0	9.8	
U1456D-28R-1 40-46 cm	6.085	528	3.580	0.667	0.027	0.0774	0.0026	0.76143	518	17	481	16	706	49	481.0	16.0	7.1	
U1456D-28R-1 40-46 cm	27.675	2650	3.100	0.074	0.001	0.0112	0.0001	0.50159	72	1.3	71.99	0.87	89	34	72.0	0.9	0.0	
U1456D-28R-1 40-46 cm	27.674	1531	2.026	0.035	0.001	0.0053	0.0001	0.13381	35.07	0.97	34.09	0.53	127	62	34.1	0.5	2.8	
U1456D-28R-1 40-46 cm	27.674	262	2.160	10.110	0.200	0.4477	0.0077	0.71603	2448	20	2382	34	2498	26	2498.0	26.0	4.6	
U1456D-28R-1 40-46 cm	27.675	1260	2.410	0.102	0.002	0.0156	0.0002	0.15564	98.7	2	100	1.2	80	44	100.0	1.2	1.3	
U1456D-28R-1 40-46 cm	27.674	797	3.340	0.110	0.003	0.0167	0.0002	0.22129	106	2.6	106.8	1.4	102	50	106.8	1.4	0.8	

Table 3

Sample Name	Duration (s)	[U] ppm	U/Th	207/235					207/235		206/238		207/206		Best age			Rim/C ore
				207/235	2σ error	206/238	2σ error	RHO	Age (Ma)	2σ error	Age (Ma)	2σ error	Age (Ma)	2σ error	Best age (Ma)	2σ error	% Discordance*	
U1456D-28R-1 40-46 cm	27.674	3190	2.208	0.099	0.002	0.0004	0.0022	0.04662	95.8	2	2	14	123	37	DISC	DISC	97.9	