

The Gangdese Culmination Model: Oligocene— Miocene Duplexing along the India-Asia Suture Zone, Lazi Region, Southern Tibet

Andrew K. Laskowski^{1*}, Paul Kapp¹, and Fulong Cai²

¹Department of Geosciences, University of Arizona, Tucson, Arizona 85721, USA

²Key Laboratory of Continental Collision and Plateau Uplift, Institute of Tibetan Plateau Research, Beijing 100101, China

*Current address: Department of Earth Sciences, Montana State University, Bozeman, Montana 59717, USA

DATA REPOSITORY

Detrital zircon U-Pb analytical data are available in Table DR1

Igneous zircon U-Pb analytical data are available in Table DR2

Compiled thermochronologic data are available in Table DR3

Supplementary Table S1: Detrital Zircon U-Pb Analytical Data

Analysis	Sample locations in WGS84, lat (°N), long(°E)		206Pb/208Pb ±		207Pb/207Pb* ±		206Pb*/238U ±		207Pb*/235U ±		206Pb*/238U ±		207Pb*/235U ±		Best age ±		Conc		
	U (ppm)	206Pb/204Pb	U/Th	206Pb*/207Pb* (%)	±	207Pb*/235U* (%)	±	206Pb*/238U* (%)	±	207Pb*/235U* (%)	±	206Pb*/238U* (Ma)	±	207Pb*/235U* (Ma)	±	(Ma)	±	(Ma)	(%)
61012AL3-Spot 79	172	2121	0.9	23.8524	5.7	0.0404	6.0	0.0070	1.6	0.27	44.9	0.7	40.2	2.4	231.0	144.8	44.9	0.7	NA
61012AL3-Spot 80	188	4498	0.8	24.0020	6.2	0.0404	6.9	0.0070	2.9	0.42	45.2	1.3	40.2	2.7	246.8	158.1	45.2	1.3	NA
61012AL3-Spot 86	582	27007	0.6	19.7233	4.3	0.0494	4.6	0.0071	1.7	0.36	45.4	0.8	48.9	2.2	227.3	100.1	45.4	0.8	NA
61012AL3-Spot 89	864	82321	0.4	21.2454	2.1	0.0469	2.4	0.0072	1.2	0.49	46.4	0.5	46.5	1.1	52.7	49.8	46.4	0.5	NA
61012AL3-Spot 147	78	1104	1.0	26.1046	8.9	0.0382	9.3	0.0072	2.8	0.30	46.5	1.3	38.1	3.5	463.9	234.9	46.5	1.3	NA
61012AL3-Spot 63	157	4243	0.7	20.0335	8.5	0.0499	8.9	0.0073	2.7	0.31	46.6	1.3	49.5	4.3	191.1	196.9	46.6	1.3	NA
61012AL3-Spot 15	1007	13411	0.5	21.7734	2.1	0.0460	2.4	0.0073	1.3	0.52	46.6	0.6	45.6	1.1	6.2	50.3	46.6	0.6	NA
61012AL3-Spot 93	735	47130	0.6	21.2427	2.8	0.0472	3.0	0.0073	1.2	0.41	46.7	0.6	46.9	1.4	53.0	65.8	46.7	0.6	NA
61012AL3-Spot 7	430	6180	0.5	22.2109	3.4	0.0456	3.9	0.0073	2.0	0.51	47.2	0.9	45.3	1.7	54.4	82.1	47.2	0.9	NA
61012AL3-Spot 108	1793	92072	0.6	20.9966	1.9	0.0485	4.5	0.0074	4.0	0.90	47.4	1.9	48.1	2.1	80.7	46.0	47.4	1.9	NA
61012AL3-Spot 149	81	631	1.1	59.5098	6.6	0.0172	7.0	0.0074	2.5	0.35	47.7	1.2	17.3	1.2	0.0	1566.1	47.7	1.2	NA
61012AL3-Spot 114	139	3399	0.6	24.4510	5.6	0.0419	6.8	0.0074	4.0	0.58	47.8	1.9	41.7	2.8	293.9	141.9	47.8	1.9	NA
61012AL3-Spot 31	131	4830	0.8	22.5074	4.9	0.0456	5.1	0.0074	1.3	0.26	47.8	0.6	45.3	2.2	86.8	119.7	47.8	0.6	NA
61012AL3-Spot 92	1268	34343	1.6	21.5762	2.0	0.0476	2.5	0.0074	1.5	0.62	47.8	0.7	47.2	1.2	15.8	47.3	47.8	0.7	NA
61012AL3-Spot 51	303	7536	0.7	19.5770	5.0	0.0526	5.4	0.0075	2.1	0.39	47.9	1.0	52.0	2.7	244.4	114.2	47.9	1.0	NA
61012AL3-Spot 119	371	44099	1.3	20.9712	5.1	0.0491	5.4	0.0075	1.7	0.32	48.0	0.8	48.7	2.6	83.6	122.2	48.0	0.8	NA
61012AL3-Spot 44	181	4178	0.7	23.3398	6.4	0.0442	6.6	0.0075	1.3	0.19	48.0	0.6	43.9	2.8	176.6	160.7	48.0	0.6	NA
61012AL3-Spot 88	381	4101	1.1	22.4382	4.3	0.0461	5.5	0.0075	3.4	0.62	48.2	1.6	45.8	2.5	79.2	104.9	48.2	1.6	NA
61012AL3-Spot 23	114	1492	0.6	25.7803	8.4	0.0402	8.9	0.0075	2.7	0.31	48.3	1.3	40.0	3.5	430.9	221.9	48.3	1.3	NA
61012AL3-Spot 80	1261	45305	1.7	21.2538	1.5	0.0488	5.2	0.0075	4.9	0.96	48.3	2.4	48.3	2.4	51.8	36.1	48.3	2.4	NA
61012AL3-Spot 52	243	3641	0.7	21.3725	5.8	0.0485	6.2	0.0075	2.2	0.36	48.3	1.1	48.1	2.9	38.5	138.1	48.3	1.1	NA
61012AL3-Spot 24	144	1435	1.0	27.1920	4.2	0.0382	4.8	0.0075	2.2	0.46	48.4	1.1	38.0	1.8	572.9	114.7	48.4	1.1	NA
61012AL3-Spot 123	386	9256	0.5	20.6163	4.1	0.0505	4.6	0.0075	1.9	0.42	48.5	0.9	50.0	2.2	124.0	97.6	48.5	0.9	NA
61012AL3-Spot 137	148	2666	1.1	23.2653	8.5	0.0449	8.9	0.0076	2.8	0.31	48.6	1.3	44.6	3.9	168.6	210.9	48.6	1.3	NA
61012AL3-Spot 14	167	12062	1.4	21.2583	5.5	0.0492	6.1	0.0076	2.6	0.43	48.7	1.3	48.7	2.9	51.3	132.2	48.7	1.3	NA
61012AL3-Spot 9	686	37215	0.6	20.1008	3.7	0.0521	4.2	0.0076	1.9	0.46	48.8	0.9	51.6	2.1	183.3	86.0	48.8	0.9	NA
61012AL3-Spot 25	235	40146	1.2	23.0171	4.7	0.0456	5.0	0.0076	1.7	0.35	48.9	0.8	45.3	2.2	142.0	116.7	48.9	0.8	NA
61012AL3-Spot 11	161	4449	0.9	21.5049	6.9	0.0488	7.7	0.0076	3.5	0.46	48.9	1.7	48.4	3.6	23.7	165.1	48.9	1.7	NA
61012AL3-Spot 120	291	30631	0.7	13.5706	4.8	0.0774	5.4	0.0076	2.6	0.47	48.9	1.2	75.7	4.0	1032.9	96.7	48.9	1.2	NA
61012AL3-Spot 58	460	70648	1.2	21.7045	2.3	0.0484	2.8	0.0076	1.5	0.53	48.9	0.7	48.0	1.3	1.4	56.3	48.9	0.7	NA
61012AL3-Spot 32	321	36118	0.6	21.4422	3.8	0.0491	4.0	0.0076	1.2	0.31	49.0	0.6	48.9	1.9	30.7	91.9	49.0	0.6	NA
61012AL3-Spot 88	401	25170	0.5	21.5759	3.9	0.0488	4.4	0.0076	1.9	0.43	49.0	0.9	48.3	2.1	15.8	94.7	49.0	0.9	NA
61012AL3-Spot 64	272	4458	1.0	22.9186	5.5	0.0460	5.8	0.0076	1.7	0.30	49.0	0.8	45.6	2.6	131.3	136.3	49.1	0.8	NA
61012AL3-Spot 65	591	11601	1.1	21.7066	3.9	0.0485	4.5	0.0076	2.3	0.50	49.1	1.1	48.1	2.1	1.2	93.4	49.1	1.1	NA
61012AL3-Spot 62	622	30061	0.9	20.4556	2.9	0.0515	3.3	0.0076	1.7	0.50	49.1	0.8	51.0	1.6	142.4	67.5	49.1	0.8	NA
61012AL3-Spot 136	274	5145	1.1	21.3722	4.9	0.0493	5.2	0.0076	1.8	0.35	49.1	0.9	48.9	2.5	38.5	117.8	49.1	0.9	NA
61012AL3-Spot 133	286	1747	1.0	29.3483	3.9	0.0359	4.4	0.0076	2.1	0.47	49.1	1.0	35.8	1.6	783.9	110.4	49.1	1.0	NA
61012AL3-Spot 70	190	28929	0.7	20.2103	4.2	0.0524	4.6	0.0077	2.0	0.43	49.3	1.0	51.8	2.3	170.6	97.0	49.3	1.0	NA
61012AL3-Spot 66	1236	31632	0.8	21.7057	3.0	0.0488	3.7	0.0077	2.2	0.60	49.3	1.1	48.4	1.7	1.3	71.3	49.3	1.1	NA
61012AL3-Spot 36	182	8966	0.8	22.2684	6.0	0.0476	6.3	0.0077	1.7	0.28	49.3	0.9	47.2	2.9	60.7	147.1	49.3	0.9	NA
61012AL3-Spot 29	613	6677	1.2	22.0230	3.6	0.0481	3.8	0.0077	1.4	0.37	49.4	0.7	47.7	1.8	33.7	86.4	49.4	0.7	NA
61012AL3-Spot 32	475	52288	1.2	20.9778	4.0	0.0506	4.3	0.0077	1.8	0.41	49.4	0.9	50.1	2.1	82.9	93.9	49.4	0.9	NA
61012AL3-Spot 73	270	6459	0.7	21.8507	4.6	0.0486	5.6	0.0077	3.2	0.58	49.5	1.6	48.2	2.6	14.7	110.3	49.5	1.6	NA
61012AL3-Spot 158	159	18319	1.2	22.8321	5.7	0.0468	6.0	0.0077	2.0	0.33	49.7	1.0	46.4	2.7	122.0	140.6	49.7	1.0	NA
61012AL3-Spot 85	364	3253	0.7	24.0251	4.5	0.0445	5.5	0.0078	3.2	0.57	49.8	1.6	44.2	2.4	249.3	114.8	49.8	1.6	NA
61012AL3-Spot 151	159	2343	1.4	23.9038	6.3	0.0448	6.7	0.0078	2.3	0.34	49.9	1.1	44.5	2.9	236.5	158.1	49.9	1.1	NA
61012AL3-Spot 35	233	2224	0.7	26.5543	5.6	0.0403	7.0	0.0078	4.3	0.61	49.9	2.1	40.1	2.8	509.2	149.3	49.9	2.1	NA
61012AL3-Spot 8	260	29932	1.1	23.7188	4.9	0.0451	5.5	0.0078	2.3	0.43	49.9	1.2	44.8	2.4	216.9	124.4	49.9	1.2	NA
61012AL3-Spot 78	105	11804	1.1	19.2490	8.3	0.0566	9.2	0.0078	3.8	0.42	49.9	1.9	55.0	4.9	283.3	190.5	49.9	1.9	NA
61012AL3-Spot 141	149	38688	1.1	20.1352	6.8	0.0533	7.1	0.0078	2.0	0.29	50.0	1.0	52.7	3.6	173.3	158.7	50.0	1.0	NA
61012AL3-Spot 135	410	3041	0.6	23.7665	3.4	0.0451	6.0	0.0078	4.9	0.82	50.0	2.5	44.8	2.6	222.0	85.7	50.0	2.5	NA
61012AL3-Spot 144	125	2337	1.1	25.9376	4.8	0.0414	5.2	0.0078	2.2	0.42	50.0	1.1	41.2	2.1	446.9	125.2	50.0	1.1	NA
61012AL3-Spot 116	207	10294	1.0	21.5385	6.0	0.0500	6.5	0.0078	2.5	0.39	50.2	1.3	49.6	3.1	19.9	144.1	50.2	1.3	NA
61012AL3-Spot 130	122	1245	1.1	26.5628	6.0	0.0406	6.6	0.0078	2.8	0.42	50.2	1.4	40.4	2.6	510.1	161.0	50.2	1.4	NA
61012AL3-Spot 39	63	1179	0.6	29.8969	9.1	0.0361	9.5	0.0078	2.8	0.29	50.3	1.4	36.0	3.4	836.5	260.0	50.3	1.4	NA
61012AL3-Spot 99	134	1859	0.8	23.2853	5.5	0.0464	6.3	0.0078	3.0	0.48	50.4	1.5	46.1	2.8	170.7	137.6	50.4	1.5	NA
61012AL3-Spot 109	349	20895	1.0	20.9670	4.1	0.0516	4.6	0.0079	2.4	0.51	50.4	1.2	51.1	2.4	84.1	97.2	50.4	1.2	NA
61012AL3-Spot 129	349	6116	0.4	22.0433	5.3	0.0484	5.7	0.0079	2.1	0.37	50.5	1.1	48.0	2.7	75.5	128.8	50.5	1.1	NA
61012AL3-Spot 159	236	4917	1.1	21.5450	5.0	0.0505	5.5	0.0079	2.2	0.39	50.6	1.1	50.0	2.7	19.2	120.8	50.6	1.1	NA
61012AL3-Spot 18	136	5098	2.1	22.7836	6.7	0.0477	7.3	0.0079	2.7	0.37	50.6	1.4	47.3	3.4	116.8	166.3	50.6	1.4	NA
61012AL3-Spot 28	152	9085	0.5	22.1704	6.6	0.0492	7.3	0.0079	3.1	0.42	50.8	1.5	48.7	3.5	49.9	160.9	50.8	1.5	NA
61012AL3-Spot 121	296	66003	0.8	21.6507	4.1	0.0504	4.3	0.0079	1.3	0.31	50.8	0.7	49.9	2.1	7.4	98.5	50.8	0.7	NA
61012AL3-Spot 101	119	19654	1																

61012AL3-Spot 81	276	27455	1.6	19.7365	3.7	0.1647	5.9	0.0236	4.6	0.78	150.2	6.9	154.8	8.5	225.8	85.3	150.2	6.9	NA
61012AL3-Spot 112	629	48832	2.3	19.6273	1.2	0.2756	1.9	0.0392	1.5	0.77	248.1	3.6	247.2	4.3	238.6	28.5	248.1	3.6	NA

61012AL2 location: 29.35832 87.79814 206/208 2-sigma systematic error: 0.9

Analysis	U (ppm)	206Pb/204Pb	U/Th	206Pb* ± 207Pb* (%)	± (%)	207Pb* ± 235U* (%)	± (%)	206Pb* ± 238U* (%)	± (%)	error corr.	206Pb* ± 238U* (Ma)	± (Ma)	207Pb* ± 235U* (Ma)	± (Ma)	206Pb* ± 207Pb* (Ma)	± (Ma)	Best age ± (Ma)	± (Ma)	Conc (%)
61012AL2_2-113	72	4349	0.7	30.4580	66.5	0.0328	67.4	0.0072	10.7	0.16	46.5	5.0	32.8	21.7	-890.0	2144.0	46.5	5.0	NA
61012AL2_2-122	264	3728	0.6	21.0581	11.8	0.0488	12.7	0.0075	4.7	0.37	47.9	2.2	48.4	6.0	73.8	280.9	47.9	2.2	NA
61012AL2_2-116	217	3631	0.8	34.8251	55.0	0.0298	55.1	0.0075	3.8	0.07	48.3	1.8	29.8	16.2	NA NA	NA	48.3	1.8	NA
61012AL2_2-108	618	15248	0.6	21.1220	6.8	0.0497	7.4	0.0076	2.7	0.37	48.9	1.3	49.3	3.5	66.6	163.1	48.9	1.3	NA
61012AL2_2-102	176	5910	0.7	26.6464	33.7	0.0395	34.2	0.0076	5.7	0.17	49.1	2.8	39.4	13.2	-518.5	922.8	49.1	2.8	NA
61012AL2_2-103	287	7333	0.5	23.0972	75.7	0.0370	75.9	0.0078	5.3	0.07	50.0	2.6	36.9	27.5	-750.9	2489.2	50.0	2.6	NA
61012AL2_2-110	336	9130	0.6	22.9851	22.7	0.0469	22.9	0.0078	3.1	0.14	50.2	1.6	46.5	10.4	-136.5	567.9	50.2	1.6	NA
61012AL2_2-124	147	11981	0.5	18.3367	23.1	0.0590	24.4	0.0079	7.8	0.32	50.4	3.9	58.2	13.8	393.2	524.3	50.4	3.9	NA
61012AL2_2-111	140	5534	0.7	18.0487	108.6	0.0607	108.7	0.0079	4.2	0.04	51.0	2.1	59.8	63.2	428.6	774.9	51.0	2.1	NA
61012AL2_2-101	156	6002	0.6	18.5013	21.6	0.0664	22.7	0.0079	6.9	0.30	51.0	3.5	65.3	14.3	625.1	470.6	51.0	3.5	NA
61012AL2_2-114	787	1227	1.0	18.3715	12.8	0.0598	12.8	0.0080	1.0	0.08	51.2	0.5	59.0	7.4	388.9	288.7	51.2	0.5	NA
61012AL2_2-118	898	8512	0.6	18.5278	11.6	0.0594	11.8	0.0080	2.5	0.21	51.3	1.3	58.6	6.7	369.9	267.7	51.3	1.3	NA
61012AL2_2-107	130	1807	0.7	21.2916	29.5	0.0530	30.5	0.0082	7.8	0.26	52.5	4.1	52.4	15.6	47.5	717.1	52.5	4.1	NA
61012AL2_2-119	304	7208	0.9	25.0013	15.2	0.0451	16.0	0.0082	4.9	0.31	52.5	2.6	44.8	7.0	-351.1	394.0	52.5	2.6	NA
61012AL2_2-106	180	1226	0.7	13.8236	25.0	0.0839	25.7	0.0084	6.2	0.24	54.0	3.4	81.8	20.2	995.5	515.0	54.0	3.4	NA
61012AL2_2-123	758	16496	0.5	20.3302	5.8	0.0607	6.1	0.0090	1.8	0.49	57.5	1.0	59.9	3.5	136.8	136.5	57.5	1.0	NA
61012AL2_2-115	196	9805	1.0	17.9222	13.4	0.1063	14.1	0.0138	4.3	0.31	88.5	3.8	102.6	13.7	44.3	298.6	88.5	3.8	NA
61012AL2_2-117	257	10289	0.8	20.9402	17.0	0.0910	17.5	0.0138	4.3	0.25	88.5	3.8	88.5	14.8	87.2	404.6	88.5	3.8	NA
61012AL2_2-125	174	7721	0.9	22.5994	23.5	0.0853	23.8	0.0140	3.4	0.15	89.5	3.1	83.1	19.0	-96.8	584.1	89.5	3.1	NA
61012AL2_2-105	2159	37271	1.1	20.4650	2.2	0.0946	2.7	0.0140	1.5	0.57	89.9	1.4	91.8	2.4	141.3	52.7	89.9	1.4	NA
61012AL2_2-121	336	12251	1.1	21.1725	7.0	0.0922	7.4	0.0142	2.1	0.29	90.6	1.9	89.6	6.3	60.9	167.9	90.6	1.9	NA
61012AL2_2-120	2526	5864	1.7	20.2027	4.2	0.0980	4.4	0.0144	1.3	0.30	91.9	1.2	94.9	4.0	171.5	98.1	91.9	1.2	NA
61012AL2-41	515	13113	0.6	23.1457	14.2	0.0417	14.3	0.0070	1.7	0.12	45.0	0.8	41.5	5.8	-155.8	354.9	45.0	0.8	NA
61012AL2-54	492	12483	0.2	21.0041	20.0	0.0466	20.0	0.0071	3.4	0.17	45.6	1.5	46.3	9.2	79.9	479.9	45.6	1.5	NA
61012AL2-85	73	2266	0.6	39.0395	85.3	0.0252	85.5	0.0071	19.7	0.23	45.8	9.0	25.3	21.8	NA NA	NA	45.8	9.0	NA
61012AL2-87	308	6336	0.6	24.1801	19.8	0.0407	20.5	0.0071	4.6	0.23	45.9	2.1	40.6	8.1	-265.6	505.9	45.9	2.1	NA
61012AL2-76	257	5365	0.4	25.5844	25.6	0.0386	26.1	0.0072	4.7	0.18	46.0	2.2	38.4	9.8	-411.0	679.0	46.0	2.2	NA
61012AL2-57	369	6653	0.3	23.7894	20.1	0.0417	20.3	0.0072	2.8	0.14	46.2	1.3	41.4	8.2	-224.4	509.9	46.2	1.3	NA
61012AL2-38	641	3363	0.7	21.9261	14.5	0.0456	14.6	0.0072	1.8	0.12	46.5	0.8	45.2	6.4	-23.0	351.6	46.5	0.8	NA
61012AL2-29	399	18974	0.3	20.9002	16.0	0.0478	16.4	0.0072	3.6	0.22	46.5	1.7	47.4	7.6	91.7	381.2	46.5	1.7	NA
61012AL2-63	236	7379	0.6	26.9872	34.2	0.0332	34.6	0.0075	5.2	0.15	48.0	2.5	38.0	12.9	-582.5	942.6	48.0	2.5	NA
61012AL2-32	185	4299	0.5	23.5254	39.9	0.0440	40.0	0.0075	3.5	0.09	48.2	1.7	43.7	17.1	-196.4	1033.5	48.2	1.7	NA
61012AL2-21	544	7832	0.6	20.6747	8.2	0.0503	9.0	0.0075	3.7	0.41	48.4	1.8	49.8	4.4	117.3	192.8	48.4	1.8	NA
61012AL2-17	484	10790	0.3	22.4427	17.1	0.0465	17.2	0.0076	1.7	0.10	48.6	0.8	46.2	7.8	-79.7	421.6	48.6	0.8	NA
61012AL2-12	458	9430	0.8	20.3374	18.6	0.0514	18.7	0.0076	1.6	0.09	48.7	0.8	50.9	9.3	156.0	438.9	48.7	0.8	NA
61012AL2-60	168	7458	0.8	20.7657	33.8	0.0504	34.2	0.0076	4.6	0.13	48.7	2.2	49.9	16.6	107.0	820.2	48.7	2.2	NA
61012AL2-10	140	3705	0.6	22.9499	42.2	0.0456	42.5	0.0076	4.7	0.11	48.8	2.3	45.3	18.8	-134.7	1086.5	48.8	2.3	NA
61012AL2-27	55	1508	0.6	12.6304	81.9	0.0829	82.8	0.0076	12.4	0.15	48.8	6.0	80.9	64.5	1176.5	2090.6	48.8	6.0	NA
61012AL2-13	287	10423	0.7	19.7193	13.9	0.0536	14.3	0.0077	3.1	0.22	49.2	1.5	53.0	7.4	227.8	323.4	49.2	1.5	NA
61012AL2-68	132	6001	0.7	17.8472	31.3	0.0592	32.0	0.0077	6.7	0.21	49.2	3.3	58.4	18.2	453.6	710.3	49.2	3.3	NA
61012AL2-91	92	5521	1.3	2.1689	1596.6	0.4879	1596.6	0.0077	14.1	0.01	49.3	6.9	403.5	#NUM!	4121.3	736.9	49.3	6.9	NA
61012AL2-30	550	20777	0.6	21.7133	6.5	0.0488	6.8	0.0077	1.9	0.28	49.4	0.9	48.4	3.2	0.5	157.2	49.4	0.9	NA
61012AL2-23	247	9545	2.1	22.7214	22.8	0.0467	23.1	0.0077	3.2	0.14	49.4	1.6	46.3	10.4	-110.0	568.4	49.4	1.6	NA
61012AL2-66	245	6454	0.7	19.8248	21.1	0.0537	22.5	0.0077	7.7	0.34	49.5	3.8	53.1	11.6	215.4	494.3	49.5	3.8	NA
61012AL2-95	60	2264	0.6	3.8104	431.0	0.2792	431.2	0.0077	12.2	0.03	49.5	6.0	250.0	1773.3	3261.4	84.0	49.5	6.0	NA
61012AL2-61	217	7228	0.9	28.0914	34.9	0.0379	35.2	0.0077	4.0	0.11	49.6	2.0	37.8	13.0	-661.7	986.8	49.6	2.0	NA
61012AL2-39	245	6265	0.7	18.0617	34.2	0.0592	34.8	0.0078	6.3	0.18	49.8	3.1	58.4	19.7	427.0	783.3	49.8	3.1	NA
61012AL2-77	224	8387	0.8	22.5316	23.2	0.0475	23.4	0.0078	3.2	0.14	49.8	1.6	47.1	10.8	-89.4	575.2	49.8	1.6	NA
61012AL2-22	90	3214	0.8	29.6152	63.5	0.0362	64.3	0.0078	10.5	0.16	49.9	5.2	36.1	22.8	-809.5	1986.7	49.9	5.2	NA
61012AL2-56	478	9839	0.5	21.4939	12.1	0.0499	12.3	0.0078	2.0	0.16	50.0	1.0	49.5	5.9	24.9	291.9	50.0	1.0	NA
61012AL2-19	77	1599	0.6	21.4876	114.9	0.0500	115.2	0.0078	8.1	0.07	50.0	4.0	49.5	55.7	25.6	1150.3	50.0	4.0	NA
61012AL2-86	115	5386	0.8	27.6832	71.1	0.0388	71.5	0.0078	7.6	0.11	50.0	3.8	38.7	27.1	-621.6	2218.5	50.0	3.8	NA
61012AL2-47	145	2878	0.9	21.8927	26.0	0.0491	26.9	0.0078	6.9	0.26	50.1	3.4	48.7	12.8	-19.4	638.7	50.1	3.4	NA
61012AL2-15	126	3505	0.6	20.4834	29.7	0.0526	31.9	0.0078	11.6	0.36	50.2	5.8	52.1	16.2	139.2	712.0	50.2	5.8	NA
61012AL2-94	312	10599	0.8	21.8714	35.2	0.0493	35.3	0.0078	2.5	0.07	50.2	1.2	48.9	16.8	-17.0	874.4	50.2	1.2	NA
61012AL2-64	229	5983	0.6	24.7062	32.7	0.0437	33.5	0.0078	7.3	0.22	50.3	3.7	43.4	14.2	-320.5	857.3	50.3	3.7	NA
61012AL2-97	98	3262	0.6	19.2630	65.8	0.0661	66.4	0.0078	9.0	0.13	50.3	4.5	55.4	35.8	281.6	1896.8	50.3	4.5	NA
61012AL2-92	201	3351	0.9	19.5376	30.0	0.0554	30.5	0.0078	5.7	0.19	50.4	2.9	54.7	16.3	249.1	704.9	50.4	2.9	NA
61012AL2-73	166	4714	0.7	27.4399	42.1	0.0395	42.4	0.0079	5.0	0.12	50.4	2.5	39.3	16.4	-597.5	1189.1	50.4	2.5	NA
61012AL2-78	202	940	1.3	10.2597	44.9	0.1057	45.2	0.0079	5.1	0.11	50.5	2.6	102.0	43.9	1576.2	88			

61012AL2-82	225	34999	1.3	20.4815	8.4	0.1628	8.6	0.0242	1.9	0.22	154.0	2.9	153.2	12.2	139.4	196.9	154.0	2.9	NA
61012AL2-8	232	19087	0.8	20.4715	9.3	0.1818	9.8	0.0270	2.9	0.30	171.7	4.9	169.6	15.3	140.5	219.7	171.7	4.9	NA
61012AL2-20	72	7376	1.5	23.1599	18.8	0.1629	19.2	0.0274	3.6	0.19	174.0	6.1	153.2	27.3	-157.3	471.6	174.0	6.1	NA
61012AL2-7	270	60255	1.3	20.0715	5.7	0.1897	5.9	0.0276	1.7	0.29	175.6	3.0	176.4	9.6	186.7	132.4	175.6	3.0	NA
61012AL2-34	130	17948	1.0	20.6440	10.7	0.1863	10.9	0.0279	2.1	0.19	177.3	3.7	173.4	17.4	120.8	253.2	177.3	3.7	NA
61012AL2-69	72	3926	1.5	22.7329	25.4	0.1707	25.7	0.0281	4.0	0.15	179.0	7.0	160.1	38.0	-111.3	633.5	179.0	7.0	NA
61012AL2-51	200	22374	1.3	20.1646	6.5	0.1926	6.7	0.0282	1.9	0.29	179.1	3.4	178.8	11.1	175.9	151.0	179.1	3.4	NA
61012AL2-98	96	7348	0.9	23.9326	11.9	0.1636	12.1	0.0284	2.4	0.20	180.5	4.3	153.8	17.3	-239.5	301.3	180.5	4.3	NA
61012AL2-1	25	2715	1.4	27.8830	55.2	0.2029	55.4	0.0410	5.5	0.10	259.2	14.0	187.5	95.2	-641.3	1621.7	259.2	14.0	NA
61012AL2-70	191	7714	1.1	12.4074	1.4	2.1001	2.8	0.1890	2.4	0.86	1115.8	25.0	1148.8	19.4	1211.6	28.2	1211.6	28.2	92.1

62211PK3

location: 29.10702 87.55496 206/208 2-sigma systematic error: 1

Analysis	U (ppm)	206Pb/204Pb	U/Th	206Pb*/207Pb* (%)	207Pb* ± (%)	206Pb* ± (%)	238U ± (%)	error corr.	206Pb* ± (Ma)	207Pb* ± (Ma)	206Pb* ± (Ma)	207Pb* ± (Ma)	Best age ± (Ma)	Conc (%)					
62211PK3-34	388	5694	1.2	19.0810	4.4	0.2031	5.8	0.0281	3.8	0.66	178.7	6.8	187.7	10.0	303.3	100.2	178.7	6.8	NA
62211PK3-42	1922	7754	2.2	13.3472	0.9	0.2916	8.4	0.0282	8.4	0.99	179.4	14.8	258.9	19.3	1066.4	18.3	179.4	14.8	NA
62211PK3-10	95	5126	1.1	20.6565	16.7	0.2082	17.8	0.0312	6.3	0.35	198.0	12.3	192.0	31.2	119.4	395.4	198.0	12.3	NA
62211PK3-43	452	25812	1.5	19.4344	3.1	0.2469	3.6	0.0348	1.9	0.53	220.5	4.2	224.0	7.3	261.3	71.2	220.5	4.2	NA
62211PK3-14	332	23257	1.2	20.2035	4.5	0.2383	4.8	0.0349	1.5	0.32	221.2	3.3	217.0	9.4	171.4	106.2	221.2	3.3	NA
62211PK3-97	176	12329	1.1	20.6068	5.7	0.2485	8.5	0.0371	6.3	0.74	235.1	14.4	225.4	17.2	125.1	135.3	235.1	14.4	NA
62211PK3-102	933	46684	2.4	15.1319	1.7	0.3671	8.0	0.0403	7.9	0.98	254.6	19.6	317.5	21.9	809.1	34.8	254.6	19.6	NA
62211PK3-60	89	7536	1.6	19.9098	9.9	0.2977	11.5	0.0430	5.7	0.50	271.3	15.1	264.6	26.7	205.5	231.1	271.3	15.1	NA
62211PK3-18	607	62425	2.1	19.2959	2.3	0.3104	3.4	0.0434	2.5	0.74	274.1	6.7	274.5	8.1	277.7	51.9	274.1	6.7	NA
62211PK3-86	328	23075	0.9	19.0825	2.7	0.3243	5.3	0.0449	4.5	0.86	283.1	12.5	285.2	13.1	303.1	62.1	283.1	12.5	NA
62211PK3-12	608	71823	1.5	18.7097	1.6	0.3712	3.2	0.0504	2.8	0.88	316.8	8.8	320.5	8.9	347.8	35.1	316.8	8.8	NA
62211PK3-76	413	33254	2.5	18.3484	2.5	0.3821	5.3	0.0508	4.7	0.88	319.7	14.5	328.6	14.8	391.8	55.8	319.7	14.5	NA
62211PK3-70	436	48127	1.2	18.8472	2.0	0.3979	4.1	0.0544	3.6	0.88	341.5	12.1	340.2	12.0	331.3	44.7	341.5	12.1	NA
62211PK3-85	492	53994	2.2	17.9251	2.3	0.4517	4.2	0.0587	3.5	0.83	367.8	12.4	378.4	13.2	443.9	51.7	367.8	12.4	NA
62211PK3-100	208	2654	1.4	16.5881	5.9	0.5004	8.0	0.0602	5.4	0.67	376.8	19.7	412.0	27.1	613.8	127.9	376.8	19.7	NA
62211PK3-33	638	8187	2.5	16.4929	2.0	0.5053	7.6	0.0604	7.0	0.96	378.3	26.8	415.3	25.7	626.2	42.8	378.3	26.8	NA
62211PK3-67	245	96281	2.1	17.3373	2.8	0.5289	5.0	0.0665	4.2	0.83	415.1	16.7	431.1	17.7	517.6	62.0	415.1	16.7	80.2
62211PK3-R33	297	63342	1.0	18.1551	2.8	0.5051	3.0	0.0665	1.0	0.32	415.1	3.8	415.2	10.2	415.5	63.2	415.1	3.8	99.9
62211PK3-R33	259	34776	1.7	18.1620	2.6	0.5143	5.4	0.0677	4.7	0.88	422.6	19.3	421.3	18.5	414.6	57.1	422.6	19.3	101.9
62211PK3-19	217	39312	1.2	17.9739	2.6	0.5279	2.9	0.0688	1.3	0.43	429.0	5.2	430.4	10.1	439.9	57.9	429.0	5.2	98.0
62211PK3-20	263	35757	1.5	18.0494	4.1	0.5259	4.2	0.0688	1.0	0.23	429.2	4.0	429.1	14.6	428.5	90.6	429.2	4.0	100.2
62211PK3-98	687	45397	7.3	16.9880	1.0	0.5897	4.5	0.0702	4.4	0.97	437.3	18.6	457.8	16.6	562.0	22.4	437.3	18.6	77.8
62211PK3-78	192	13976	0.9	17.6482	4.5	0.5649	6.6	0.0723	4.8	0.73	450.1	21.0	454.7	24.1	478.4	98.9	450.1	21.0	94.1
62211PK3-91	406	17402	0.7	16.5850	1.8	0.6402	2.8	0.0770	2.1	0.75	478.2	9.6	502.4	11.0	614.2	38.6	478.2	9.6	77.9
62211PK3-28	335	16880	2.4	16.9877	1.5	0.6531	6.8	0.0805	6.7	0.98	498.9	32.0	510.4	27.4	562.1	31.9	498.9	32.0	88.8
62211PK3-74	937	14091	1.3	17.0396	1.7	0.6515	7.6	0.0805	7.4	0.97	499.2	35.5	509.4	30.4	555.5	37.5	499.2	35.5	89.9
62211PK3-15	229	64236	3.3	17.0533	1.7	0.6599	3.1	0.0816	2.6	0.84	505.8	12.7	514.6	12.6	553.7	37.1	505.8	12.7	91.3
62211PK3-35	958	62263	3.8	16.3968	1.9	0.6928	4.4	0.0824	3.9	0.90	510.4	19.3	534.5	18.2	638.8	40.4	510.4	19.3	79.9
62211PK3-90	295	29578	1.0	17.2318	1.3	0.6636	3.3	0.0829	3.0	0.91	513.6	15.0	516.8	13.4	531.0	29.5	513.6	15.0	96.7
62211PK3-44	373	31692	3.0	16.8652	1.3	0.6790	4.6	0.0831	4.4	0.96	514.3	21.5	526.2	18.7	577.9	28.7	514.3	21.5	89.0
62211PK3-7	692	62560	14.7	17.2428	2.3	0.6858	2.7	0.0833	1.4	0.53	515.6	7.1	518.2	11.1	529.6	51.0	515.6	7.1	97.4
62211PK3-89	159	30031	2.2	16.5268	3.4	0.6955	4.0	0.0834	2.1	0.53	516.2	10.6	536.1	16.9	621.8	74.3	516.2	10.6	83.0
62211PK3-5	560	101655	3.7	17.1789	0.8	0.6694	1.6	0.0834	1.4	0.86	516.4	7.0	520.4	6.6	537.7	18.3	516.4	7.0	96.0
62211PK3-4	534	59557	1.6	17.1158	1.3	0.6745	5.1	0.0837	5.0	0.97	518.3	24.7	523.4	20.9	545.8	27.6	518.3	24.7	95.0
62211PK3-48	539	165695	6.9	16.8950	0.7	0.7086	2.4	0.0868	2.3	0.96	536.7	11.8	543.9	10.1	574.1	14.6	536.7	11.8	93.5
62211PK3-58	207	32766	2.1	17.1903	2.3	0.6992	5.6	0.0872	5.1	0.91	538.8	26.3	538.3	23.2	536.3	49.6	538.8	26.3	100.5
62211PK3-65	109	19187	1.1	17.2620	7.4	0.7117	7.7	0.0891	2.1	0.28	550.2	11.2	545.7	32.6	527.2	162.6	550.2	11.2	104.4
62211PK3-49	66	7224	0.7	16.4484	6.1	0.7515	9.0	0.0897	6.6	0.73	553.5	35.0	569.1	39.2	632.1	131.9	553.5	35.0	87.6
62211PK3-93	504	6709	5.3	14.4538	2.8	0.8605	4.2	0.0902	3.1	0.75	556.7	16.8	630.4	19.8	904.3	58.0	556.7	16.8	61.6
62211PK3-38	134	34060	0.3	17.0441	5.7	0.7316	6.2	0.0904	2.4	0.39	558.2	12.9	557.5	26.6	554.9	124.4	558.2	12.9	100.6
62211PK3-84	1149	143977	5.0	16.8442	0.4	0.7612	2.4	0.0930	2.3	0.98	573.2	12.9	574.7	10.5	580.6	9.3	573.2	12.9	98.7
62211PK3-22	723	124620	4.3	16.6612	1.3	0.7781	4.5	0.0940	4.3	0.96	579.3	23.9	584.4	20.0	604.3	27.3	579.3	23.9	95.9
62211PK3-3	256	25060	0.8	17.1214	1.3	0.7622	1.9	0.0947	1.4	0.74	583.0	8.0	575.3	8.5	545.0	58.0	583.0	8.0	107.0
62211PK3-8	829	88577	7.9	15.7118	0.7	0.8546	6.5	0.0974	6.4	0.99	599.1	36.9	627.2	30.3	729.9	14.1	599.1	36.9	82.1
62211PK3-25	133	24454	1.7	15.7125	3.2	0.8662	8.6	0.0987	7.9	0.93	606.8	45.9	633.5	40.3	729.8	68.4	606.8	45.9	83.1
62211PK3-40	315	59575	2.7	15.8529	1.4	0.9213	4.2	0.1059	4.0	0.94	649.1	24.4	663.1	20.4	710.9	29.4	649.1	24.4	91.3
62211PK3-59	556	135261	15.8	14.2815	1.8	1.0379	4.9	0.1136	4.6	0.93	693.4	30.1	752.3	28.1	931.9	36.1	693.4	30.1	74.4
62211PK3-66	272	48046	3.2	13.9183	1.4	1.0660	2.1	0.1177	1.6	0.75	717.3	10.7	784.8	11.5	981.7	28.1	717.3	10.7	73.1
62211PK3-24	455	88340	1.5	14.6268	1.4	1.2846	2.5	0.1363	2.1	0.84	823.5	16.5	838.9	14.5	879.7	28.4	823.5	16.5	93.6
62211PK3-56	209	31701	1.4	14.3676	1.3	1.3503	6.1	0.1407	6.0	0.98	848.7	47.4	867.7	35.6	916.6	26.4	848.7	47.4	92.6
62211PK3-96	151	81136	2.1	13.9833	2.0	1.3596	4.6	0.1379	4.1	0.90	832.7	32.3	871.7	26.9	972.1	41.3	871.7	26.9	85.7

7712AL2-5	41	22695	0.7	18.1794	6.8	0.6282	7.0	0.0828	1.9	0.27	513.0	9.2	495.0	27.5	412.5	151.6	513.0	9.2	124.4
7712AL2-63	34	8909	0.8	17.6020	16.1	0.6494	16.4	0.0829	2.9	0.18	513.4	14.4	508.1	65.7	484.3	358.4	513.4	14.4	106.0
7712AL2-82	26	9309	0.4	17.9297	18.0	0.6376	18.5	0.0829	4.2	0.23	513.5	20.8	500.8	73.3	443.3	403.4	513.5	20.8	115.8
7712AL2-93	28	25694	0.5	18.1472	20.0	0.6342	20.5	0.0835	4.5	0.22	516.8	22.8	498.7	80.8	416.5	450.0	516.8	22.3	124.1
7712AL2-75	349	99860	0.7	17.3765	1.4	0.6631	1.6	0.0836	0.9	0.54	517.3	4.4	516.5	6.7	512.6	30.5	517.3	4.4	100.9
7712AL2-57	35	15473	0.6	17.9977	12.2	0.6406	12.9	0.0836	4.1	0.32	517.7	20.6	502.7	51.2	434.9	273.2	517.7	20.6	119.0
7712AL2-58	213	73216	0.9	17.4357	2.3	0.6615	2.5	0.0836	1.1	0.45	517.8	5.7	515.5	10.2	505.1	49.6	517.8	5.7	102.5
7712AL2-56	205	47761	0.9	17.6951	2.5	0.6548	2.7	0.0840	0.9	0.34	520.1	4.5	511.4	10.8	472.6	56.0	520.1	4.5	110.1
7712AL2-53	236	136901	0.9	17.3473	2.9	0.6682	3.2	0.0841	1.4	0.45	520.4	7.2	519.6	13.1	516.3	63.5	520.4	7.2	100.8
7712AL2-24	109	29813	0.6	17.5409	4.5	0.6665	4.7	0.0848	1.5	0.33	524.7	7.8	518.6	19.2	491.9	98.8	524.7	7.8	106.7
7712AL2-80	100	42999	0.4	17.0566	2.4	0.6961	2.6	0.0861	1.0	0.38	532.5	5.1	536.4	11.0	553.3	53.2	532.5	5.1	96.2
7712AL2-78	199	54315	1.2	17.2726	2.3	0.6928	2.5	0.0868	1.0	0.39	536.5	5.0	534.5	10.3	525.8	50.2	536.5	5.0	102.0
7712AL2-6	66	22250	1.6	17.7090	9.1	0.6764	9.2	0.0869	1.5	0.16	537.1	7.6	524.6	37.9	470.9	202.2	537.1	7.6	114.1
7712AL2-4	375	115124	0.7	17.1289	1.4	0.7018	2.5	0.0872	2.1	0.82	538.8	10.6	539.9	10.4	544.1	30.9	538.8	10.6	99.0
7712AL2-29	385	129338	16.3	17.1410	1.2	0.7104	1.4	0.0883	0.8	0.52	545.6	3.9	545.0	6.1	542.5	26.9	545.6	3.9	100.6
7712AL2-31	180	45576	1.2	17.2841	1.8	0.7123	2.2	0.0892	1.2	0.56	550.7	6.4	546.1	9.1	528.9	38.9	550.7	6.4	104.5
7712AL2-17	112	24682	1.0	17.0846	3.1	0.7200	3.4	0.0892	1.3	0.39	550.7	7.0	550.7	14.5	547.7	68.6	550.9	7.0	100.2
7712AL2-48	162	69147	1.5	17.5171	3.1	0.7077	3.4	0.0899	1.5	0.43	555.0	7.9	543.4	14.3	494.9	67.5	555.0	7.9	112.2
7712AL2-89	29	8997	0.8	16.4620	12.3	0.7584	13.7	0.0906	6.0	0.44	558.8	32.1	573.1	59.9	630.3	265.4	558.8	32.1	88.7
7712AL2-34	367	415990	7.1	17.1841	1.3	0.7278	1.5	0.0907	0.6	0.44	559.7	3.5	555.2	6.3	537.0	28.8	559.7	3.5	104.2
7712AL2-64	1223	9695	1.4	15.1073	0.9	0.8473	4.2	0.0928	4.0	0.97	572.3	22.2	623.2	19.4	812.5	19.7	572.3	22.2	70.4
7712AL2-87	53	30796	2.0	16.9564	7.0	0.8643	7.2	0.1000	1.9	0.26	614.5	11.1	632.4	34.1	697.1	149.0	614.5	11.1	88.2
7712AL2-23	257	109497	1.4	16.5998	1.2	0.8444	1.7	0.1017	1.3	0.73	624.1	7.5	621.5	8.0	612.2	25.5	624.1	7.5	101.9
7712AL2-84	254	13941	2.2	15.9874	3.1	0.8842	4.0	0.1025	2.6	0.64	629.2	15.4	643.3	19.0	692.9	65.4	629.2	15.4	90.8
7712AL2-38	314	102314	2.2	15.1501	0.9	1.0139	2.3	0.1114	2.1	0.92	680.9	13.6	710.9	11.7	806.5	19.0	680.9	13.6	84.4
7712AL2-12	65	29629	1.2	14.8984	2.9	1.0984	3.2	0.1187	1.5	0.46	723.0	10.0	752.6	17.1	841.6	59.7	723.0	10.0	85.9
7712AL2-73	118	23354	1.4	15.2127	2.2	1.0856	2.6	0.1198	1.4	0.52	729.3	9.4	746.4	13.8	797.9	46.6	729.3	9.4	91.4
7712AL2-42	618	16473	1.6	14.6916	4.0	1.1548	7.0	0.1230	5.7	0.82	748.1	40.5	779.5	38.0	870.5	82.1	748.1	40.5	85.9
7712AL2-99	105	88790	2.1	14.6557	2.8	1.2278	4.4	0.1305	3.4	0.77	790.7	25.2	813.3	24.5	875.6	57.7	790.7	25.2	90.3
7712AL2-96	75	32375	0.7	14.7246	3.1	1.3075	5.7	0.1396	4.8	0.84	842.6	37.7	849.0	32.6	865.9	63.4	842.6	37.7	97.3
7712AL2-80	298	159139	2.7	14.5743	1.1	1.3865	3.2	0.1466	3.0	0.94	881.7	24.8	883.2	18.9	887.2	22.8	881.7	24.8	99.4
7712AL2-36	80	39132	1.8	14.7039	2.5	1.3761	4.3	0.1468	3.5	0.81	882.7	28.6	878.8	25.2	868.8	52.6	882.7	28.6	101.6
7712AL2-44	109	35662	1.9	14.5511	2.2	1.4174	2.6	0.1496	1.4	0.53	898.6	11.6	896.3	15.7	890.4	46.4	898.6	11.6	100.9
7712AL2-65	254	151270	1.8	14.4390	0.9	1.4804	5.1	0.1550	5.0	0.98	929.1	43.1	922.4	30.7	906.4	18.8	906.4	18.8	102.5
7712AL2-97	222	101631	3.0	14.4215	1.0	1.4267	1.6	0.1492	1.3	0.79	896.6	10.8	900.1	9.8	908.9	20.8	908.9	20.8	98.6
7712AL2-46	53	46203	1.4	14.3044	4.2	1.4392	4.4	0.1493	1.5	0.33	897.1	12.2	905.4	26.6	925.7	86.3	925.7	86.3	96.9
7712AL2-50	50	55579	0.7	14.2455	6.6	1.4534	7.1	0.1502	2.7	0.38	901.9	22.9	911.3	43.0	934.2	133.6	934.2	133.6	96.5
7712AL2-100	603	326319	6.2	14.2349	0.2	1.5223	1.1	0.1572	1.1	0.87	941.3	9.3	939.6	6.7	935.7	5.1	935.7	5.1	100.6
7712AL2-49	286	145186	1.4	14.0469	1.5	1.4890	2.4	0.1517	1.9	0.79	910.5	16.2	925.9	14.7	962.9	30.5	962.9	30.5	94.6
7712AL2-98	194	78116	1.5	13.9576	1.3	1.6035	2.1	0.1623	1.6	0.77	969.6	14.3	971.6	12.9	975.9	26.9	975.9	26.9	99.4
7712AL2-22	299	411900	6.6	13.8927	2.3	1.4479	6.7	0.1459	6.3	0.94	877.9	51.4	909.0	40.1	985.4	47.2	985.4	47.2	89.1
7712AL2-1	171	54125	0.6	13.8043	1.4	1.6735	3.1	0.1675	2.8	0.89	866.6	25.8	898.5	20.0	998.3	29.3	998.3	29.3	100.0
7712AL2-68	285	232811	9.3	13.6379	1.6	1.5931	7.9	0.1576	7.7	0.98	943.3	67.9	967.5	49.3	1022.9	33.0	1022.9	33.0	92.2
7712AL2-26	311	45866	1.2	13.1951	0.8	1.8473	1.5	0.1768	1.3	0.85	1049.4	12.4	1062.5	9.9	1089.4	16.0	1089.4	16.0	96.3
7712AL2-90	57	48744	1.1	13.1245	3.8	1.8525	4.6	0.1763	2.6	0.57	1046.9	25.2	1064.3	30.3	1100.1	75.6	1100.1	75.6	95.2
7712AL2-9	343	152870	1.1	13.0904	0.8	1.9284	1.1	0.1831	0.8	0.72	1083.8	8.0	1091.0	7.4	1105.4	15.3	1105.4	15.3	98.0
7712AL2-74	148	149303	2.0	13.0232	1.5	1.8831	2.4	0.1779	1.9	0.77	1055.3	18.1	1075.2	16.0	1115.6	30.5	1115.6	30.5	94.6
7712AL2-14	301	329561	0.7	12.9946	0.6	2.0251	2.3	0.1909	2.3	0.96	1126.0	23.3	1124.0	15.9	1120.0	12.4	1120.0	12.4	100.5
7712AL2-79	30	16229	0.7	12.8737	4.5	2.0934	8.4	0.1955	7.1	0.84	1150.9	74.5	1146.6	57.8	1138.7	90.5	1138.7	90.5	101.1
7712AL2-41	65	67463	0.8	12.6157	2.5	2.1925	2.7	0.2006	1.0	0.38	1178.6	10.9	1178.7	18.8	1178.8	49.4	1178.8	49.4	100.0
7712AL2-30	88	39007	1.2	12.2749	1.0	2.3647	1.5	0.2105	1.2	0.77	1231.6	13.1	1232.0	10.8	1232.7	19.0	1232.7	19.0	99.9
7712AL2-67	195	183976	1.6	11.4747	0.9	2.8854	2.9	0.2401	2.8	0.95	1387.4	34.7	1378.1	22.0	1363.8	17.4	1363.8	17.4	101.7
7712AL2-52	187	118208	1.0	11.4087	1.3	2.7197	2.7	0.2250	2.4	0.87	1308.4	28.1	1333.9	20.3	1374.9	25.9	1374.9	25.9	95.2
7712AL2-76	130	122324	1.6	11.3046	0.9	2.8699	1.4	0.2353	1.1	0.78	1362.2	13.6	1374.1	10.7	1392.5	17.1	1392.5	17.1	97.8
7712AL2-51	106	108010	1.6	11.1209	1.2	3.0416	3.0	0.2453	2.8	0.92	1414.3	35.4	1418.1	23.3	1423.8	23.1	1423.8	23.1	99.3
7712AL2-18	143	74739	0.6	10.2647	1.0	3.2074	1.5	0.2388	1.2	0.77	1380.4	14.8	1459.0	12.0	1575.3	18.5	1575.3	18.5	87.6
7712AL2-47	139	58358	1.0	9.4740	0.9	4.4352	1.4	0.3048	1.0	0.74	1714.8	15.8	1718.9	11.6	1723.9	17.2	1723.9	17.2	98.5
7712AL2-11	226	230812	1.2	9.4641	0.3	4.3228	1.2	0.2967	1.2	0.96	1675.0	17.0	1697.7	9.9	1725.9	6.4	1725.9	6.4	97.1
7712AL2-94	57	63284	1.4	9.0186	1.3	3.8668	2.2	0.2542	1.8	0.82	1460.3	23.5	1611.0	17.7	1813.9	22.8	1813.9	22.8	80.5
7712AL2-55	248	238493	1.1	6.2202	0.2	9.2426	1.1	0.4170	1.1	0.99	2246.7	20.4	2362.3	10.0	2463.7	3.1	2463.7	3.1	91.2
7712AL2-50	339	484825	1.6	6.2082	0.2	9.7844	1.2	0.4406	1.2	0.99	2353.1	22.9	2414.7	10.8	2467.0	3.1	2467.0	3.1	95.4
7712AL2-20	217	608183	1.4	6.1926	0.3	10.0593	1.5	0.4518	1.5	0.99	2403.0	29.6	2440.1	13.8	2471.2	4.2	2471.2	4.2	97.2
7712AL2-2	486	285103	0.9	6.1633	0.3	10.													

62211PK5-21	328	75641	2.7	16.3369	1.6	0.8266	4.7	0.0979	4.4	0.94	602.3	25.3	611.7	21.5	646.7	33.9	602.3	25.3	93.1
62211PK5-7	554	24835	2.6	16.5687	1.8	0.8206	2.1	0.0986	1.1	0.53	606.3	6.6	608.4	9.8	616.3	39.1	606.3	6.6	98.4
62211PK5-93	231	41087	2.7	15.3410	1.3	0.8881	3.0	0.0988	2.7	0.90	607.5	15.4	645.4	14.1	780.3	27.2	607.5	15.4	77.9
62211PK5-80	392	78811	2.3	15.6688	1.4	0.9680	2.9	0.1100	2.6	0.88	672.8	16.4	687.4	14.5	735.7	29.1	672.8	16.4	91.4
62211PK5-31	146	82417	1.3	15.6480	2.6	1.0066	2.8	0.1142	1.0	0.38	697.3	6.9	707.1	14.1	738.5	54.3	697.3	6.9	94.4
62211PK5-100	131	15688	3.6	15.4301	4.6	1.1033	5.8	0.1235	3.4	0.59	750.5	24.1	754.9	30.7	768.1	97.7	750.5	24.1	97.7
62211PK5-50	421	100653	2.2	15.1658	0.7	1.1498	2.2	0.1265	2.1	0.95	767.7	15.1	777.2	11.9	804.4	13.9	767.7	15.1	95.4
62211PK5-44	54	25619	0.6	14.6243	2.9	1.2403	4.7	0.1316	3.7	0.79	796.7	28.0	819.0	26.6	880.0	59.8	796.7	28.0	90.5
62211PK5-38	586	142891	2.4	14.6366	0.7	1.2408	4.3	0.1317	4.2	0.99	797.7	31.4	819.2	23.9	878.3	14.8	797.7	31.4	90.8
62211PK5-43	122	52036	2.5	15.0421	2.2	1.2344	3.5	0.1347	2.8	0.78	814.5	21.1	816.4	19.8	821.5	46.2	814.5	21.1	99.1
62211PK5-64	253	114528	2.8	14.5416	1.1	1.3070	2.3	0.1378	2.0	0.87	832.4	15.4	848.8	13.0	891.8	23.0	832.4	15.4	93.3
62211PK5-69	130	19777	1.9	14.1896	2.1	1.3395	2.7	0.1379	1.8	0.66	832.5	14.0	863.0	15.9	942.2	42.1	832.5	14.0	88.4
62211PK5-1	487	111057	1.0	14.6586	0.7	1.3515	1.9	0.1437	1.7	0.92	865.5	13.9	868.2	10.8	875.2	14.9	865.5	13.9	98.9
62211PK5-79	232	169656	0.9	14.7129	1.3	1.3724	1.8	0.1464	1.2	0.67	881.0	9.9	877.2	10.5	867.6	27.4	881.0	9.9	101.5
62211PK5-60	260	129909	3.5	14.3528	1.8	1.4529	2.4	0.1512	1.6	0.67	907.9	13.4	911.1	14.2	918.7	36.0	918.7	36.0	98.8
62211PK5-87	235	148972	2.4	14.3528	0.9	1.4651	2.6	0.1525	2.5	0.94	915.1	20.9	916.1	15.7	918.7	17.7	918.7	17.7	99.6
62211PK5-91	170	44938	1.7	14.3465	1.3	1.4397	2.7	0.1498	2.4	0.88	899.8	19.9	905.6	16.2	919.6	26.8	919.6	26.8	97.8
62211PK5-28	140	41185	2.4	14.2277	1.7	1.5509	3.1	0.1600	2.6	0.84	957.0	23.4	950.8	19.4	936.7	35.2	936.7	35.2	102.2
62211PK5-84	206	63357	1.2	14.1696	1.0	1.3834	2.3	0.1422	2.1	0.91	856.9	17.1	881.9	13.8	945.1	19.9	945.1	19.9	90.7
62211PK5-98	291	60337	1.5	14.1100	0.8	1.5261	2.0	0.1562	1.8	0.92	935.5	15.9	940.9	12.2	953.7	15.6	953.7	15.6	98.1
62211PK5-30	254	89775	2.4	14.0321	1.0	1.4063	3.4	0.1431	3.2	0.96	862.3	26.1	891.6	20.1	965.0	20.1	965.0	20.1	89.3
62211PK5-12	158	47825	2.1	13.9757	1.3	1.4295	3.1	0.1449	2.8	0.91	872.3	22.7	901.3	18.3	973.3	26.6	973.3	26.6	89.6
62211PK5-97	420	153159	6.5	13.7207	1.1	1.7752	6.3	0.1767	6.2	0.98	1048.7	60.2	1036.4	41.0	1010.7	22.1	1010.7	22.1	103.8
62211PK5-16	736	161263	8.6	13.4983	0.6	1.6544	5.5	0.1620	5.5	0.99	967.7	49.6	991.3	35.1	1043.7	11.7	1043.7	11.7	92.7
62211PK5-6	118	42316	0.9	13.4855	2.5	1.5912	3.4	0.1556	2.3	0.67	932.4	20.1	966.8	21.4	1045.7	51.1	1045.7	51.1	89.2
62211PK5-45	131	2944	0.8	13.3631	2.8	1.8779	4.0	0.1820	2.8	0.70	1077.9	27.7	1073.3	26.3	1064.0	57.0	1064.0	57.0	101.3
62211PK5-3	77	26011	3.2	13.3560	2.5	1.8692	2.8	0.1810	1.2	0.44	1072.7	12.0	1070.2	18.4	1065.3	50.5	1065.3	50.5	100.7
62211PK5-83	673	144218	10.7	13.2972	0.6	1.6877	1.8	0.1628	1.7	0.95	972.1	15.4	1003.9	11.5	1074.0	11.5	1074.0	11.5	90.5
62211PK5-9	171	80327	1.2	13.2954	1.1	1.9432	2.1	0.1874	1.7	0.83	1107.1	17.5	1096.1	13.8	1074.2	22.9	1074.2	22.9	103.1
62211PK5-66	108	35214	0.8	13.0943	1.1	1.8874	1.6	0.1792	1.2	0.72	1062.9	11.7	1076.7	10.9	1104.8	22.7	1104.8	22.7	96.2
62211PK5-59	248	74541	1.7	13.0534	0.5	1.9913	1.6	0.1885	1.5	0.95	1113.4	15.3	1112.6	10.7	1111.0	10.0	1111.0	10.0	100.2
62211PK5-18	992	96119	5.0	12.9767	0.2	1.8135	4.4	0.1707	4.4	1.00	1015.9	41.2	1050.4	28.7	1122.8	3.2	1122.8	3.2	90.5
62211PK5-49	72	47779	1.2	12.9303	2.9	1.9294	3.4	0.1809	1.7	0.51	1072.1	17.2	1091.3	22.6	1129.9	57.7	1129.9	57.7	94.9
62211PK5-90	163	47930	1.5	12.9186	1.2	1.9812	2.1	0.1856	1.7	0.82	1097.6	17.3	1109.1	14.2	1131.7	24.2	1131.7	24.2	97.0
62211PK5-88	393	113446	5.7	12.8441	0.9	1.7638	4.7	0.1643	4.6	0.98	980.7	42.3	1032.3	30.7	1143.2	17.5	1143.2	17.5	85.8
62211PK5-51	106	53910	1.4	12.7936	2.5	2.1055	3.2	0.1954	2.0	0.61	1150.4	20.7	1150.6	22.1	1151.0	50.4	1151.0	50.4	99.9
62211PK5-55	116	52455	1.0	12.7429	1.6	2.1370	2.1	0.1975	1.4	0.65	1161.9	14.4	1160.9	14.4	1158.9	31.4	1158.9	31.4	100.3
62211PK5-71	152	58390	4.2	12.7216	1.2	2.1180	3.0	0.1954	2.8	0.92	1150.7	29.2	1154.7	20.7	1162.2	23.0	1162.2	23.0	99.0
62211PK5-101	403	110325	2.5	12.7172	0.5	2.0271	1.7	0.1870	1.6	0.95	1104.9	16.3	1124.6	11.4	1162.9	10.1	1162.9	10.1	95.0
62211PK5-42	128	43769	2.0	12.6469	1.3	2.2349	3.2	0.2050	2.9	0.92	1202.1	32.2	1192.1	22.5	1173.9	25.3	1173.9	25.3	102.4
62211PK5-54	354	780616	4.5	11.4048	0.5	2.8874	0.9	0.2388	0.7	0.79	1380.6	8.4	1378.6	6.5	1375.5	10.1	1375.5	10.1	100.4
62211PK5-32	423	189333	1.8	11.4029	0.5	2.7468	2.3	0.2272	2.3	0.97	1319.6	27.1	1341.2	17.4	1375.8	10.4	1375.8	10.4	95.9
62211PK5-61	143	104701	1.9	10.0587	0.7	3.8487	1.5	0.2808	1.3	0.86	1595.3	17.7	1603.0	11.7	1613.2	13.8	1613.2	13.8	98.9
62211PK5-22	302	138018	1.9	8.3829	0.4	4.9517	2.3	0.3011	2.3	0.98	1696.6	34.1	1811.1	19.6	1945.6	7.7	1945.6	7.7	87.2
62211PK5-82	317	287536	9.7	7.9488	0.2	6.2617	0.5	0.3610	0.5	0.92	1986.9	8.4	2013.1	4.7	2040.1	3.8	2040.1	3.8	97.4
62211PK5-25	54	74300	0.8	7.0613	0.6	7.9188	3.3	0.4055	3.2	0.98	2194.5	59.6	2221.8	29.3	2247.1	10.0	2247.1	10.0	97.7
62211PK5-77	454	119138	1.9	6.3737	0.5	7.2838	5.1	0.3367	5.1	1.00	1870.8	82.4	2146.8	45.5	2422.5	7.9	2422.5	7.9	77.2
62211PK5-14	581	244311	4.9	6.3112	0.4	9.0926	2.5	0.4162	2.5	0.99	2243.2	47.4	2347.4	23.2	2439.2	7.3	2439.2	7.3	92.0
62211PK5-24	141	30200	0.9	6.2613	0.6	9.8387	1.5	0.4468	1.4	0.93	2381.0	28.3	2419.8	14.1	2452.6	9.3	2452.6	9.3	97.1
62211PK5-86	121	66392	1.4	6.2333	0.3	9.9732	2.2	0.4509	2.2	0.99	2399.1	43.2	2432.3	20.2	2460.2	5.6	2460.2	5.6	97.5
62211PK5-13	294	396541	1.5	6.1130	0.1	10.3975	1.9	0.4610	1.9	1.00	2443.9	38.1	2470.8	17.4	2493.0	2.2	2493.0	2.2	98.0
62211PK5-2	35	22046	1.2	5.0422	1.3	14.9304	7.8	0.5460	7.7	0.99	2808.5	174.9	2810.8	74.3	2812.5	21.3	2812.5	21.3	99.9
62211PK5-62	123	135921	2.1	5.0413	0.5	13.7494	3.3	0.5027	3.3	0.99	2625.5	71.5	2732.6	31.7	2812.7	7.5	2812.7	7.5	93.3
62211PK5-48	867	1045895	14.4	3.7789	0.3	21.6063	2.1	0.5922	2.1	0.99	2998.2	49.6	3166.2	20.3	3274.4	5.3	3274.4	5.3	91.6
62211PK5-95	63	79737	1.2	3.3941	0.2	27.9719	1.4	0.6886	1.4	0.99	3377.2	35.6	3418.1	13.4	3442.2	2.6	3442.2	2.6	98.1

- Analyses with >10% uncertainty (1-sigma) in 206Pb/238U age are not included.
- Analyses with >10% uncertainty (1-sigma) in 206Pb/207Pb age are not included, unless 206Pb/238U age is <400 Ma.
- Best age is determined from 206Pb/238U age for analyses with 206Pb/238U age <900 Ma and from 206Pb/207Pb age for analyses with 206Pb/238U age >900 Ma.
- Concordance is based on 206Pb/238U age / 206Pb/207Pb age. Value is not reported for 206Pb/238U ages <400 Ma because of large uncertainty in 206Pb/207Pb age.
- Analyses with 206Pb/238U age >400 Ma and with >20% discordance (<80% concordance) are not included.
- Analyses with 206Pb/238U age >400 Ma and with >5% reverse discordance (<105% concordance) are not included.
- All uncertainties are reported at the 1-sigma level, and include only measurement errors.
- U concentration and U/Th are calibrated relative to FC-1 zircon standard and are accurate to ~20%.
- Common Pb correction is from measured 204Pb with common Pb composition interpreted from Stacey and Kramers (1975).
- Common Pb composition assigned uncertainties of 1.5 for 206Pb/204Pb, 0.3 for 207Pb/204Pb, and 2.0 for 208Pb/204Pb.
- U/Pb and 206Pb/207Pb fractionation is calibrated relative to fragments of large Sri Lanka zircons and individual crystals of FC-1, and R33.
- U decay constants and composition as follows: 238U = 9.8485 x 10⁻¹⁰, 235U = 1.55125 x 10⁻¹⁰, 238U/235U = 137.82.
- U-Th disequilibrium correction is applied to 206/238 ages assuming a value of 2.3 for the magma.

Supplementary Table S2: Igneous Zircon U-Pb Analytical Data

Sample locations in WGS84, lat (*N), long(*E)																			
location: 29.2777 88.07289 206/208 2-sigma systematic error: 0.8																			
Analysis	U (ppm)	206Pb/204Pb	U/Th	206Pb*/207Pb* ± (%)	207Pb*/235U* ± (%)	206Pb*/238U* ± (%)	error corr.	206Pb*/238U* ± (Ma)	207Pb*/235U* ± (Ma)	206Pb*/207Pb* ± (Ma)	Best age ± (Ma)	Conc (%)							
61312AL1-1	1354	4570	0.6	26.9565	15.9	0.0076	16.6	0.0015	4.4	0.27	9.5	0.4	7.6	1.3	-549.5	431.1	9.5	0.4	NA
61312AL1-18	2006	1151	0.2	19.9727	16.6	0.0103	17.4	0.0015	5.0	0.29	9.6	0.5	10.4	1.8	198.1	388.4	9.6	0.5	NA
61312AL1-7	1301	4494	0.3	20.9086	18.0	0.0099	18.5	0.0015	4.3	0.23	9.7	0.4	10.0	1.8	90.7	429.9	9.7	0.4	NA
61312AL1-11	1256	11443	0.6	21.4323	22.4	0.0097	23.1	0.0015	5.3	0.23	9.7	0.5	9.8	2.2	31.8	543.7	9.7	0.5	NA
61312AL1-15	1613	863	0.2	16.5964	19.4	0.0126	20.0	0.0015	4.7	0.23	9.7	0.5	12.7	2.5	612.7	422.8	9.7	0.5	NA
61312AL1-5	1057	12546	0.8	21.2484	18.9	0.0100	19.1	0.0015	3.0	0.16	9.9	0.3	10.1	1.9	52.4	454.2	9.9	0.3	NA
61312AL1-16	738	2136	1.2	17.2404	12.4	0.0124	14.4	0.0015	7.3	0.51	10.0	0.7	12.5	1.8	529.9	272.2	10.0	0.7	NA
61312AL1-20	1158	10043	0.7	20.4143	19.4	0.0105	19.4	0.0016	1.7	0.09	10.0	0.2	10.6	2.1	147.1	457.5	10.0	0.2	NA
61312AL1-22	2063	3238	0.3	20.3044	20.3	0.0106	20.6	0.0016	3.5	0.17	10.1	0.4	10.7	2.2	159.8	479.9	10.1	0.4	NA
61312AL1-9	3209	869	0.2	18.6479	8.3	0.0138	11.9	0.0019	8.5	0.72	12.0	1.0	13.9	1.6	355.3	186.9	12.0	1.0	NA
61312AL1-12	1167	7533	1.1	18.9494	20.3	0.0160	21.3	0.0022	6.4	0.30	14.2	0.9	16.2	3.4	319.0	465.9	14.2	0.9	NA
61312AL1-21	3227	1235	0.2	19.0468	7.9	0.0165	17.4	0.0023	15.5	0.89	14.7	2.3	16.6	2.9	307.4	180.3	14.7	2.3	NA
61312AL1-3	634	3504	1.2	16.6108	55.8	0.0376	59.5	0.0045	20.6	0.35	29.1	6.0	37.5	21.9	610.8	1310.8	29.1	6.0	NA
61312AL1-4	302	13549	4.1	16.1797	7.6	0.1093	13.6	0.0128	11.3	0.83	82.2	9.2	105.3	13.6	667.4	163.0	82.2	9.2	NA
61312AL1-2	1331	365723	15.4	17.6562	0.3	0.5946	1.0	0.0761	0.9	0.95	473.1	4.2	473.8	3.7	477.4	6.8	473.1	4.2	99.1
61312AL1-6	2682	29841	2.3	17.3948	0.6	0.6174	9.8	0.0779	9.8	1.00	483.5	45.8	488.2	38.2	510.3	13.7	483.5	45.8	94.8
61312AL1-14	195	76242	0.6	15.3835	1.6	1.1255	2.0	0.1296	1.3	0.63	762.6	9.1	765.6	10.9	774.5	33.1	762.6	9.1	98.5
61012AL7	location: 29.34689 87.79019	206/208 2-sigma systematic error: 0.8																	
61012AL7-8C	409	12499	2.1	20.3891	8.8	0.0447	9.7	0.0066	4.1	0.42	42.5	1.7	44.4	4.2	150.0	206.6	42.5	1.7	NA
61012AL7-8	1364	51420	1.8	22.8960	4.0	0.0410	4.1	0.0068	0.8	0.21	43.7	0.4	40.8	1.6	-128.9	98.7	43.7	0.4	NA
61012AL7-13	432	10620	0.4	21.7219	12.9	0.0475	13.2	0.0075	3.2	0.24	48.1	1.5	47.1	6.1	-0.4	311.2	48.1	1.5	NA
61012AL7-19	409	1486	0.5	18.9121	17.5	0.0571	18.0	0.0078	4.0	0.22	50.3	2.0	56.3	9.9	323.5	401.2	50.3	2.0	NA
61012AL7-10	263	9951	1.1	21.8806	14.7	0.0498	15.1	0.0079	3.3	0.22	50.7	1.7	49.3	7.3	-18.0	356.7	50.7	1.7	NA
61012AL7-2	1004	39251	0.6	20.5124	5.9	0.0544	7.3	0.0081	4.2	0.57	52.0	2.2	53.8	3.8	135.9	139.7	52.0	2.2	NA
61012AL7-11	142	9603	1.0	24.5205	28.0	0.0756	28.4	0.0134	4.8	0.17	86.1	4.1	74.0	20.3	-301.2	728.5	86.1	4.1	NA
61012AL7-5	579	14472	9.1	18.9157	1.5	0.3319	2.6	0.0455	2.1	0.82	287.0	5.9	291.0	6.5	323.1	33.8	287.0	5.9	NA
61012AL7-3	1011	78473	6.7	19.0940	0.9	0.3315	1.1	0.0459	0.6	0.56	289.4	1.7	290.7	2.7	301.7	20.4	289.4	1.7	NA
61012AL7-7	528	146202	2.6	19.1272	2.2	0.3364	2.4	0.0467	1.1	0.44	294.0	3.1	294.4	6.2	297.7	50.0	294.0	3.1	NA
61012AL7-18	261	7230	2.9	18.8834	2.3	0.3423	2.5	0.0469	1.0	0.41	295.3	3.0	298.9	6.5	326.9	51.7	295.3	3.0	NA
61012AL7-6	477	96159	1.4	19.0319	1.0	0.3475	1.4	0.0480	1.0	0.70	302.0	2.9	302.8	3.7	309.2	22.7	302.0	2.9	NA
61012AL7-9	346	97969	2.6	18.9351	2.4	0.3571	2.7	0.0490	1.2	0.44	308.6	3.6	310.0	7.2	320.7	55.0	308.6	3.6	NA
61012AL7-17	48	28023	1.3	13.4532	4.1	1.7997	4.4	0.1756	1.6	0.36	1042.9	15.2	1045.4	28.5	1050.5	81.9	1050.5	81.9	99.3
61012AL7-14	98	15500	1.2	13.0634	1.8	1.7985	3.5	0.1704	3.0	0.85	1014.3	27.8	1044.9	22.7	1109.5	36.3	1109.5	36.3	91.4
61012AL7-1	166	73592	1.2	10.1314	0.6	3.6887	1.3	0.2710	1.1	0.90	1546.1	15.5	1568.9	10.0	1599.8	10.3	1599.8	10.3	96.6
6912AL1	location: 29.28315 87.9625	206/208 2-sigma systematic error: 0.8																	
6912AL1-16	272	1551	3.6	11.9027	148.9	0.0166	149.5	0.0014	13.2	0.09	9.2	1.2	16.7	24.7	1292.9	405.2	9.2	1.2	NA
6912AL1-18	588	1816	0.6	17.8347	29.7	0.0115	30.5	0.0015	7.0	0.23	9.6	0.7	11.7	3.5	455.2	672.7	9.6	0.7	NA
6912AL1-5	1303	11045	1.8	20.2914	27.2	0.0102	28.1	0.0015	6.8	0.24	9.7	0.7	10.3	2.9	161.3	647.8	9.7	0.7	NA
6912AL1-2	1326	10934	1.8	19.2050	19.5	0.0108	20.0	0.0015	4.4	0.22	9.7	0.4	10.9	2.2	288.5	449.8	9.7	0.4	NA
6912AL1-12	1008	4490	3.2	20.7284	13.7	0.0100	15.2	0.0015	6.6	0.43	9.7	0.6	10.1	1.5	111.2	325.6	9.7	0.6	NA
6912AL1-9	1574	12876	3.4	22.1570	14.5	0.0094	15.7	0.0015	5.9	0.37	9.7	0.6	9.5	1.5	-48.5	355.0	9.7	0.6	NA
6912AL1-1	1070	5485	1.1	22.0417	16.3	0.0095	16.9	0.0015	4.4	0.26	9.8	0.4	9.6	1.6	-35.8	399.0	9.8	0.4	NA
6912AL1-14	1408	6181	1.7	19.0214	12.7	0.0111	13.1	0.0015	3.2	0.25	9.8	0.3	11.2	1.5	310.4	289.4	9.8	0.3	NA
6912AL1-11	1030	4504	1.7	23.0871	29.9	0.0092	30.5	0.0015	6.0	0.20	9.9	0.6	9.3	2.8	-149.5	757.0	9.9	0.6	NA
6912AL1-6	963	725	0.5	15.3112	27.6	0.0138	28.3	0.0015	6.3	0.22	9.9	0.6	13.9	3.9	784.4	590.7	9.9	0.6	NA
6912AL1-7	551	2518	0.5	20.7872	36.4	0.0105	37.4	0.0016	8.8	0.24	10.2	0.9	10.6	4.0	104.5	885.4	10.2	0.9	NA
6912AL1-3	3316	16798	1.7	21.2979	7.7	0.0121	9.5	0.0019	5.6	0.59	12.1	0.7	12.2	1.2	46.8	183.5	12.1	0.7	NA
6912AL1-13	2836	36356	5.20	21.2340	7.5	0.0149	9.5	0.0023	5.8	0.61	14.8	0.9	15.1	1.4	54.0	178.5	14.8	0.9	NA
6912AL1-4	1116	317384	89.8	17.6418	0.8	0.4584	7.2	0.0587	7.1	0.99	367.5	25.5	383.2	22.9	479.2	17.0	367.5	25.5	NA
6912AL1-8	662	227167	1.4	17.2467	0.9	0.5724	5.0	0.0716	4.9	0.98	445.7	21.0	459.5	18.3	529.1	19.3	445.7	21.0	84.2
6912AL1-17	346	116923	7.0	17.5146	0.8	0.5691	1.8	0.0723	1.7	0.90	450.0	7.2	457.4	6.8	495.2	17.8	450.0	7.2	90.9
6912AL1-15	109	30933	1.5	17.0841	3.8	0.6662	4.2	0.0825	1.9	0.44	511.3	9.1	518.4	17.2	549.8	83.2	511.3	9.1	93.0
6912AL2	location: 29.28626 87.96127	206/208 2-sigma systematic error: 0.8																	
6912AL2-1	954	3658	0.5	23.2153	35.9	0.0088	36.6	0.0015	7.1	0.19	9.5	0.7	8.9	3.2	-163.3	918.0	9.5	0.7	NA
6912AL2-23	1011	7462	1.0	21.4584	17.1	0.0096	18.0	0.0015	5.8	0.32	9.6	0.6	9.7	1.7	28.9	412.7	9.6	0.6	NA
6912AL2-6	393	8212	0.6	7.1036	244.2	0.0292	244.6	0.0015	13.7	0.06	9.7	1.3	29.2	70.5	2236.7	147.0	9.7	1.3	NA
6912AL2-18	933	4954	3.3	18.0863	30.7	0.0117	31.0	0.0015	4.2	0.14	9.9	0.4	11.9	3.7	424.0	700.5	9.9	0.4	NA
6912AL2-2R	357	71077	23.5	17.9014	1.8	0.3826	8.4	0.0497	8.2	0.98	312.5	25.0	329.0	23.6	446.9	39.8	312.5	25.0	NA
6912AL2-4C	321	18096	9.2	15.1078	5.8	0.4718	7.1	0.0517	4.1	0.58	324.9	13.1	392.4	23.1	812.4	120.4	324.9	13.1	NA
6912AL2-3R	287	74238	1.2	17.5274	2.3	0.4192	3.4	0.0533	2.5	0.73	334.6	8.2	355.4	10.3	493.6	51.8	334.6	8.2	NA
6912AL2-17	632	79381	22.3	17.6469	2.7	0.4627	3.4	0.0592	2.0	0.59	370.9	7.2	386.1	10.8	478.6	60.0	370.9	7.2	NA
6912AL2-10C	265	116515	2.1	15.4790	1.3	0.5553	7.2	0.0623	7.1	0.98	389.9	26.7	448.5	26.1	761.4	27.9	389.9	26.7	NA
6912AL2-13	343	43700	0.8	17.5837	1.2	0.5841	3.3	0.0745	3.1	0.93	463.1	13.7	467.1	12.3	486.5	26.0	463.1	13.7	95.2
6912AL2-3C	224	80219	0.8	17.5031	1.6	0.6143	2.2	0.0780	1.5	0.67	484.1	6.8	486.3	8.4	496.7	35.3	484.1	6.8	97.5
6912AL2-7	13	3062	0.6	15.5273	33.8	0.7084	34.6	0.0798	7.6										

61012AL1-3	46	3748	1.1	22.6904	22.4	0.1635	23.9	0.0269	8.2	0.34	171.1	13.8	153.7	34.1	-106.7	557.9	171.1	13.8	NA
61012AL1-4	74	6659	1.0	19.9564	19.7	0.1868	20.4	0.0270	5.4	0.26	171.9	9.1	173.9	32.6	200.0	460.4	171.9	9.1	NA
61012AL1-2	55	9452	1.1	21.6653	11.3	0.1730	13.5	0.0272	7.3	0.54	172.9	12.5	162.0	20.2	5.8	272.7	172.9	12.5	NA
61012AL1-11	65	9682	1.0	18.6616	21.9	0.2027	22.4	0.0274	4.9	0.22	174.5	8.4	187.4	38.4	353.7	500.1	174.5	8.4	NA
61012AL1-5	37	9199	1.4	23.8365	34.2	0.1600	34.4	0.0277	4.2	0.12	175.9	7.2	150.7	48.2	-229.4	883.0	175.9	7.2	NA

1. Analyses with >10% uncertainty (1-sigma) in 206Pb/238U age are not included.
2. Analyses with >10% uncertainty (1-sigma) in 206Pb/207Pb age are not included, unless 206Pb/238U age is <400 Ma.
3. Best age is determined from 206Pb/238U age for analyses with 206Pb/238U age <900 Ma and from 206Pb/207Pb age for analyses with 206Pb/238U age >900 Ma.
4. Concordance is based on 206Pb/238U age / 206Pb/207Pb age. Value is not reported for 206Pb/238U ages <400 Ma because of large uncertainty in 206Pb/207Pb age.
5. Analyses with 206Pb/238U age >400 Ma and with >20% discordance (<80% concordance) are not included.
6. Analyses with 206Pb/238U age >400 Ma and with >5% reverse discordance (<105% concordance) are not included.
7. All uncertainties are reported at the 1-sigma level, and include only measurement errors.
8. U concentration and U/Th are calibrated relative to FC-1 zircon standard and are accurate to ~20%.
9. Common Pb correction is from measured 204Pb with common Pb composition interpreted from Stacey and Kramers (1975).
10. Common Pb composition assigned uncertainties of 1.5 for 206Pb/204Pb, 0.3 for 207Pb/204Pb, and 2.0 for 208Pb/204Pb.
11. U/Pb and 206Pb/207Pb fractionation is calibrated relative to fragments of large Sri Lanka zircons and individual crystals of FC-1, and R33.
12. U decay constants and composition as follows: 238U = 9.8485 x 10⁻¹⁰, 235U = 1.55125 x 10⁻¹⁰, 238U/235U = 137.82.
13. U-Th disequilibrium correction is applied to 206/238 ages assuming a value of 2.3 for the magma.

Supplementary Table S3: Compiled Thermochronologic Data

sample	degrees E	degrees N	age	uncertainty	reference	system	unit	physiographic zone	notes
5045-7	88.44	29.343	8.1		0.95 Dai et al., 2013	A-He	Gangdese batholith	Yarlung suture	location estimated from figure
XC01	88.436	29.352	8.9		0.6 Dai et al., 2013	A-He	Gangdese batholith	Yarlung suture	location estimated from figure
XC04	88.437	29.351	10.9		0.7 Dai et al., 2013	A-He	Gangdese batholith	Yarlung suture	location estimated from figure
XC07	88.433	29.353	8.4		0.15 Dai et al., 2013	A-He	Gangdese batholith	Yarlung suture	location estimated from figure
XC09	88.43	29.355	10.1		0.55 Dai et al., 2013	A-He	Gangdese batholith	Yarlung suture	location estimated from figure
XC18	88.391	29.38	11.3		0.95 Dai et al., 2013	A-He	Gangdese batholith	Yarlung suture	location estimated from figure
N-59	89.279	30.204	10.9		0.2 Ge et al., 2016	A-He	Gangdese batholith	Yarlung suture	
X-20	88.253	29.372	9.5		0.5 Ge et al., 2016	A-He	Gangdese batholith	Yarlung suture	
X-37	88.214	29.657	12.3		0.6 Ge et al., 2016	A-He	Gangdese batholith	Yarlung suture	
DC-29	89.5034	31.2889	39.5		1.3 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-21	89.7747	31.2419	46.8		4.4 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-19	89.7781	31.2078	49		4.7 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-20	89.7804	31.2208	61.2		5.3 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-22B	89.8383	31.2734	54.2		3.7 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
DC-33	90.0143	31.3733	52		0.2 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-13	90.0153	31.3293	43.3		1.2 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-7	90.082	31.2753	47		4.7 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-105	90.1044	31.2885	49.5		1.2 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-34	90.1428	31.2944	42.4		1.2 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-35	90.1469	31.309	54.1		2.3 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-12	90.1504	31.3281	55.1		1.9 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-33	90.151	31.2879	45.4		1.5 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
DC-28	90.172	31.3746	45.5		2.1 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-14	90.1761	31.3136	50.2		4.3 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-85	90.3332	31.297	58.4		11.9 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-87	90.3544	31.1861	53		1.8 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-86	90.3545	31.2613	54.9		0.7 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-71B	90.5139	31.1702	48.2		2.6 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-72	90.5319	31.143	43.8		0.3 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-70	90.5591	31.0527	48.9		1.4 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-45	90.6566	31.151	46.4		2.6 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
DC-25	90.6762	31.1641	47.3		1.8 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-90	90.6772	31.1817	44.9		3.1 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-51	90.7063	31.0367	67.2		15.9 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
DC-38	90.7118	30.9527	40		1.1 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-47	90.7132	31.0002	55.7		17.5 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-50	90.7746	31.1043	57.7		5.6 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
DC-40	90.8623	30.9579	38.8		5.2 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
DC-41	90.9395	30.9366	50		2.9 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
DC-23	90.9415	30.994	34.8		1.1 Haider 2013	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-23	89.8048	31.4227	56.2		0.9 Hetzel 2011	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-24	89.8054	31.4434	56.3		0.7 Hetzel 2011	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-30	89.8959	31.4685	59		3.6 Hetzel 2011	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-29	89.8982	31.4433	53.6		1.2 Hetzel 2011	A-He	Cretaceous Granite	Northern Lhasa Terrane	
H-31	89.9194	31.4797	55.4		5.7 Hetzel 2011	A-He	Cretaceous Granite	Northern Lhasa Terrane	
DC-31	89.9208	31.4677	55.1		3.3 Hetzel 2011	A-He	Cretaceous Granite	Northern Lhasa Terrane	
DC-33	90.0143	31.3733	52		0.2 Hetzel 2011	A-He	Cretaceous Granite	Northern Lhasa Terrane	
T12-28	91.32	29.822	6.4		0.25 Li et al., 2016	A-He	Gangdese batholith	Yarlung suture	
T12-33	92.188	30.098	18		0.65 Li et al., 2016	A-He	Gangdese batholith	Yarlung suture	
T12-36	92.025	29.981	21.2		0.75 Li et al., 2016	A-He	Gangdese batholith	Yarlung suture	
T12-40	92.01	30.003	18.1		0.8 Li et al., 2016	A-He	Gangdese batholith	Yarlung suture	
T12-42	91.91	29.981	22.3		1 Li et al., 2016	A-He	Gangdese batholith	Yarlung suture	
JV3	84.5	31.5	44.7		1.1 Rohrmann 2012	A-He	Cretaceous Granite	Northern Lhasa Terrane	
PK3	89.02	31.41	54.6		1.3 Rohrmann 2012	A-He	Cretaceous Granite	Northern Lhasa Terrane	
PK5	89.08	31.5	49.9		0.7 Rohrmann 2012	A-He	Cretaceous Granite	Northern Lhasa Terrane	
JV1	89.88	31.34	44.8		0.6 Rohrmann 2012	A-He	Cretaceous Granite	Northern Lhasa Terrane	
JV4	89.89	31.36	52		0.7 Rohrmann 2012	A-He	Cretaceous Granite	Northern Lhasa Terrane	
JK6005	84.869	29.911	13.8		0.6 Carrapa et al., 2014	AFT	Gangdese batholith	Yarlung suture	
VP2	84.876	29.922	14.2		1.3 Carrapa et al., 2014	AFT	Gangdese batholith	Yarlung suture	
1LK260	84.861	29.907	17.1		2.9 Carrapa et al., 2014	AFT	Kailas	Yarlung suture	
1LK194DZ	84.861	29.907	16.1		2.5 Carrapa et al., 2014	AFT	Kailas	Yarlung suture	
GY1-M	86.542	29.528	14.4		2.8 Carrapa et al., 2014	AFT	Kailas	Yarlung suture	
M369	90.92	29.44	16.4		1.5 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
M370	90.92	29.44	16.2		1.2 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
M371	90.92	29.44	15.9		1.3 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
M372	90.92	29.44	15.3		1.4 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
M373	90.92	29.44	15		0.9 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
H-88-1	90.72	29.3	18.6		1.5 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
H-88-2	90.72	29.3	21.4		2.9 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
K-88-33A	90.71	29.84	45.2		5.9 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
K-88-33B	90.71	29.84	47		5.5 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
K-88-45	91.1	29.65	25.2		4.3 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
K-88-66	91.26	29.52	33.3		5.2 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
K-88-72	91.26	29.52	19.1		2.1 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
K-88-73	90.72	29.25	20.2		1.6 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-11	89.92	29.47	15.1		2.1 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-12	89.92	29.47	17.1		2.2 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-29	90.56	30.08	9.5		0.9 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-30	90.87	29.37	19.4		1.5 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-32	90.87	29.37	18.1		1.7 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-36	90.91	29.65	20.8		1.7 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-39A	90.91	29.65	19.9		1.8 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-39B	90.91	29.65	20.1		1.7 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-59	90.37	29.21	6.9		0.9 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
PC-88-65	91.42	29.26	24.9		2.3 Copeland et al., 1995	AFT	Gangdese batholith	Yarlung suture	
N-46	89.101	29.979	23		6.3 Ge et al., 2016	AFT	Carboniferous Sandstone	Yarlung suture	
N-47	89.085	29.998	18.2		3.3 Ge et al., 2016	AFT	Carboniferous Sandstone	Yarlung suture	
N-48	89.084	30.016	13.2		2.1 Ge et al., 2016	AFT	Carboniferous Sandstone	Yarlung suture	
N-44	89.101	29.914	17.3		5.7 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
N-50	89.084	30.047	15.6		1.8 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
N-52	89.118	30.092	16.6		1.2 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
N-53	89.134	30.1	22.1		0.9 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
N-55	89.151	30.115	24.1		1 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
N-56	89.168	30.122	12.8		0.7 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
N-59	89.279	30.204	36.9		3.1 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
X-14	88.814	29.36	16.6		1.4 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
X-20	88.253	29.372	23.7		2.1 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
X-21	88.261	29.435	9.4		0.6 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
X-23	88.23	29.466	25.4		3.9 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
X-25	88.224	29.492	25.4		6 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
X-28	88.215	29.54	23		2.4 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
X-33	88.23	29.601	25.4		3.8 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
X-37	88.214	29.657	28.6		2.8 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	

X-38	88.203	29.7	9.4	1.3 Ge et al., 2016	AFT	Gangdese batholith	Yarlung suture	
H-21	89.7747	31.2419	76.6	4.9 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-19	89.7781	31.2078	65	4.2 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-20	89.7804	31.2208	68.4	4.3 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-16	89.9504	31.4844	52.2	2.1 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
DC-33	90.0143	31.3733	59.6	2.4 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-7	90.082	31.2753	61.7	4.4 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-105	90.1044	31.2885	45.8	2.4 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-34	90.1428	31.2944	66.9	3.6 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-12	90.1504	31.3281	54.6	2.4 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-33	90.151	31.2879	60.1	3.3 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
DC-28	90.172	31.3746	58.8	2.9 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-85	90.3332	31.297	61.3	3 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-86	90.3545	31.2613	53.3	3.4 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-71B	90.5139	31.1702	72	4.3 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-72	90.5319	31.143	57.5	4.2 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-70	90.5591	31.0527	58.2	3.2 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-45	90.6566	31.151	57.3	2.8 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-90	90.6772	31.1817	61	3.7 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-49	90.7381	31.0037	45	3.6 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
DC-40	90.8623	30.9579	71.7	4 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
DC-26B	90.8914	31.3668	72.8	3.2 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
DC-41	90.9395	30.9366	88.5	5.5 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-4	91.222	30.878	64.1	3.9 Haider 2013	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-23	89.8048	31.4227	59.4	2.3 Hetzel 2011	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-24	89.8054	31.4434	58.5	3.3 Hetzel 2011	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-30	89.8959	31.4685	58.2	3 Hetzel 2011	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-29	89.8982	31.4433	56.8	2.8 Hetzel 2011	AFT	Cretaceous Granite	Northern Lhasa Terrane	
H-31	89.9194	31.4797	68.4	3.9 Hetzel 2011	AFT	Cretaceous Granite	Northern Lhasa Terrane	
DC-31	89.9208	31.4677	58.8	3 Hetzel 2011	AFT	Cretaceous Granite	Northern Lhasa Terrane	
DC-33	90.0143	31.3733	59.6	2.4 Hetzel 2011	AFT	Cretaceous Granite	Northern Lhasa Terrane	
T12-28	91.32	29.822	21.3	1.5 Li et al., 2016	AFT	Gangdese batholith	Yarlung suture	
T12-33	92.188	30.098	31	2.4 Li et al., 2016	AFT	Gangdese batholith	Yarlung suture	
T12-35	92.052	30.022	24.8	2.2 Li et al., 2016	AFT	Gangdese batholith	Yarlung suture	
T12-36	92.025	29.981	38.6	2.4 Li et al., 2016	AFT	Gangdese batholith	Yarlung suture	
T12-37	92.022	29.983	40.2	2.2 Li et al., 2016	AFT	Gangdese batholith	Yarlung suture	
T12-40	92.01	30.003	38.8	2.5 Li et al., 2016	AFT	Gangdese batholith	Yarlung suture	
T12-42	91.91	29.981	23.5	1.5 Li et al., 2016	AFT	Gangdese batholith	Yarlung suture	
T13-15-2	91.336	29.698	41.1	2.9 Li et al., 2016	AFT	Gangdese batholith	Yarlung suture	
T13-15-3	91.267	29.683	41.1	3.4 Li et al., 2016	AFT	Gangdese batholith	Yarlung suture	
AJX12-01	86.322	29.547	18.9	1.4 Wang et al., 2015	AFT	Gangdese batholith	Yarlung suture	
AJX12-02	86.326	29.549	17.9	1.3 Wang et al., 2015	AFT	Gangdese batholith	Yarlung suture	
AJX12-03	86.331	29.55	21.4	1.8 Wang et al., 2015	AFT	Gangdese batholith	Yarlung suture	
GDS12-02	86.359	29.644	23.4	1.7 Wang et al., 2015	AFT	Gangdese batholith	Yarlung suture	
GDS12-03	86.361	29.649	17.2	1.2 Wang et al., 2015	AFT	Gangdese batholith	Yarlung suture	
GDS12-04	86.429	29.693	19	1.6 Wang et al., 2015	AFT	Gangdese batholith	Yarlung suture	
GDS12-05	86.345	29.656	17.9	1.4 Wang et al., 2015	AFT	Gangdese batholith	Yarlung suture	
GDS12-06	86.31	29.65	17	1.1 Wang et al., 2015	AFT	Gangdese batholith	Yarlung suture	
GDS12-07	86.24	29.625	18.5	1.4 Wang et al., 2015	AFT	Gangdese batholith	Yarlung suture	
JV1	89.88	31.34	61.7	2.9 Rohmann 2012	AFT	Cretaceous Granite	Northern Lhasa Terrane	
JV4	89.89	31.36	53.7	2.6 Rohmann 2012	AFT	Cretaceous Granite	Northern Lhasa Terrane	
M369	90.91	29.5	26.8	0.2 Copeland et al., 1987	Ar-Ar bio	Gangdese batholith	Yarlung suture	isochron apparent age
M370	90.91	29.5	23.3	0.5 Copeland et al., 1987	Ar-Ar bio	Gangdese batholith	Yarlung suture	isochron apparent age
M371	90.91	29.5	19.7	0.3 Copeland et al., 1987	Ar-Ar bio	Gangdese batholith	Yarlung suture	isochron apparent age
M372	90.91	29.5	18.4	0.4 Copeland et al., 1987	Ar-Ar bio	Gangdese batholith	Yarlung suture	isochron apparent age
M373	90.91	29.5	17.8	0.1 Copeland et al., 1987	Ar-Ar bio	Gangdese batholith	Yarlung suture	isochron apparent age
6.17.1	84.444	29.923	19.7	0.1 Sanchez et al., 2013	Ar-Ar bio	Gangdese batholith	Yarlung suture	
JV4	89.89	31.36	119.7	0.3 Rohmann 2012	Ar-Ar bio	Cretaceous Granite	Northern Lhasa Terrane	cooling
JV4	89.89	31.36	96.5	0 Rohmann 2012	Ar-Ar feld	Cretaceous Granite	Northern Lhasa Terrane	cooling
1LK260	84.861	29.907	16.5	0.1 Carrapa et al., 2014	Z-Hf	Kailas	Yarlung suture	mean of 4 analyses, one older outlier ~21 included
GY1_M	86.542	29.528	21	0.3 Carrapa et al., 2014	Z-Hf	Kailas	Yarlung suture	youngest grain of 8, older dates between 25.2~42.9
5045-7	88.44	29.343	17.9	2.55 Dai et al., 2013	Z-Hf	Gangdese batholith	Yarlung suture	location estimated from figure
XC01	88.436	29.352	22.2	2.7 Dai et al., 2013	Z-Hf	Gangdese batholith	Yarlung suture	location estimated from figure
XC04	88.437	29.351	18.9	1.55 Dai et al., 2013	Z-Hf	Gangdese batholith	Yarlung suture	location estimated from figure
XC07	88.433	29.353	16.7	1.9 Dai et al., 2013	Z-Hf	Gangdese batholith	Yarlung suture	location estimated from figure
XC13	88.223	29.359	18.7	4.45 Dai et al., 2013	Z-Hf	Gangdese batholith	Yarlung suture	location estimated from figure
XC15	88.396	29.377	20.9	0.9 Dai et al., 2013	Z-Hf	Gangdese batholith	Yarlung suture	location estimated from figure
XC18	88.391	29.38	18.8	1.4 Dai et al., 2013	Z-Hf	Gangdese batholith	Yarlung suture	location estimated from figure
N-59	89.279	30.204	77.8	1.3 Ge et al., 2016	Z-Hf	Gangdese batholith	Yarlung suture	
DC-29	89.5034	31.2889	78.1	8.3 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-19	89.7781	31.2078	61.8	2.8 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-20	89.7804	31.2208	72.3	5.8 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-16	89.9504	31.4844	91	8 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
DC-33	90.0143	31.3733	69.2	4.4 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-13	90.0153	31.3293	84.4	6.9 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-7	90.082	31.2753	67.7	2.1 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-34	90.1428	31.2944	73.3	6.8 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-35	90.1469	31.309	69.3	4.8 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-33	90.151	31.2879	76.8	6.5 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-87	90.3544	31.1861	69.1	3.9 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-72	90.5319	31.143	77.5	4.4 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
DC-41	90.9395	30.9366	89.5	7.6 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
DC-23	90.9415	30.994	85.7	5.7 Haider 2013	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-23	89.8048	31.4227	77.1	7.9 Hetzel 2011	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-24	89.8054	31.4434	80.2	5 Hetzel 2011	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-30	89.8959	31.4685	94.1	9.1 Hetzel 2011	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-29	89.8982	31.4433	75.1	6.6 Hetzel 2011	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
H-31	89.9194	31.4797	66.7	3.2 Hetzel 2011	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
DC-31	89.9208	31.4677	85.1	4.7 Hetzel 2011	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
DC-33	90.0143	31.3733	74.8	1.7 Hetzel 2011	Z-Hf	Cretaceous Granite	Northern Lhasa Terrane	
62011PK6	84.813	29.944	18	0.2 Laskowski et al., 2017	Z-Hf	Gangdese batholith	Yarlung suture	
T12-28	91.32	29.822	23.2	0.8 Li et al., 2016	Z-Hf	Gangdese batholith	Yarlung suture	
T12-33	92.188	30.098	46.5	1.65 Li et al., 2016	Z-Hf	Gangdese batholith	Yarlung suture	
T12-36	92.025	29.981	43.3	1.5 Li et al., 2016	Z-Hf	Gangdese batholith	Yarlung suture	
T12-40	92.01	30.003	58	2.5 Li et al., 2016	Z-Hf	Gangdese batholith	Yarlung suture	
T12-42	91.91	29.981	51.9	1.9 Li et al., 2016	Z-Hf	Gangdese batholith	Yarlung suture	
T13-15-3	91.267	29.683	45.8	2 Li et al., 2016	Z-Hf	Gangdese batholith	Yarlung suture	
N-02	89.094	29.416	48.4	3.1 Ge et al., 2016	ZFT	Gangdese batholith	Yarlung suture	
N-06	89.102	29.482	51.6	2.3 Ge et al., 2016	ZFT	Gangdese batholith	Yarlung suture	
N-09	89.081	29.55	23.7	1.1 Ge et al., 2016	ZFT	Gangdese batholith	Yarlung suture	
X-21	88.261	29.435	36.1	1.8 Ge et al., 2016	ZFT	Gangdese batholith	Yarlung suture	
AJX12-01	86.322	29.547	50.9	2.6 Wang et al., 2015	ZFT	Gangdese batholith	Yarlung suture	
GDS12-01	86.359	29.676	56.2	4.2 Wang et al., 2015	ZFT	Gangdese batholith	Yarlung suture	