Yiming Liu, Yuhua Wang, Sanzhong Li, M. Santosh, Runhua Guo, and Shengyao Yu, 2020, Neoproterozoic Amdo and Jiayuqiao microblocks in the Tibetan Plateau: Implications for Rodinia reconstruction: GSA Bulletin, <https://doi.org/10.1130/B35632.1>.

Supplemental Material

Table S1. LA-ICP-MS U-Pb data for zircon grains of Neoproterozoic granitic gneisses from the central Tibetan Plateau.

Table S2. Trace element ($\times 10^{-6}$) compositions of zircons in Neoproterozoic granitic gneisses as measured by LA-ICP-MS.

Table S3. Hf isotopic compositions of zircons of the Neoproterozoic granitic gneisses from the central Tibetan Plateau.

Table S4. Whole-rock major and trace element compositions of the Neoproterozoic granitic gneisses.

Supplementary Table S1. LA-ICP-MS U-Pb data for zircon grains of Neoproterozoic granitic gneisses from the central Tibetan Plateau

Spot	$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$		$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$	
	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$
T1 granitic gneiss																
T1-01	0.091012	0.000837	2.757115	0.029707	0.219725	0.002811	0.074139	0.001455	1447	18	1344	8	1280	15	1446	27
T1-02	0.073644	0.000581	1.648274	0.018614	0.162332	0.001656	0.051775	0.000836	1031	16	989	7	970	9	1020	16
T1-03	0.082294	0.000577	2.055013	0.021851	0.181081	0.001777	0.053756	0.001018	1254	14	1134	7	1073	10	1058	20
T1-04	0.076075	0.000488	1.690077	0.017356	0.161065	0.001487	0.050209	0.000796	1098	13	1005	7	963	8	990	15
T1-05	0.106711	0.001005	4.431413	0.049259	0.301186	0.003875	0.082474	0.001506	1744	17	1718	9	1697	19	1602	28
T1-06	0.078706	0.000630	2.093299	0.025451	0.192860	0.002029	0.057759	0.000848	1165	15	1147	8	1137	11	1135	16
T1-07	0.071587	0.000531	1.603177	0.027937	0.162255	0.002422	0.046236	0.000915	976	16	971	11	969	13	914	18
T1-08	0.069350	0.000496	1.365162	0.024951	0.142686	0.002432	0.042310	0.000603	909	15	874	11	860	14	838	12
T1-09	0.070466	0.000456	1.383290	0.016562	0.142371	0.001622	0.042989	0.000601	943	14	882	7	858	9	851	12
T1-10	0.065789	0.000485	1.285127	0.017176	0.141630	0.001812	0.042817	0.000549	800	17	839	8	854	10	847	11
T1-11	0.071094	0.000667	1.590926	0.026897	0.162119	0.002159	0.047886	0.000679	961	23	967	11	969	12	945	13
T1-12	0.072732	0.000820	1.619515	0.023117	0.161476	0.001857	0.050315	0.000637	1006	23	978	9	965	10	992	12
T1-13	0.071031	0.000536	1.386967	0.018539	0.141649	0.001919	0.042239	0.000618	967	16	883	8	854	11	836	12
T1-14	0.065587	0.000786	1.130292	0.021002	0.124834	0.001668	0.039548	0.000500	794	25	768	10	758	10	784	10
T1-15	0.069766	0.000908	1.371347	0.021222	0.142513	0.001349	0.043375	0.000607	921	27	877	9	859	8	858	12
T1-16	0.098783	0.000920	3.719719	0.054166	0.273358	0.004930	0.074272	0.001128	2000	18	1576	12	1558	25	1448	21
T541 granitic gneiss																
T541-01	0.065379	0.000633	1.209521	0.018021	0.134142	0.001687	0.040695	0.000577	787	20	805	8	811	10	806	11
T541-02	0.067396	0.000709	1.245656	0.019061	0.134070	0.001769	0.042033	0.000612	850	22	821	9	811	10	832	12
T541-03	0.065589	0.002537	1.199127	0.074671	0.132332	0.005558	0.044543	0.001234	794	81	800	34	801	32	881	24
T541-04	0.070336	0.000571	1.301615	0.054050	0.133408	0.005146	0.045416	0.000765	939	17	846	24	807	29	898	15
T541-05	0.064288	0.000762	1.181373	0.019938	0.133295	0.002077	0.039679	0.000823	750	25	792	9	807	12	786	16

Spot	$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$		$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$	
	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$
T541-06	0.065724	0.000746	1.212306	0.017826	0.133641	0.001191	0.041071	0.000670	798	24	806	8	809	7	814	13
T541-07	0.070514	0.000886	1.289473	0.035881	0.132583	0.003375	0.047428	0.001043	943	26	841	16	803	19	937	20
T541-08	0.066907	0.000713	1.233811	0.018849	0.133705	0.001568	0.040901	0.000579	835	22	816	9	809	9	810	11
T541-09	0.066742	0.001495	1.223425	0.038833	0.133085	0.003778	0.040625	0.000853	831	46	811	18	805	21	805	17
T541-10	0.067030	0.000789	1.229922	0.018694	0.133253	0.001755	0.042368	0.000688	839	26	814	9	806	10	839	13
T541-11	0.065580	0.000731	1.002608	0.017110	0.110886	0.003002	0.038247	0.000993	794	24	705	9	678	17	759	19
T541-12	0.066454	0.000991	1.016513	0.019178	0.110883	0.001151	0.036282	0.000518	820	30	712	10	678	7	720	10
T541-13	0.066373	0.001038	1.208657	0.030065	0.132151	0.003296	0.039994	0.000758	818	33	805	14	800	19	793	15
T541-14	0.067534	0.000585	1.244676	0.020396	0.133668	0.001874	0.041797	0.001016	854	19	821	9	809	11	828	20
T541-15	0.068069	0.000958	1.248416	0.024791	0.133202	0.002616	0.039883	0.000935	872	29	823	11	806	15	790	18
T541-16	0.066866	0.000636	1.230269	0.024987	0.133404	0.002358	0.042237	0.000754	835	20	814	11	807	13	836	15
T541-17	0.067650	0.000687	1.038065	0.013929	0.111351	0.001362	0.036092	0.000514	857	21	723	7	681	8	717	10
T541-18	0.066691	0.000529	1.020381	0.019075	0.110847	0.001759	0.038458	0.000528	828	21	714	10	678	10	763	10
T541-19	0.067128	0.002104	1.235302	0.037329	0.133650	0.003030	0.038740	0.001041	843	65	817	17	809	17	768	20
T541-20	0.071030	0.001335	1.297566	0.035671	0.132453	0.002669	0.038283	0.000975	967	38	845	16	802	15	759	19
T541-21	0.067122	0.000714	1.224710	0.017465	0.132317	0.001392	0.038836	0.000510	843	22	812	8	801	8	770	10
T541-22	0.071598	0.001285	0.973610	0.029536	0.098306	0.001966	0.039073	0.000860	976	36	690	15	604	12	775	17
T541-23	0.068315	0.001317	1.251675	0.025967	0.132923	0.001852	0.040447	0.000669	880	39	824	12	805	11	801	13
T541-24	0.067011	0.000499	1.225987	0.019610	0.132710	0.002049	0.039694	0.000566	839	10	813	9	803	12	787	11
T553 granitic gneiss																
T553-01	0.065813	0.001831	1.146688	0.044661	0.126004	0.002585	0.042439	0.000599	1200	57	776	21	765	15	840	12
T553-02	0.070031	0.000743	1.219339	0.024307	0.126326	0.002561	0.045393	0.000635	929	21	809	11	767	15	897	12
T553-03	0.110806	0.001611	4.416464	0.096685	0.288935	0.006021	0.087076	0.001280	1813	26	1715	18	1636	30	1688	24
T553-04	0.095891	0.002387	3.395098	0.092658	0.256523	0.002199	0.076730	0.002591	1546	47	1503	21	1472	11	1494	49

Spot	$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$		$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$	
	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$
T553-05	0.068942	0.000598	1.208258	0.044495	0.126508	0.004272	0.045462	0.000768	898	17	804	20	768	24	899	15
T553-06	0.073367	0.000580	1.579388	0.021213	0.155946	0.001733	0.048408	0.000883	1033	15	962	8	934	10	955	17
T553-07	0.066849	0.000925	1.037800	0.022194	0.112522	0.002184	0.036326	0.000663	833	28	723	11	687	13	721	13
T553-08	0.068339	0.000798	1.193515	0.023858	0.126669	0.002234	0.041157	0.000581	880	24	798	11	769	13	815	11
T553-09	0.159175	0.002274	9.318532	0.178939	0.424179	0.002680	0.135295	0.010843	2447	19	2370	18	2279	12	2565	193
T553-10	0.070476	0.000702	1.229599	0.038949	0.126034	0.003397	0.044479	0.000720	943	20	814	18	765	19	880	14
T553-11	0.071928	0.000724	1.550867	0.029013	0.156237	0.002449	0.045067	0.000740	983	20	951	12	936	14	891	14
T553-12	0.097926	0.000679	3.420129	0.038407	0.253085	0.002289	0.074861	0.001032	1585	13	1509	9	1454	12	1459	19
T553-13	0.112665	0.001547	4.709091	0.107059	0.302827	0.004632	0.084968	0.001325	1843	58	1769	19	1705	23	1648	25
T553-14	0.070545	0.000440	1.521136	0.020730	0.156343	0.002068	0.044411	0.000701	944	18	939	8	936	12	878	14
T553-15	0.071046	0.000677	1.534065	0.018912	0.156613	0.002004	0.044916	0.000795	959	25	944	8	938	11	888	15
T553-16	0.052717	0.001023	0.272436	0.002942	0.037481	0.001080	0.055251	0.001945	317	44	245	2	237	7	1087	37
T553-17	0.059626	0.001360	0.757383	0.014079	0.092431	0.001582	0.041082	0.000932	591	50	572	8	570	9	814	18
T553-18	0.120059	0.000943	1.264413	0.022198	0.076220	0.001088	0.096591	0.001367	1957	15	830	10	474	7	1864	25
T553-19	0.062550	0.000290	0.708094	0.007587	0.082059	0.000641	0.032592	0.000711	694	9	544	5	508	4	648	14
T553-20	0.071360	0.000463	1.542451	0.016602	0.156780	0.001572	0.046625	0.000643	969	14	947	7	939	9	921	12
T553-21	0.104959	0.000763	3.836771	0.047995	0.265062	0.002986	0.076921	0.001175	1714	13	1600	10	1516	15	1498	22
T553-22	0.067201	0.000800	1.168522	0.031863	0.126090	0.003254	0.043293	0.000762	844	29	786	15	766	19	857	15
T553-23	0.064561	0.000881	0.815801	0.027619	0.091295	0.002205	0.043613	0.000633	761	29	606	15	563	13	863	12
T553-24	0.101556	0.001363	1.907462	0.114037	0.133896	0.006939	0.082193	0.001406	1654	25	1084	40	810	39	1597	26
T553-25	0.069925	0.001475	1.220403	0.031348	0.126543	0.002000	0.039790	0.000858	928	43	810	14	768	11	789	17
T655 granitic gneiss																
T655-01	0.163487	0.001211	10.396654	0.266090	0.460964	0.013820	0.112271	0.002202	2492	13	2471	24	2444	61	2151	40
T655-02	0.159827	0.000888	6.687636	0.167386	0.302599	0.007040	0.078238	0.002649	2454	10	2071	22	1704	35	1523	50

Spot	$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$		$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$	
	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$
T655-03	0.071980	0.000891	1.476524	0.020335	0.148826	0.002688	0.038769	0.000584	987	25	921	8	894	15	769	11
T655-04	0.161611	0.000628	9.559012	0.107448	0.428608	0.005510	0.108564	0.001392	2473	7	2393	10	2299	25	2083	25
T655-05	0.161250	0.001198	9.648972	0.192365	0.433662	0.008530	0.109461	0.001963	2469	12	2402	18	2322	38	2100	36
T655-06	0.107176	0.000602	4.067666	0.034000	0.275143	0.002352	0.076161	0.000977	1754	10	1648	7	1567	12	1484	18
T655-07	0.160229	0.001143	9.685741	0.139845	0.439020	0.008296	0.112803	0.001513	2458	12	2405	13	2346	37	2160	27
T655-08	0.072139	0.000597	1.475358	0.014941	0.148274	0.001271	0.043574	0.000578	991	17	920	6	891	7	862	11
T655-09	0.070981	0.000768	1.455939	0.019119	0.148652	0.001453	0.043150	0.000736	967	-6	912	8	893	8	854	14
T655-10	0.097453	0.000654	3.164796	0.029636	0.235441	0.002402	0.067788	0.001417	1576	12	1449	7	1363	13	1326	27
T655-11	0.163715	0.001116	8.847094	0.104436	0.391732	0.004364	0.107300	0.001754	2494	11	2322	11	2131	20	2060	32
T655-12	0.069808	0.000508	1.434725	0.012333	0.149013	0.001695	0.042545	0.000812	924	15	904	5	895	10	842	16
T655-13	0.070704	0.000627	1.444942	0.015435	0.148124	0.001200	0.046277	0.000872	950	19	908	6	890	7	914	17
T655-14	0.163512	0.001347	9.205739	0.092526	0.408160	0.003538	0.107673	0.001315	2492	13	2359	9	2207	16	2067	24
T655-15	0.080773	0.000480	2.089824	0.020543	0.187531	0.001553	0.055143	0.000769	1217	11	1145	7	1108	8	1085	15
T655-16	0.070288	0.001604	1.439832	0.043507	0.149152	0.005809	0.037788	0.000877	937	42	906	18	896	33	750	17
T655-17	0.162010	0.001080	8.289941	0.179130	0.370752	0.007595	0.108166	0.001447	2477	11	2263	20	2033	36	2076	26
T655-18	0.072438	0.000724	1.489719	0.037152	0.149134	0.003630	0.046715	0.000878	998	15	926	15	896	20	923	17
T655-19	0.092421	0.000668	3.079118	0.029032	0.241637	0.001979	0.068403	0.001104	1476	19	1428	7	1395	10	1337	21
T655-20	0.071087	0.001806	1.448751	0.095402	0.148061	0.010360	0.045272	0.000908	961	52	909	40	890	58	895	18
T655-21	0.096530	0.001060	3.134251	0.038640	0.235485	0.002066	0.070342	0.001338	1558	25	1441	10	1363	11	1374	25
T655-22	0.104495	0.000985	2.957839	0.056058	0.205352	0.003959	0.072060	0.001076	1706	18	1397	14	1204	21	1406	20
T655-23	0.165292	0.001312	9.230469	0.102774	0.404961	0.003783	0.107918	0.001710	2511	13	2361	10	2192	17	2071	31
T655-24	0.070289	0.001660	1.432270	0.041694	0.148482	0.006344	0.044437	0.000933	937	49	902	17	892	36	879	18
T655-25	0.112820	0.000747	4.119800	0.054563	0.265027	0.003749	0.076777	0.001004	1856	12	1658	11	1516	19	1495	19
T655-26	0.114647	0.001673	4.973872	0.082979	0.314688	0.004453	0.084118	0.002284	1876	27	1815	14	1764	22	1632	43

Spot	$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$		$^{207}\text{Pb}/^{206}\text{Pb}$		$^{207}\text{Pb}/^{235}\text{U}$		$^{206}\text{Pb}/^{238}\text{U}$		$^{208}\text{Pb}/^{232}\text{Th}$	
	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Ratio	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$	Age	$\pm 1\sigma$
T655-27	0.067433	0.001872	1.392207	0.093241	0.149385	0.008604	0.041001	0.002050	850	58	886	40	898	48	812	40
T655-28	0.071537	0.000609	1.464442	0.015684	0.148536	0.001327	0.043773	0.000670	972	18	916	6	893	7	866	13
T655-29	0.071524	0.002528	1.464065	0.017994	0.148667	0.003593	0.042038	0.000952	972	72	916	7	893	20	832	18
T655-30	0.071355	0.000544	1.461871	0.019555	0.148539	0.001651	0.043899	0.000851	969	15	915	8	893	9	868	16
T655-31	0.167536	0.001222	10.386221	0.160268	0.449464	0.006560	0.115530	0.002567	2533	13	2470	14	2393	29	2210	47
T655-32	0.073468	0.000655	1.501717	0.018347	0.148206	0.001471	0.043670	0.000644	1028	23	931	7	891	8	864	12
T655-33	0.127445	0.002862	3.657974	0.032332	0.208114	0.003231	0.057324	0.002713	2065	34	1562	7	1219	17	1127	52
T655-34	0.092019	0.000922	1.494785	0.024558	0.117740	0.001644	0.069325	0.001294	1533	19	928	10	718	9	1355	24
T655-35	0.161245	0.001053	8.105675	0.078187	0.364453	0.003669	0.094591	0.001270	2469	11	2243	9	2003	17	1827	23
T655-36	0.082807	0.001223	2.091778	0.038557	0.183145	0.005929	0.052491	0.001577	1265	30	1146	13	1084	32	1034	30
T655-37	0.252436	0.001565	18.114517	0.524048	0.519005	0.013963	0.143240	0.001877	3600	10	2996	28	2695	59	2706	33
T655-38	0.070775	0.000772	1.273147	0.014684	0.130531	0.001558	0.041995	0.000557	950	22	834	7	791	9	831	11
T655-39	0.097666	0.015898	1.553492	0.215605	0.117938	0.006402	0.073947	0.004855	1580	309	952	86	719	37	1442	91
T655-40	0.069977	0.001462	1.432958	0.033171	0.148933	0.006592	0.059796	0.001835	928	43	903	14	895	37	1174	35
T655-41	0.071467	0.000521	1.464970	0.014968	0.148596	0.001243	0.041075	0.000524	972	10	916	6	893	7	814	10
T655-42	0.067389	0.000809	1.215145	0.015648	0.131129	0.002249	0.036308	0.000486	850	21	808	7	794	13	721	9
T655-43	0.094733	0.000941	2.097924	0.100149	0.158825	0.006847	0.066000	0.000947	1524	19	1148	33	950	38	1292	18
T655-44	0.071019	0.000985	1.455696	0.068923	0.148765	0.007399	0.040781	0.001142	967	29	912	29	894	42	808	22
T655-45	0.069212	0.001306	1.411878	0.030508	0.148328	0.004006	0.044321	0.000777	906	39	894	13	892	22	877	15
T655-46	0.166648	0.001374	3.444803	0.090029	0.149616	0.003492	0.118514	0.001545	2524	14	1515	21	899	20	2264	28

Supplementary Table S2. Trace element ($\times 10^{-6}$) compositions of zircons in Neoproterozoic granitic gneisses as measured by LA-ICP-MS

Spot	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Th	U	Y	Nb	Pb
T1 granitic gneiss																			
T1-01	0.24	7.19	0.06	0.73	1.65	0.42	9.19	3.38	46.37	17.58	82.16	19.78	215.37	35.10	113.95	562.32	515.46	1.51	141.05
T1-02	0.06	4.16	0.37	6.06	11.35	0.29	55.10	18.26	204.68	68.06	263.44	54.72	488.37	67.88	403.43	294.92	1867.48	1.71	68.69
T1-03	0.03	3.92	0.03	0.41	0.88	0.13	4.92	1.94	25.96	11.10	60.05	17.04	222.03	49.31	115.33	1046.74	359.22	3.03	208.12
T1-05	0.03	0.61	0.04	0.58	2.49	0.10	19.50	8.36	95.37	30.10	120.77	26.57	253.64	39.09	53.38	520.72	876.44	0.70	92.00
T1-08	1.62	15.20	0.99	7.70	8.33	0.74	42.17	12.93	149.15	51.76	205.91	41.80	373.98	57.41	183.58	280.35	1328.17	4.61	106.24
T1-09	0.02	5.27	0.09	1.74	3.64	0.22	19.56	6.72	80.52	28.44	120.45	26.43	248.97	38.01	118.87	218.55	770.70	1.62	50.94
T1-11	0.70	2.04	0.22	1.69	3.55	0.10	27.16	12.14	163.70	61.51	262.93	56.63	497.17	73.24	66.74	368.57	1781.03	0.65	65.82
T1-12	236.46	255.78	30.58	116.96	17.08	1.72	36.14	14.86	200.51	79.93	384.93	92.30	906.09	145.53	281.78	1028.52	2336.26	3.81	164.57
T1-13	0.08	2.33	0.09	1.32	4.70	0.13	31.13	12.32	135.30	43.43	166.18	33.68	291.12	43.06	159.74	596.75	1216.58	1.03	95.79
T1-14	0.32	25.90	0.12	2.02	4.84	0.17	33.82	13.95	183.10	71.14	325.26	72.67	665.46	99.44	666.86	928.28	1949.52	41.01	163.14
T1-15	0.07	4.80	0.47	8.19	14.42	0.51	77.44	26.60	308.44	107.35	433.61	89.97	803.90	115.53	219.50	177.80	2075.89	2.04	39.45
T1-16	0.01	5.74	0.10	1.94	4.12	0.56	21.37	7.04	79.51	27.93	117.84	24.81	229.48	36.71	59.37	87.83	748.90	3.68	17.67
T1-17	0.07	1.53	0.05	0.96	3.02	0.09	21.77	9.69	130.99	50.71	231.59	52.99	509.65	78.10	120.35	523.04	1441.99	1.16	82.35
T1-18	0.04	19.92	0.29	4.58	7.52	2.06	32.98	9.79	109.62	39.84	172.36	39.83	397.89	64.58	247.62	138.86	1151.55	0.91	27.00
T1-19	0.03	6.32	0.18	2.98	5.97	1.03	33.12	10.89	128.62	46.26	195.98	43.24	409.84	63.55	85.53	110.11	1237.02	1.02	19.84
T1-20	0.00	3.42	0.02	0.71	1.56	0.43	12.08	4.43	55.86	21.99	97.72	22.27	215.87	35.17	106.97	170.46	610.06	0.60	57.15
T541 granitic gneiss																			
T541-01	0.01	7.89	0.07	1.51	4.46	0.52	27.62	10.50	137.29	54.05	246.42	54.45	533.82	86.54	261.32	312.56	1441.93	6.46	53.06
T541-02	0.07	9.19	0.09	1.75	5.43	1.01	35.81	13.31	168.79	63.73	285.84	62.93	609.17	96.55	132.44	184.69	1735.21	1.36	30.99
T541-03	0.00	11.94	0.05	1.14	3.18	0.45	16.82	6.17	82.50	30.18	141.48	31.16	317.76	51.79	294.94	342.24	945.07	2.68	55.40
T541-04	0.02	2.61	0.05	1.12	3.27	0.26	21.96	8.91	119.59	46.76	218.62	50.25	508.59	80.37	100.06	330.64	1280.04	1.32	47.70
T541-05	0.00	3.00	0.03	0.91	2.47	0.20	19.69	7.70	99.05	38.31	177.24	39.62	392.71	65.34	231.46	524.91	1055.38	2.69	81.47
T541-06	0.02	9.91	0.03	0.71	1.57	0.43	10.25	3.96	50.93	21.24	103.47	24.83	269.86	47.49	121.60	152.34	594.59	1.21	25.73

Spot	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Th	U	Y	Nb	Pb
T541-07	0.03	1.32	0.07	0.93	2.95	0.15	19.49	7.87	90.97	33.47	141.92	30.79	301.84	48.81	51.70	197.51	902.29	0.71	30.29
T541-08	0.04	19.42	0.06	1.16	3.27	0.71	18.81	6.55	80.49	30.91	139.13	30.62	309.73	49.71	175.72	180.61	849.31	2.24	31.42
T541-09	0.02	11.21	0.04	0.59	2.71	0.53	19.50	7.66	100.93	40.31	186.26	43.35	434.32	75.50	134.58	186.53	1094.73	2.47	30.85
T541-10	0.02	14.97	0.09	1.73	4.60	0.92	25.79	9.25	114.49	43.69	190.57	42.26	414.62	66.19	148.35	172.58	1175.26	1.91	29.46
T541-11	0.00	10.70	0.12	2.56	5.08	1.31	40.77	14.04	188.45	79.56	371.47	80.52	832.07	134.20	382.42	458.08	1991.29	4.94	66.03
T541-12	0.01	9.22	0.04	0.84	1.86	0.39	10.91	4.77	62.26	26.38	127.84	31.03	330.06	57.95	274.37	373.38	772.21	1.71	52.19
T541-13	0.03	26.17	0.06	1.27	3.87	0.93	29.93	12.33	161.29	66.29	302.79	72.05	718.63	119.54	300.50	438.37	1829.12	6.18	71.38
T541-14	0.02	14.40	0.12	2.16	4.57	1.20	25.01	8.65	104.97	40.16	175.78	39.58	406.64	67.21	193.80	214.36	1140.82	1.44	36.44
T541-15	0.09	20.37	0.12	1.96	4.67	0.95	27.06	9.96	122.76	47.27	219.34	52.24	531.68	90.01	305.09	360.52	1388.17	2.72	60.86
T541-16	0.02	18.45	0.05	0.94	2.72	0.63	17.94	7.03	92.21	36.72	174.70	42.58	449.37	74.46	188.80	307.70	1071.93	3.09	50.01
T541-17	0.37	17.46	0.32	3.00	4.81	1.00	24.91	9.10	116.68	46.41	222.14	53.95	580.21	95.02	482.78	532.24	1352.55	3.06	77.73
T541-18	0.02	19.77	0.21	4.24	8.40	2.23	42.42	14.07	165.50	61.10	265.38	60.73	616.59	100.75	278.77	270.15	1636.92	1.85	40.55
T541-19	0.01	13.84	0.04	1.12	2.88	0.50	19.14	7.33	93.30	37.31	171.30	40.97	403.66	69.77	115.53	159.21	1044.10	1.59	26.45
T541-20	0.10	3.41	0.06	1.21	3.05	0.36	19.13	7.45	91.13	36.18	161.71	35.33	357.16	58.98	69.13	115.24	983.45	1.04	18.54
T541-21	0.43	21.93	0.15	1.69	3.32	0.78	21.83	8.23	102.75	40.65	187.91	43.36	444.87	76.85	341.42	407.34	1131.21	3.15	68.50
T541-22	0.03	2.04	0.03	0.63	1.92	0.12	12.05	5.36	72.49	28.55	132.94	31.51	318.43	49.51	62.02	239.58	761.33	1.15	27.67
T541-23	0.21	20.25	0.14	1.82	2.75	0.78	17.39	6.67	89.80	37.25	184.57	46.51	509.51	92.81	93.37	148.20	1036.84	2.80	24.22
T541-24	0.05	21.68	0.09	1.66	4.16	0.92	25.67	10.13	130.22	51.51	240.06	55.71	569.97	93.74	317.92	463.05	1402.27	3.92	74.84
T553 granitic gneiss																			
T553-01	0.01	0.97	0.01	0.06	0.22	0.08	1.10	0.58	9.41	4.16	21.87	6.01	68.55	11.33	85.18	94.84	111.61	1.99	15.85
T553-02	0.01	8.61	0.04	0.74	1.48	0.08	8.22	2.93	34.90	13.07	56.10	12.18	115.16	17.21	157.00	248.71	372.07	1.41	39.87
T553-03	0.00	4.90	0.07	1.70	3.74	0.08	25.25	8.97	116.09	41.93	177.09	36.82	349.79	52.14	188.62	432.51	1173.91	2.79	152.75
T553-04	0.01	11.39	0.03	0.61	1.34	0.21	11.54	3.95	52.50	21.26	98.95	22.02	232.06	38.54	152.57	306.21	551.49	2.48	96.19
T553-05	0.03	42.59	0.29	4.99	8.78	3.04	37.77	11.13	121.30	42.22	179.16	40.25	408.85	65.01	382.23	391.05	1149.41	2.19	65.53
T553-06	0.01	1.55	0.04	0.78	2.86	0.11	21.35	8.78	111.44	40.77	176.43	40.09	409.36	62.56	91.93	410.96	1154.48	1.30	71.80

Spot	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Th	U	Y	Nb	Pb
T553-07	0.11	0.79	0.12	0.80	2.32	0.27	13.65	4.55	49.72	13.61	47.58	9.53	82.55	11.86	67.74	505.22	409.34	1.22	62.41
T553-08	0.03	7.91	0.26	4.23	7.81	0.89	39.46	12.64	147.29	52.19	211.82	44.09	424.47	64.39	85.63	105.94	1393.58	1.89	17.35
T553-09	0.00	20.15	0.13	1.06	2.53	1.18	11.54	4.03	44.33	18.18	95.88	22.69	281.03	43.93	99.29	157.25	521.37	0.90	89.37
T553-10	0.01	0.67	0.03	0.63	2.77	0.14	18.31	6.77	70.77	19.10	63.98	11.77	102.07	14.41	70.22	568.25	544.62	0.90	79.94
T553-11	0.07	2.78	0.33	5.26	8.48	0.45	34.07	9.83	106.21	34.91	137.34	28.33	268.23	39.65	141.74	267.61	954.64	1.12	49.32
T553-12	0.11	6.30	0.04	0.55	0.88	0.38	5.33	1.78	24.65	9.91	48.87	12.93	157.45	30.83	103.77	261.26	299.81	1.11	79.67
T553-13	0.03	5.30	0.05	0.90	1.82	0.06	10.16	3.40	43.03	16.46	72.31	15.61	153.38	23.94	98.48	196.64	470.92	1.80	73.91
T553-14	0.02	1.54	0.11	2.29	6.76	0.31	37.72	11.44	101.43	27.10	92.23	17.49	153.66	21.97	119.97	514.45	763.79	0.99	90.00
T553-15	0.01	3.92	0.03	0.82	3.02	0.07	20.54	9.39	127.44	48.42	214.07	47.91	473.85	72.05	191.54	858.68	1359.73	2.53	151.61
T553-16	0.05	1.65	0.01	0.26	0.47	0.29	4.33	1.88	20.24	6.03	25.81	5.92	56.83	8.08	18.93	511.79	191.81	0.96	21.07
T553-17	0.06	2.80	0.19	3.44	7.43	0.57	38.61	13.24	149.29	50.81	204.02	42.29	390.07	60.81	75.01	227.59	1437.62	1.37	24.75
T553-18	0.02	7.24	0.05	0.73	1.46	0.32	8.83	2.82	31.29	11.04	47.51	11.02	111.42	17.74	40.24	485.50	326.61	1.39	44.84
T553-19	3.66	23.04	1.34	7.16	4.15	0.73	16.51	6.43	77.29	29.36	133.52	32.38	313.95	50.87	151.31	400.73	829.78	5.06	39.40
T553-20	0.01	1.27	0.06	1.29	4.52	0.12	30.53	10.86	113.65	32.98	114.40	22.05	187.97	26.24	100.17	423.38	949.56	0.78	73.80
T553-21	0.02	5.94	0.03	0.63	1.54	0.16	9.88	3.68	46.45	17.77	73.85	16.60	163.67	26.28	118.68	610.07	513.04	6.64	184.75
T553-22	0.10	6.65	0.50	7.04	11.59	0.96	48.00	14.80	159.96	56.16	227.05	46.96	423.98	64.31	290.62	226.11	1540.14	2.13	41.39
T553-23	0.04	33.38	0.11	1.76	2.69	0.56	11.96	3.66	42.64	15.96	70.95	17.16	179.14	28.90	192.39	392.31	495.02	2.21	44.79
T553-24	0.02	2.17	0.04	0.57	1.34	0.14	7.28	2.63	31.30	11.33	48.85	10.72	103.73	15.88	41.54	183.63	324.60	1.80	28.01
T553-25	0.05	14.91	0.03	0.52	0.98	0.53	6.08	2.46	33.96	16.10	89.13	27.47	348.58	70.06	168.24	195.80	585.83	2.58	32.49
T655 granitic gneiss																			
T655-01	0.02	30.69	0.27	6.03	14.57	1.30	67.59	19.51	203.44	65.24	243.44	49.42	410.73	63.13	709.60	384.99	1719.59	2.52	286.03
T655-02	0.09	25.33	0.15	1.69	3.15	0.89	14.50	5.04	59.70	21.57	97.69	24.95	270.57	45.99	265.49	466.74	634.57	2.42	182.06
T655-03	0.00	1.52	0.06	1.22	4.44	0.13	28.89	9.92	104.29	31.49	112.47	21.88	192.42	27.82	126.43	567.91	901.49	0.91	96.07
T655-04	0.00	7.22	0.15	2.88	6.50	1.37	33.81	10.44	114.86	37.99	143.26	30.80	272.71	41.17	108.22	95.84	1011.75	0.89	59.68
T655-05	0.00	30.10	0.03	0.52	1.47	0.26	9.24	3.50	41.67	16.90	74.35	19.10	198.82	33.41	199.63	250.81	487.48	3.95	148.43

Spot	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Th	U	Y	Nb	Pb
T655-06	0.00	9.63	0.02	0.55	1.55	0.07	10.06	4.13	54.72	21.58	98.33	23.06	233.62	35.53	136.27	398.81	592.01	8.81	132.67
T655-07	0.05	12.22	0.11	1.75	3.66	0.25	20.49	6.67	79.37	28.84	121.26	26.89	255.21	39.29	144.93	215.77	841.90	2.96	125.34
T655-08	0.01	12.75	0.08	1.60	3.48	0.18	18.88	6.53	77.58	27.92	119.30	26.84	263.02	41.12	136.46	245.10	788.73	3.92	45.00
T655-09	0.01	1.88	0.09	1.83	6.06	0.11	42.03	17.46	213.30	74.30	303.12	64.72	590.58	85.18	167.69	520.41	2066.17	1.34	90.41
T655-10	0.02	17.48	0.16	3.26	7.02	0.25	36.06	12.95	156.46	57.50	242.97	54.41	517.75	74.28	702.49	1071.24	1583.47	7.19	324.70
T655-11	0.01	21.44	0.08	1.58	3.16	0.31	14.55	4.92	54.39	18.92	79.53	17.84	179.30	27.11	200.15	205.06	551.88	2.13	113.77
T655-12	0.01	1.31	0.03	0.76	2.68	0.10	19.02	7.24	86.58	30.49	125.84	28.23	267.08	41.11	89.58	521.10	864.47	1.06	87.08
T655-13	0.00	16.62	0.05	1.00	2.31	0.48	15.47	6.52	86.77	34.53	164.46	41.47	436.68	71.02	472.22	959.71	1102.18	0.83	173.60
T655-14	0.06	34.43	0.64	10.34	15.12	0.76	54.63	16.37	175.25	59.46	240.49	51.31	478.36	72.57	845.51	656.10	1640.50	4.20	399.24
T655-15	0.01	0.50	0.03	0.51	2.38	0.06	19.74	7.81	82.64	24.89	93.01	18.98	174.45	26.23	64.83	484.61	724.63	0.67	101.74
T655-16	0.01	0.85	0.02	0.48	2.08	0.07	18.08	7.07	80.98	24.65	91.44	18.29	172.31	25.70	74.92	531.55	775.52	0.66	83.11
T655-17	0.02	33.99	0.05	0.97	2.48	0.28	13.51	4.82	56.86	20.85	89.24	20.30	202.36	31.05	275.50	147.72	610.28	3.23	89.98
T655-18	0.01	0.99	0.06	1.10	4.24	0.07	31.17	13.46	156.65	49.58	192.89	40.32	366.07	47.95	117.10	528.63	1450.33	1.27	88.87
T655-19	0.00	15.01	0.07	1.35	3.04	0.14	16.35	5.67	67.36	24.80	105.42	23.47	228.54	34.56	162.46	279.16	692.37	5.63	83.87
T655-20	0.05	23.03	0.07	0.66	0.73	0.21	3.72	1.64	23.04	10.13	52.81	16.10	196.83	40.08	219.36	351.59	327.19	1.60	62.72
T655-21	3.38	30.99	1.46	8.96	7.58	0.85	33.83	11.91	146.73	55.38	239.67	55.33	558.23	83.11	253.66	290.61	1463.63	3.31	91.43
T655-22	0.03	1.52	0.06	0.95	2.86	0.29	22.24	10.26	139.05	54.74	248.10	60.11	636.59	97.08	70.26	444.14	1519.96	1.06	104.62
T655-23	0.03	24.72	0.12	1.84	3.09	0.76	15.90	4.86	56.07	20.34	88.51	21.01	218.05	36.25	196.63	208.61	589.02	1.77	118.22
T655-24	0.00	2.84	0.09	1.80	4.22	0.13	18.73	6.49	72.79	24.63	96.08	20.62	195.06	27.53	143.77	215.64	711.91	1.33	39.28
T655-25	0.02	7.60	0.08	1.60	4.02	0.13	23.31	8.40	101.10	37.76	162.85	37.02	364.29	55.13	271.33	398.65	1056.55	3.26	136.87
T655-26	0.01	5.10	0.06	1.30	2.16	0.07	12.85	4.48	54.27	19.82	82.59	18.44	176.98	27.47	82.48	101.74	546.75	1.86	42.25
T655-27	0.00	19.80	0.09	1.56	3.20	0.77	14.98	5.43	61.17	23.38	103.82	24.12	245.39	40.88	84.28	69.17	677.93	1.35	13.18
T655-28	0.03	6.73	0.08	1.50	3.74	0.12	18.56	6.66	74.95	27.14	111.56	24.69	234.43	34.52	235.50	234.75	735.26	2.16	47.08
T655-29	0.05	10.48	0.13	2.84	6.99	0.40	31.06	10.04	110.18	36.96	146.71	31.69	292.55	43.87	194.64	226.11	998.94	3.04	43.90
T655-30	0.05	7.43	0.43	7.33	11.67	0.32	47.26	14.80	155.64	52.10	201.16	41.91	394.84	55.79	428.83	513.80	1373.74	1.69	99.58

Spot	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Th	U	Y	Nb	Pb
T655-31	21.46	129.60	19.23	110.81	39.25	2.19	49.37	9.88	84.57	26.25	108.75	24.56	257.51	42.32	196.04	175.29	740.15	4.37	114.63
T655-32	0.01	5.60	0.07	1.09	1.49	0.63	5.82	1.97	24.87	10.52	53.41	15.46	200.80	39.53	89.67	197.70	340.87	0.65	35.34
T655-33	0.14	8.77	0.14	1.00	2.63	0.42	12.14	5.30	65.91	26.22	122.74	28.38	293.62	47.81	190.17	856.88	784.89	13.64	213.05
T655-34	0.04	3.61	0.06	0.54	1.06	0.20	8.09	4.10	63.50	26.81	140.15	39.80	480.73	80.89	61.50	423.34	784.75	1.49	58.90
T655-35	0.01	9.24	0.05	0.87	2.59	0.11	15.72	5.21	62.70	22.67	96.22	20.79	203.11	31.24	168.63	598.72	669.17	2.87	270.63
T655-36	0.00	0.54	0.01	0.48	2.57	0.04	19.75	7.83	81.17	25.86	99.12	20.05	193.63	28.16	66.43	451.49	802.73	0.74	93.50
T655-37	0.01	18.79	0.11	1.90	4.43	1.66	27.57	10.18	133.96	53.26	248.35	58.93	610.83	102.64	105.57	178.98	1491.47	3.54	130.38
T655-38	0.19	5.25	0.39	4.16	4.94	0.45	23.68	7.92	95.26	35.65	155.89	36.21	368.66	57.09	106.02	388.16	984.43	2.10	58.99
T655-39	0.14	0.72	0.64	0.67	1.14	0.56	5.18	2.73	47.63	20.48	107.98	30.15	357.39	65.66	18.18	286.84	732.09	0.16	38.07
T655-40	0.01	0.69	0.02	0.32	1.42	0.13	14.75	6.55	83.21	28.94	114.89	25.09	232.60	33.99	32.39	410.26	860.86	0.79	67.17
T655-41	0.01	1.92	0.08	1.66	5.51	0.08	37.49	15.36	188.70	66.47	272.10	58.32	530.86	77.81	157.00	429.08	1852.09	1.14	75.06
T655-42	0.03	111.48	0.23	4.00	7.54	4.84	34.48	9.63	95.26	30.62	119.35	24.99	229.63	33.49	479.67	227.96	878.14	3.32	48.94
T655-43	0.06	6.86	0.14	2.32	5.25	0.32	29.01	10.96	137.48	52.35	237.82	59.19	638.10	99.89	279.80	465.90	1439.80	1.48	100.35
T655-44	66.40	156.34	23.15	116.07	34.10	1.37	63.80	14.26	127.23	38.32	148.75	31.22	291.28	42.99	137.11	271.15	1036.38	1.60	47.77
T655-45	0.01	1.13	0.03	0.65	2.42	0.10	18.84	8.57	125.74	50.55	227.63	50.85	479.01	71.59	37.92	208.26	1443.14	0.96	34.69
T655-46	0.08	11.45	0.34	4.66	6.35	0.99	34.58	12.32	153.24	58.99	266.27	66.27	719.60	116.28	235.15	476.79	1547.42	2.20	110.35

Supplementary Table S3. Hf isotopic compositions of zircons of the Neoproterozoic granitic gneisses from the central Tibetan Plateau

Spot	Age (Ma)	$^{176}\text{Yb}/^{177}\text{Hf}$	2σ	$^{176}\text{Lu}/^{177}\text{Hf}$	2σ	$^{176}\text{Hf}/^{177}\text{Hf}$	2σ	$\varepsilon_{\text{Hf}}(0)$	$\varepsilon_{\text{Hf}}(t)$	2σ	T_{DM} (Ma)	T_{DM}^{C} (Ma)	f_{LuHf}
T1 granitic gneiss													
T1-1	967	0.031445	0.001022	0.000785	0.000019	0.282089	0.000016	-24.2	-3.3	3.3	1630	2031	-0.98
T1-2	967	0.016272	0.000391	0.000404	0.000008	0.281914	0.000012	-30.3	-9.3	9.3	1853	2401	-0.99
T1-4	967	0.030105	0.001589	0.000682	0.000033	0.282096	0.000015	-23.9	-3.0	3.0	1617	2011	-0.98
T1-7	857	0.026110	0.000545	0.000590	0.000012	0.281994	0.000015	-27.5	-8.9	8.9	1752	2299	-0.98
T1-8	857	0.055192	0.000376	0.001253	0.000004	0.282168	0.000018	-21.4	-3.2	3.2	1540	1938	-0.96
T1-9	967	0.059646	0.002787	0.001598	0.000082	0.282221	0.000018	-19.5	0.8	-0.8	1479	1770	-0.95
T1-10	967	0.017589	0.000185	0.000434	0.000003	0.282167	0.000019	-21.4	-0.3	0.3	1508	1842	-0.99
T1-11	857	0.039681	0.000049	0.000932	0.000003	0.282089	0.000014	-24.2	-5.8	5.8	1636	2101	-0.97
T1-12	857	0.040162	0.000198	0.000981	0.000003	0.282366	0.000020	-14.4	4.0	-4.0	1252	1487	-0.97
T541 granitic gneiss													
T541-1	807	0.071981	0.001527	0.001769	0.000033	0.282293	0.000019	-16.9	-0.1	0.1	1383	1707	-0.95
T541-2	807	0.076167	0.000736	0.001912	0.000026	0.282345	0.000017	-15.1	1.7	-1.7	1314	1596	-0.94
T541-3	807	0.024283	0.000442	0.000666	0.000011	0.282312	0.000017	-16.3	1.2	-1.2	1316	1626	-0.98
T541-4	807	0.037374	0.000145	0.001114	0.000017	0.282386	0.000016	-13.7	3.5	-3.5	1229	1477	-0.97
T541-5	807	0.055218	0.000955	0.001750	0.000043	0.282238	0.000021	-18.9	-2.0	2.0	1461	1828	-0.95
T541-6	807	0.050167	0.000952	0.001308	0.000026	0.282264	0.000019	-18.0	-0.9	0.9	1407	1755	-0.96
T541-7	807	0.048465	0.000789	0.001294	0.000029	0.282226	0.000018	-19.3	-2.2	2.2	1459	1839	-0.96
T541-8	807	0.044493	0.000328	0.001123	0.000009	0.282199	0.000017	-20.2	-3.1	3.1	1490	1893	-0.97
T541-9	807	0.144106	0.007731	0.003652	0.000200	0.282369	0.000022	-14.3	1.6	-1.6	1343	1601	-0.89
T541-10	807	0.043884	0.000603	0.001133	0.000015	0.282235	0.000016	-19.0	-1.8	1.8	1441	1815	-0.97
T553 granitic gneiss													
T553-1	767	0.007968	0.000032	0.000209	0.000001	0.282329	0.000019	-15.6	1.2	-1.2	1277	1597	-0.99
T553-2	767	0.047754	0.001941	0.001243	0.000048	0.282324	0.000016	-15.8	0.5	-0.5	1319	1642	-0.96
T553-3	937	0.019974	0.000868	0.000436	0.000019	0.282009	0.000016	-27.0	-6.6	6.6	1725	2211	-0.99
T553-4	767	0.043304	0.001145	0.001041	0.000023	0.282326	0.000018	-15.8	0.6	-0.6	1311	1632	-0.97
T553-5	767	0.012189	0.000760	0.000278	0.000018	0.282160	0.000015	-21.6	-4.9	4.9	1512	1977	-0.99
T553-6	937	0.019132	0.000533	0.000454	0.000013	0.281954	0.000015	-28.9	-8.5	8.5	1801	2334	-0.99
T553-7	937	0.017385	0.002242	0.000401	0.000055	0.282021	0.000017	-26.5	-6.1	6.1	1706	2183	-0.99
T553-8	937	0.016975	0.000534	0.000355	0.000011	0.282053	0.000015	-25.4	-4.9	4.9	1660	2110	-0.99

Supplementary Table S4. Whole-rock major and trace element compositions of the Neoproterozoic granitic gneisses

Samples	T1H1	T1H2	T1H3	T1H4	T1H5	T1H6	T541H1
Major element (wt. %)							
SiO ₂	77.09	75.10	76.30	78.92	76.08	76.54	61.24
TiO ₂	0.65	0.20	0.10	0.08	0.07	0.11	0.75
Al ₂ O ₃	9.87	13.28	12.58	10.35	12.90	12.44	14.38
TFe ₂ O ₃	4.49	1.46	0.90	0.73	0.70	0.77	8.67
MnO	0.08	0.02	0.05	0.03	0.03	0.02	0.18
MgO	1.49	0.33	0.11	0.08	0.07	0.12	5.01
CaO	1.26	1.34	0.72	0.62	0.74	0.59	2.02
Na ₂ O	2.00	3.05	3.54	3.32	3.43	3.52	2.28
K ₂ O	1.55	3.89	4.47	4.66	4.93	4.67	3.61
P ₂ O ₅	0.11	0.05	0.06	0.01	0.01	0.02	0.02
LOI	0.46	0.56	0.48	0.46	0.39	0.49	1.38
ToTal	99.05	99.30	99.29	99.26	99.34	99.30	99.53
Trace element (ppm)							
Li	63.060	47.914	20.260	2.798	9.022	8.730	60.920
P	645.2	304.5	376.6	116.9	56.3	128.8	133.0
K	12834.0	31849.2	37860.0	39200.0	42720.0	40660.0	30600.0
Sc	8.750	3.223	5.670	3.142	2.380	3.014	29.660
V	57.240	16.117	5.626	4.324	4.056	6.200	188.980
Cr	70.780	1.787	1.904	1.211	3.594	7.382	355.200
Mn	610.8	179.4	392.0	217.4	212.6	178.2	1323.6
Co	11.106	1.558	0.607	0.480	0.626	0.652	32.100
Ni	21.500	1.323	1.700	1.858	3.536	5.422	124.140
Cu	14.492	1.052	1.399	1.823	5.486	2.414	15.688
Zn	44.740	27.958	20.360	23.380	20.800	17.936	68.820
Ga	11.538	13.861	15.226	13.154	14.730	14.076	17.856
Rb	75.260	119.655	196.460	166.120	202.200	149.540	213.600
Sr	91.3	164.3	27.3	40.5	25.2	54.5	133.7
Y	29.640	10.600	23.180	13.406	23.420	8.020	17.338
Zr	336.400	114.521	79.632	79.233	60.291	73.269	242.400
Nb	14.546	10.800	38.600	26.900	49.420	13.922	12.472
Cs	2.276	4.467	1.256	0.832	1.555	1.569	16.516
Ba	354.800	924.188	119.220	99.180	41.540	221.000	459.800
La	26.628	30.388	6.357	9.097	7.904	29.148	16.084
Ce	64.659	70.863	61.740	38.577	24.717	59.472	31.941
Pr	6.479	6.158	2.186	2.421	1.985	5.949	3.740
Nd	24.706	21.217	7.669	8.404	7.084	18.427	14.256
Sm	5.201	3.486	2.159	1.947	1.773	2.713	2.798
Eu	1.026	0.909	0.289	0.251	0.242	0.449	0.677
Gd	5.476	2.837	2.245	1.975	2.039	1.932	2.613
Tb	0.835	0.373	0.440	0.342	0.410	0.245	0.381
Dy	5.226	2.102	3.291	2.346	3.220	1.344	2.571
Ho	1.059	0.384	0.773	0.514	0.788	0.244	0.598
Er	3.013	1.010	2.666	1.578	2.719	0.691	1.987
Tm	0.445	0.139	0.472	0.243	0.464	0.114	0.340
Yb	2.882	0.894	3.528	1.592	3.291	0.846	2.528
Lu	0.438	0.140	0.571	0.247	0.541	0.138	0.416
Hf	7.745	2.804	2.178	2.238	1.716	1.741	5.665
Ta	0.895	0.656	2.633	1.316	2.740	1.154	0.800
Pb	13.406	14.075	18.244	21.300	27.680	18.320	12.278
Th	14.506	11.217	22.600	20.420	24.120	9.662	6.752
U	1.161	0.792	4.038	2.218	10.216	1.404	0.804

Samples	T541H2	T541H3	T541H4	T541H5	T541H6	T553H1	T553H2
Major element (wt. %)							
SiO2	66.80	70.80	61.87	60.57	62.28	68.18	62.39
TiO2	0.63	0.57	0.77	0.78	0.82	0.74	0.76
Al2O3	12.78	13.32	16.55	13.30	15.66	14.39	15.65
TFe2O3	6.85	4.03	7.82	9.00	6.74	4.89	8.63
MnO	0.06	0.07	0.17	0.14	0.13	0.06	0.17
MgO	4.01	1.82	3.40	6.96	3.87	2.46	3.82
CaO	1.82	2.83	1.31	1.32	2.37	1.71	1.21
Na2O	2.24	3.61	2.11	1.49	2.75	2.63	1.76
K2O	2.74	1.00	2.59	4.59	2.45	3.13	2.84
P2O5	0.03	0.04	0.03	0.04	0.14	0.01	0.01
LOI	1.40	1.10	2.76	1.39	2.22	1.15	2.14
ToTal	99.35	99.20	99.38	99.58	99.43	99.36	99.39
Trace element (ppm)							
Li	60.340	14.410	75.180	81.660	72.740	75.280	185.029
P	231.4	320.0	265.4	297.0	1007.0	121.4	120.4
K	25040.0	8724.0	25420.0	44140.0	23320.0	27720.0	24744.1
Sc	14.984	9.468	22.600	27.320	23.720	10.958	26.049
V	112.640	72.880	150.620	173.760	152.500	103.900	146.478
Cr	232.000	103.920	222.200	506.600	281.400	135.820	352.398
Mn	489.8	570.6	1398.2	1137.8	1064.8	444.4	1346.0
Co	22.480	12.544	28.540	40.040	26.620	18.628	29.801
Ni	92.500	43.440	87.740	202.000	97.780	53.080	103.311
Cu	2.708	9.272	354.000	4.230	7.426	3.250	3.566
Zn	53.920	64.120	105.400	89.540	63.100	72.600	88.120
Ga	15.158	16.174	21.520	19.340	18.826	19.186	24.543
Rb	140.160	71.920	173.140	333.400	162.360	204.000	212.121
Sr	163.1	151.5	91.1	85.0	163.9	93.8	59.5
Y	10.882	19.804	37.560	25.460	43.000	3.016	43.488
Zr	188.340	142.580	205.400	87.920	190.540	191.000	24.002
Nb	7.756	11.362	13.802	17.274	12.070	29.740	24.403
Cs	14.726	3.814	10.830	25.460	13.234	9.010	10.510
Ba	348.800	159.360	584.000	340.200	547.600	672.000	414.409
La	34.587	51.597	35.427	28.707	28.182	12.846	25.117
Ce	70.539	101.934	75.180	62.706	59.997	20.874	53.185
Pr	8.030	11.138	8.213	6.957	6.768	2.079	5.828
Nd	30.448	41.052	31.174	26.642	26.158	6.904	22.097
Sm	5.922	7.773	6.074	5.474	5.645	1.090	4.185
Eu	1.219	1.034	1.087	0.813	1.040	0.936	0.711
Gd	5.030	6.555	5.789	5.214	5.962	0.851	4.191
Tb	0.586	0.813	0.920	0.739	0.988	0.102	0.753
Dy	2.712	4.156	6.240	4.480	6.916	0.555	6.028
Ho	0.408	0.700	1.242	0.881	1.485	0.103	1.467
Er	0.856	1.650	3.404	2.468	4.273	0.308	4.567
Tm	0.094	0.204	0.488	0.352	0.614	0.048	0.685
Yb	0.528	1.190	3.160	2.248	3.781	0.388	4.293
Lu	0.086	0.175	0.468	0.333	0.511	0.074	0.597
Hf	4.173	3.502	4.581	2.179	4.365	4.430	0.574
Ta	0.570	0.758	0.769	1.267	0.719	1.615	1.589
Pb	14.188	15.502	11.704	8.962	12.930	17.312	12.721
Th	13.858	27.780	14.646	12.786	12.112	1.279	11.919
U	0.741	1.126	1.479	1.359	1.141	0.452	0.658