

Supplementary Table S4. SIMS zircon O isotope data for the early Neoproterozoic granitic rocks in the western margin of the NQT

Spot	$\delta^{18}\text{O}$	2σ
WS20-01-01	8.90	0.26
WS20-01-02	8.90	0.18
WS20-01-03	9.30	0.25
WS20-01-04	8.74	0.17
WS20-01-05	9.15	0.22
WS20-01-06	8.88	0.21
WS20-01-07	9.27	0.26
WS20-01-08	8.38	0.22
WS20-01-09	8.80	0.26
WS20-01-10	8.14	0.24
WS20-01-11	9.08	0.23
WS20-01-13	9.28	0.27
WS20-01-15	9.15	0.14
WS20-01-16	8.57	0.21
WS20-01-17	9.37	0.12
WS20-01-18	4.56	0.24
WS20-01-19	9.11	0.22
WS20-01-20	8.78	0.22
WS20-01-21	8.89	0.20
WS20-01-22	8.96	0.20
WS20-01-23	9.35	0.19
WS20-01-24	9.37	0.18
WS20-02-01	9.72	0.20
WS20-02-02	11.07	0.19
WS20-02-03	8.40	0.25
WS20-02-04	8.79	0.20
WS20-02-05	9.08	0.18
WS20-02-06	9.10	0.20
WS20-02-09	9.47	0.18
WS20-02-10	8.01	0.27
WS20-02-11	9.00	0.17
WS20-02-12	8.35	0.24
WS20-02-14	9.35	0.23
WS20-02-16	9.56	0.20
WS20-02-18	8.42	0.24
WS20-02-19	6.64	0.19
WS20-02-20	5.96	0.26
WS20-02-21	8.96	0.24

WS20-02-23	8.88	0.22
WS20-02-24	8.97	0.18
WS20-03-01	8.25	0.32
WS20-03-02	9.10	0.27
WS20-03-03	9.02	0.23
WS20-03-04	9.29	0.18
WS20-03-05	8.82	0.28
WS20-03-07	8.96	0.27
WS20-03-08	8.90	0.21
WS20-03-09	8.75	0.22
WS20-03-11	9.14	0.22
WS20-03-13	6.92	0.21
WS20-03-14	8.88	0.13
WS20-03-15	9.18	0.25
WS20-03-16	9.22	0.25
WS20-03-18	9.66	0.19
WS20-03-20	8.95	0.20
WS20-03-21	8.96	0.21
WS20-03-22	8.41	0.32
WS20-03-23	8.78	0.24
WS20-03-24	8.94	0.18
YL20-01-01	4.66	0.30
YL20-01-04	6.99	0.33
YL20-01-07	9.85	0.19
YL20-01-08	9.38	0.24
YL20-01-09	9.14	0.23
YL20-01-10	7.74	0.26
YL20-01-11	9.79	0.31
YL20-01-13	7.96	0.34
YL20-01-14	9.61	0.19
YL20-01-15	9.76	0.27
YL20-01-16	9.99	0.24
YL20-01-17	4.73	0.45
YL20-01-20	9.92	0.21
YL20-01-21	10.94	0.18
YL20-01-24	10.07	0.27
YL20-02-02	7.08	0.22
YL20-02-04	4.24	0.34
YL20-02-05	10.26	0.29

YL20-02-06	9.64	0.22
YL20-02-08	9.01	0.28
YL20-02-09	9.27	0.26
YL20-02-10	8.28	0.31
YL20-02-11	8.10	0.19
YL20-02-12	9.48	0.25
YL20-02-13	9.48	0.18
YL20-02-14	9.55	0.22
YL20-02-16	9.04	0.30
YL20-02-17	9.66	0.21
YL20-02-18	9.41	0.35
YL20-02-19	9.82	0.23
YL20-03-01	9.81	0.21
YL20-03-02	9.08	0.21
YL20-03-05	9.43	0.21
YL20-03-06	6.91	0.20
YL20-03-07	9.84	0.19
YL20-03-08	9.89	0.21
YL20-03-09	9.66	0.19
YL20-03-10	8.86	0.31
YL20-03-11	10.47	0.26
YL20-03-13	9.67	0.20
YL20-03-14	8.94	0.25
YL20-03-15	10.07	0.16
YL20-03-16	9.09	0.23
YL20-03-17	9.37	0.28
YL20-03-18	9.79	0.28
YL20-03-19	9.68	0.26
YL20-03-20	9.85	0.33
YL20-03-22	9.93	0.22
YL20-03-23	9.81	0.21
XY20-02-02	7.59	0.18
XY20-02-03	9.20	0.21
XY20-02-04c	8.77	0.33
XY20-02-05	7.59	0.14
XY20-02-07	9.35	0.14
XY20-02-11	8.78	0.47
XY20-02-13	3.56	0.20
XY20-02-14c	6.06	0.14
XY20-02-16c	9.13	0.17

XY20-02-17c	8.94	0.21
XY20-02-19c	8.73	0.18
XY20-02-20c	7.37	0.23
XY20-02-21	8.58	0.22
XY20-02-22c	5.17	0.30
XY20-02-23c	7.37	0.25
XY20-02-25	7.80	0.26
XY20-02-26	7.52	0.15
XY20-02-27	8.72	0.17
XY20-02-28	8.53	0.14
XY20-02-29	10.26	0.16
XY20-02-30	7.18	0.21
XY20-02-31	8.94	0.22
XY20-02-32	8.68	0.22
XY20-02-33	7.72	0.28
XY20-02-34	8.56	0.22
XY20-02-35	8.67	0.23
XY20-05-01	9.82	0.28
XY20-05-02	9.90	0.26
XY20-05-03	9.92	0.17
XY20-05-04c	9.13	0.38
XY20-05-05c	10.49	0.23
XY20-05-06	9.15	0.24
XY20-05-07	8.65	0.40
XY20-05-08c	8.90	0.23
XY20-05-09c	4.73	0.23
XY20-05-10	9.94	0.29
XY20-05-11c	9.25	0.22
XY20-05-12c	7.84	0.37
XY20-05-13	9.25	0.22
XY20-05-14c	6.31	0.26
XY20-05-15	8.99	0.24
XY20-05-16	4.62	0.91
XY20-05-17c	9.35	0.28
XY20-05-18c	8.56	0.29
XY20-05-19c	8.15	0.28
XY20-05-20	9.06	0.28
XY20-05-22	9.45	0.34
XY20-05-23c	9.04	0.19
XY20-05-24	9.43	0.24
XY20-05-25	8.94	0.23

XY20-05-26	9.50	0.22
XY20-05-27	10.01	0.22
XY20-05-28	8.87	0.24
XY20-05-29	8.76	0.19
XY20-05-30	7.83	0.18
XY20-05-31	9.68	0.22
XY20-05-32	9.29	0.21
XY20-05-33	6.81	0.23
XY20-05-34	8.62	0.25
XY20-05-35	9.09	0.18
XY20-07-08	8.93	0.28
XY20-07-10	6.06	0.28
XY20-07-12	6.73	0.29
XY20-07-14c	9.61	0.31
XY20-07-18	9.73	0.26
XY20-07-19	10.38	0.26
XY20-07-21	9.39	0.22
XY20-07-22	9.03	0.20
XY20-07-23	9.00	0.18
XY20-07-24	9.12	0.28
XY20-07-25	10.06	0.22
XY20-07-26	9.31	0.21
XY20-07-27	8.81	0.22
XY20-07-28	8.50	0.22
XY20-07-29	9.71	0.30
XY20-07-30	9.60	0.24
XY20-07-31	9.61	0.27
XY20-07-32	7.63	0.26
XY20-07-33	9.85	0.26
XY20-07-34	9.19	0.31
XY20-07-35	7.71	0.17
XY20-07-36	6.99	0.25
XY20-07-37	10.33	0.18

***Postfix c denotes inherited zircon domain; others are magmatic zircons.**