

2013-12-02

2014-

1968-

78

8

650-
1012

63
U

4

20

35%

2%~5%

2%

45%

%~1

5%~4

1 a 650-615Ma c^[10]
b

Fig. 1 Distribution of Precambrian strata in Tarim Basin (a), 650-615Ma basic dykes and granitic intrusive rocks with sampling sites (b) and composite columnar section of Neoproterozoic strata in Quruqtagh area c

Fig. 2 U - Pb concordia diagram for granite and gneiss
Bi— Hb— Pl—

9K

327

703 1.8

3779

0.60 0.8785

0.56 0.87

0 0.60

3 0.60

0.102

4 0.103

0 5 0.103

48 96 0.

1016 102

0.

14 5.9 0.102

1 0.32 0.102

16 0.2 02

17 71 2 1.18 02

18 39 70 02

19 02

5 633 5 638 17

714

0.8653 0.92 630

622 6 645 20

650 16

2
Tab

	$^{176}\text{Lu}/^{177}\text{Hf}$			$^{176}\text{Lu}/^{177}\text{Hf}$			t/Ma	Lu/Hf	
			0.0020				509	-0.94	
			0.0015				340	-0.95	
			0.0014				511	-0.96	
			0.0012				550	-0.96	
			0.0014				330	-0.96	
			0.0020				224	-0.94	
			0.0021				61	-0.94	
			0.0011				54	-0.97	
			0.0014				84	-0.96	
			0.0010				74	-0.97	
			0.0017				37	-0.95	
			0.0011				96	-0.97	
			0.0018				74	-0.95	
	5		0.0008				94	-0.98	
	7		0.0022				72	-0.93	
	2		0.0010				5	-0.97	
	51		0.0015				3	-0.95	
	02		0.0011				6	-0.97	
	14		0.0016				2	-0.95	
	53		0.0012				2	-0.96	
	510		0.0012				7	-0.96	
	971		0.0049				6	-0.85	
	505		0.0013				4	-0.96	
	0531		0.0013				2	-0.96	
	16								
	1286	0.0031	0.282283				2	-0.91	
	0289	0.0008	0.282283				3	-0.97	
	0989	0.0027	0.282283				5	-0.92	
	0294	0.0008	0.282283				7	-0.97	
	0359	0.0010	0.282283				9	-0.97	
	0243	0.0007	0.282283				3	-0.98	
	0412	0.0012	0.282283					-0.97	
	0400	0.0010	0.282283					-0.97	
	0512	0.0013	0.282283					-0.96	
	0574	0.0016	0.282277					-0.95	
	0233	0.0007	0.282283					-0.98	
	0391	0.0011	0.282252					-0.97	
	0		0.282283					-0.99	
	4		0.282310					-0.95	
	5		0.282295					-0.97	
	16	0.0024	0.282304					-0.93	
	17	0.0007	0.282281		0.282273			-0.98	
	18	0.0017	0.282277		0.00018	0.282257	-17.7	-0.95	
	19	0.0019	0.282230		0.000019	0.282207	-19.2	-0.94	
	0164	0.0032	0.282274		0.000018	0.282236	-17.6	-0.90	
	0165	0.0008	0.282274		0.000017	0.282263	-17.7	-0.98	
	2	0.0008	0.282274		0.000018	0.282250	-18.1	-0.97	
	23	0.0037	0.282274		0.000016	0.282255	-18.0	-4.4	
	24	0.0015	0.282315		0.000017	0.282295	-16.2	-3.0	
		0.0014	0.282308		0.000018			-0.96	
		0.0016	0.282287		0.000018			-17.8	-4.6

33 5

32 Hf

2 Hf

630Ma

- 8.9-- 4.2 -
630Ma)

Hf(=

Hf()

- 6-- 4

Hf()

- 5-- 3

Hf

~25Ga

22-

24Ga

4

41



1

U 01

[21]

U PI

76

6

Z u [21]

1

3

P

Ma

71

U

8

9

Rodi

cratonization of the Tarim Block, NW China: Petrology, geochemistry, Nd isotopes and U- Pb zircon geochronology from Archean gabbro, G- potassic granite suite and Paleoproterozoic metamorphic belt. *Journal of Asian Earth Sciences*, 2012, 47: 5- 20.

[6]Shu L, Wang X L, Ma D S. Precambrian tectonic evolution of the Tarim Block, NW China: Geochronological insights from the Juruqtagh domain. *Journal of Asian Earth Sciences*, 2011, 41: 765- 790.

[7]Zhang C, You H B, Li H K. Precambrian tectonic evolution of the Tarim Block, NW China. *Journal of Earth System Science*, 2011, 122: 1306- 1315.

[8]Zhang C, You H B, Z X, Li X H. Neoproterozoic igneous activity in the eastern margin of the Tarim Block, NW China: Petrology and tectonic implications. *Journal of Earth System Science*, 2011, 122: 167- 179.

[9]Zhang C, You H B, Wang X L. Neoproterozoic igneous activity in the eastern margin of the Tarim Block, NW China: Interaction between the mantle plume and the crust. *Precambrian Research*, 2011, 185: 1- 15.

[10]Zhu W B, Zhang X Z, Shu L. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Implications from zircon U- Pb chronology. *Precambrian Research*, 2008, 165: 88- 100.

[11]Ku B, Xiao S, You H B, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Constraints on Neoproterozoic Qaidam Basin. *Precambrian Research*, 2009, 170: 1- 15.

[12]Zhu W B, Zheng B H, You H B, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Insights from zircon U- Pb zircon geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[13]Zhu W B, Zheng B H, You H B, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Insights from zircon U- Pb zircon geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[14]Long J, et al. Neoproterozoic tectonic evolution of the northern margin of the Tarim Block, NW China: Constraints from zircon U- Pb geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[15]Zhu W B, Zheng B H, You H B, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Insights from zircon U- Pb zircon geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[16]Zhu W B, Zheng B H, You H B, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Insights from zircon U- Pb zircon geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[17]Zhu W B, Zheng B H, You H B, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Insights from zircon U- Pb zircon geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[18]Zhu W B, Zheng B H, You H B, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Insights from zircon U- Pb zircon geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[19]Zhu W B, Zheng B H, You H B, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Insights from zircon U- Pb zircon geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[20]Zhu W B, Zheng B H, You H B, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Insights from zircon U- Pb zircon geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[21]Zhu W B, Zheng B H, You H B, et al. Neoproterozoic tectonic evolution of the Precambrian Aksu Uplift, NW Tarim, China: Insights from LA- ICP- MS zircon U- Pb geochronology. *Precambrian Research*, 2011, 185: 1- 15.

[22]Ge R F, Zhu W B, Zheng B H, et al. Early Pan- African orogeny in the Tarim Craton: Insights from zircon U- Pb geochronology and geochemistry of granitoids in the Kashi area. *Precambrian Research*, 2012, 222: 1- 15.

[23]Xu B, Jiang P, Zheng H, et al. Neoproterozoic tectonic evolution of the Tarim Block, NW China: Constraints from zircon U- Pb geochronology. *Precambrian Research*, 2011, 185: 1- 15.

te
[14]Long
northe
constra
[15]
[J].