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Table DR2. Whole-rock Rb-Sr and Sm-Nd isotope compositions of postcollisional mafic rocks from the Tongbai-Hong'an orogens.

Sample No.	Rb(ppm)	Sr(ppm)	$^{87}\text{Rb}/^{86}\text{Sr}$	$^{87}\text{Sr}/^{86}\text{Sr}$	2σ	$(^{87}\text{Sr}/^{86}\text{Sr})_i$	Sm(ppm)	Nd(ppm)	$^{147}\text{Sm}/^{144}\text{Nd}$	$^{143}\text{Nd}/^{144}\text{Nd}$	2σ	$\varepsilon_{\text{Nd}}(t)$	T _{DM} (Ma)
<i>Anlu</i>													
14HA10	20.2	424	0.1376	0.704584	0.000019	0.704426	4.38	17.1	0.154601	0.512685	0.000011	1.4	1198
14HA11	22.8	439	0.1501	0.704727	0.000016	0.704554	5.36	20.8	0.156049	0.512673	0.000011	1.1	1260
14HA15	26.3	458	0.1662	0.704739	0.000013	0.704548	4.79	20.1	0.144096	0.512640	0.000010	0.6	1116
14HA16	27.2	462	0.1704	0.704686	0.000013	0.704490	4.89	20.6	0.143568	0.512645	0.000010	0.7	1097
14HA17	16.4	403	0.1176	0.704564	0.000018	0.704428	4.14	16.1	0.155251	0.512691	0.000007	1.5	1197
14HA18	8.40	411	0.0590	0.704517	0.000018	0.704449	4.08	16.3	0.151833	0.512681	0.000011	1.3	1154
<i>Xinzhou</i>													
14HA01	48.4	978	0.1431	0.705159	0.000017	0.704994	7.80	38.6	0.121995	0.512644	0.000008	0.9	841
14HA02	46.2	960	0.1391	0.705066	0.000020	0.704906	7.88	38.7	0.123097	0.512635	0.000010	0.7	866
14HA04	39.2	523	0.2166	0.704569	0.000016	0.704320	6.71	28.9	0.140333	0.512808	0.000011	3.9	711
14HA05	38.1	531	0.2075	0.704548	0.000016	0.704309	6.69	28.7	0.140659	0.512828	0.000010	4.3	672
14HA06	37.0	576	0.1858	0.704839	0.000016	0.704626	6.71	30.0	0.135345	0.512832	0.000009	4.4	619
<i>Macheng*</i>													
11DB10	54.7	663	0.2386	0.704863	0.000006	0.704473	6.57	27.5	0.144564	0.512596	0.000003	-0.3	1221
11DB11	49.5	685	0.2091	0.704991	0.000005	0.704649	7.09	29.6	0.144891	0.512759	0.000001	2.9	867
11DB12	58.5	685	0.2471	0.70492	0.000003	0.704516	6.78	28.2	0.145045	0.512643	0.000005	0.6	1125
11DB15	68.4	664	0.2983	0.704983	0.000003	0.704496	6.97	28.2	0.149348	0.512581	0.000001	-0.7	1347
11DB16	63.4	625	0.2937	0.705273	0.000004	0.704793	6.8	27.3	0.150318	0.512559	0.000004	-1.1	1420
11DB17	36.4	582	0.1807	0.704478	0.000002	0.704183	6.29	25.8	0.147481	0.512842	0.000002	4.5	710
11DB18	48.3	537	0.2600	0.704542	0.000004	0.704117	6.82	26.6	0.155027	0.512528	0.000008	-1.8	1613
11DB19	45.5	586	0.2244	0.704331	0.000002	0.703965	6.7	26.9	0.150411	0.512773	0.000002	3.1	908
11DB21	57.3	448	0.3701	0.705416	0.000002	0.704811	6.2	25.3	0.148303	0.512798	0.000001	3.6	821
11DB23	44.6	589	0.2189	0.704659	0.000004	0.704301	6.99	28.4	0.14874	0.51265	0.000007	0.7	1173

*The data for Macheng mafic dykes are from Dai et al. (2015). The initial isotopic ratios are calculated at t = 81 Ma and t = 115 Ma for Late Cretaceous basalt and Early Cretaceous Macheng mafic dykes respectively, based on whole-rock Rb, Sr, Sm and Nd contents measured by ICP-MS; and the Chondrite uniform reservoir values (CHUR): $^{147}\text{Sm}/^{144}\text{Nd} = 0.1967$, $^{143}\text{Nd}/^{144}\text{Nd} = 0.512638$.

Table DR3. Whole-rock Lu-Hf isotope compositions of postcollisional mafic rocks from the Tongbai-Hong'an orogens.

Sample No.	Lu(ppm)	Hf(ppm)	$^{176}\text{Lu}/^{177}\text{Hf}$	$^{176}\text{Hf}/^{177}\text{Hf}$	2σ	$\epsilon_{\text{Hf}}(t)$	$T_{\text{DM1}}(\text{Ma})$
<i>Anlu</i>							
14HA10	0.24	2.90	0.01198	0.282935	0.000007	6.9	636
14HA11	0.26	3.74	0.00995	0.282892	0.000010	5.5	671
14HA15	0.22	3.22	0.00991	0.282872	0.000007	4.8	707
14HA16	0.23	3.47	0.00949	0.282869	0.000008	4.7	702
14HA17	0.22	2.71	0.01177	0.282928	0.000006	6.7	644
14HA18	0.23	2.81	0.01166	0.282926	0.000007	6.6	645
<i>Xinzhou</i>							
14HA01	0.23	4.93	0.00658	0.282896	0.000009	5.8	593
14HA02	0.22	4.96	0.00629	0.282894	0.000007	5.7	592
14HA04	0.30	4.91	0.00870	0.282987	0.000006	8.9	472
14HA05	0.30	4.98	0.00869	0.282984	0.000008	8.8	477
14HA06	0.33	5.10	0.00909	0.282983	0.000010	8.8	486
<i>Macheng*</i>							
11DB10	0.19	4.3	0.00628	0.282949	0.000011	8.3	501
11DB11	0.22	4.47	0.00699	0.282959	0.00001	8.6	494
11DB12	0.21	4.49	0.00664	0.282953	0.000009	8.4	499
11DB16	0.2	4.46	0.00637	0.282956	0.000008	8.5	490
11DB17	0.2	4.82	0.00589	0.282994	0.000008	9.9	421
11DB18	0.22	5.05	0.00619	0.283002	0.000008	10.2	411
11DB19	0.22	4.99	0.00626	0.283004	0.000009	10.2	409
11DB21	0.2	4.84	0.00587	0.283003	0.000014	10.3	405
11DB23	0.22	5.39	0.0058	0.283005	0.000008	10.3	402

Note:

(1) *The data for Macheng mafic dykes are from Dai et al. (2015).

(2) $\epsilon_{\text{Hf}}(t)$ were calculated at $t = 81 \text{ Ma}$ and $t = 115 \text{ Ma}$ for Late Cretaceous basalt and Early Cretaceous Macheng mafic dykes respectively:

$$\epsilon_{\text{Hf}}(t) = [({}^{176}\text{Hf}/{}^{177}\text{Hf})_S - ({}^{176}\text{Lu}/{}^{177}\text{Hf})_S \times (e^{\lambda t} - 1)] / [({}^{176}\text{Hf}/{}^{177}\text{Hf})_{\text{CHUR}} - ({}^{176}\text{Lu}/{}^{177}\text{Hf})_{\text{CHUR}} \times (e^{\lambda t} - 1)] - 1) \times 10000;$$

$$T_{\text{DM1}} = 1/\lambda \times (1 + [({}^{176}\text{Hf}/{}^{177}\text{Hf})_S - ({}^{176}\text{Hf}/{}^{177}\text{Hf})_{\text{DM}}]) / [({}^{176}\text{Lu}/{}^{177}\text{Hf})_S - ({}^{176}\text{Lu}/{}^{177}\text{Hf})_{\text{DM}}].$$

where $({}^{176}\text{Lu}/{}^{177}\text{Hf})_{\text{CHUR}} = 0.0332$, $({}^{176}\text{Hf}/{}^{177}\text{Hf})_{\text{CHUR}} = 0.282772$; $({}^{176}\text{Lu}/{}^{177}\text{Hf})_{\text{DM}} = 0.0384$, $({}^{176}\text{Hf}/{}^{177}\text{Hf})_{\text{DM}} = 0.28325$; $\lambda = 1.867 \times 10^{-11} \text{ year}^{-1}$. Abbreviations: S = sample; CHUR = chondritic reservoir; DM = depleted mantle.