



Corrigendum: New Paleomagnetic Constraints on the Early Cretaceous Paleolatitude of the Lhasa Terrane (Tibet)

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A Corrigendum on

New Paleomagnetic Constraints on the Early Cretaceous Paleolatitude of the Lhasa Terrane (Tibet)

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In the original article, there was a mistake in **Table 2** as published. In the “Reference” column, “Combined analysis with results from Li et al. (2016),” the citation should be Li Z. et al. (2017) instead of Li et al. (2016). The corrected **Table 2** appears below.

In the original article, there was a mistake in **Figure 10** as published. The selected reference site appearing in the top-right corner of the figure should read “Reference site (29.5°N, 91.0°E)” instead of “Reference site: 29.7°N, 91.0°E.” The corrected **Figure 10** appears below.

In the original article, the reference for Li Z. et al. (2017) was incorrectly written as “Li, Z., Ding, L., Song, P., Fu, J., and Yue, Y. (2017d). Paleomagnetic Constraints on the Paleolatitude of the Lhasa Block during the Early Cretaceous: Implications for the Onset of India-Asia Collision and Latitudinal Shortening Estimates across Tibet and Stable Asia. *Gondwana Res.* 41, 352–372. doi: 10.1016/j.gr.2015.05.013.” Instead, it should be “Li, Z., Ding, L., Song, P., Fu, J., and Yue, Y. (2017). Paleomagnetic Constraints on the Paleolatitude of the Lhasa Block during the Early Cretaceous: Implications for the Onset of India-Asia Collision and Latitudinal Shortening Estimates across Tibet and Stable Asia. *Gondwana Res.* 41, 352–372. doi: 10.1016/j.gr.2015.05.013.”

In the original article, the reference for Qasim et al. (2018) was not cited. The citation has now been inserted in **Section 8 Discussion**, “*Sub-section 8.2 Implications to Timing of Initial India-Asia Collision*,” Paragraph 14: “Recently, scientists have studied the timing of initial India-Asia collision from the perspectives of biostratigraphic constraints and sedimentary records (DeCelles et al., 2014; Wu et al., 2014; Hu et al., 2015, 2016a; Qasim et al., 2018; Wei et al., 2020).”

In the original article, there was an error in the text. The authors mistakenly wrote “7,100 ± 530 km” and “6,400 ± 550 km” as “7,100 ± 540 km” and “6,400 ± 560 km”. A correction has been made to the **Section Highlights**, point 3:

“The Neo-Tethys Ocean reached its maximum N-S width of 7,100 ± 530 km at ~132 Ma and shrank to 6,400 ± 550 km at ~115 Ma.”

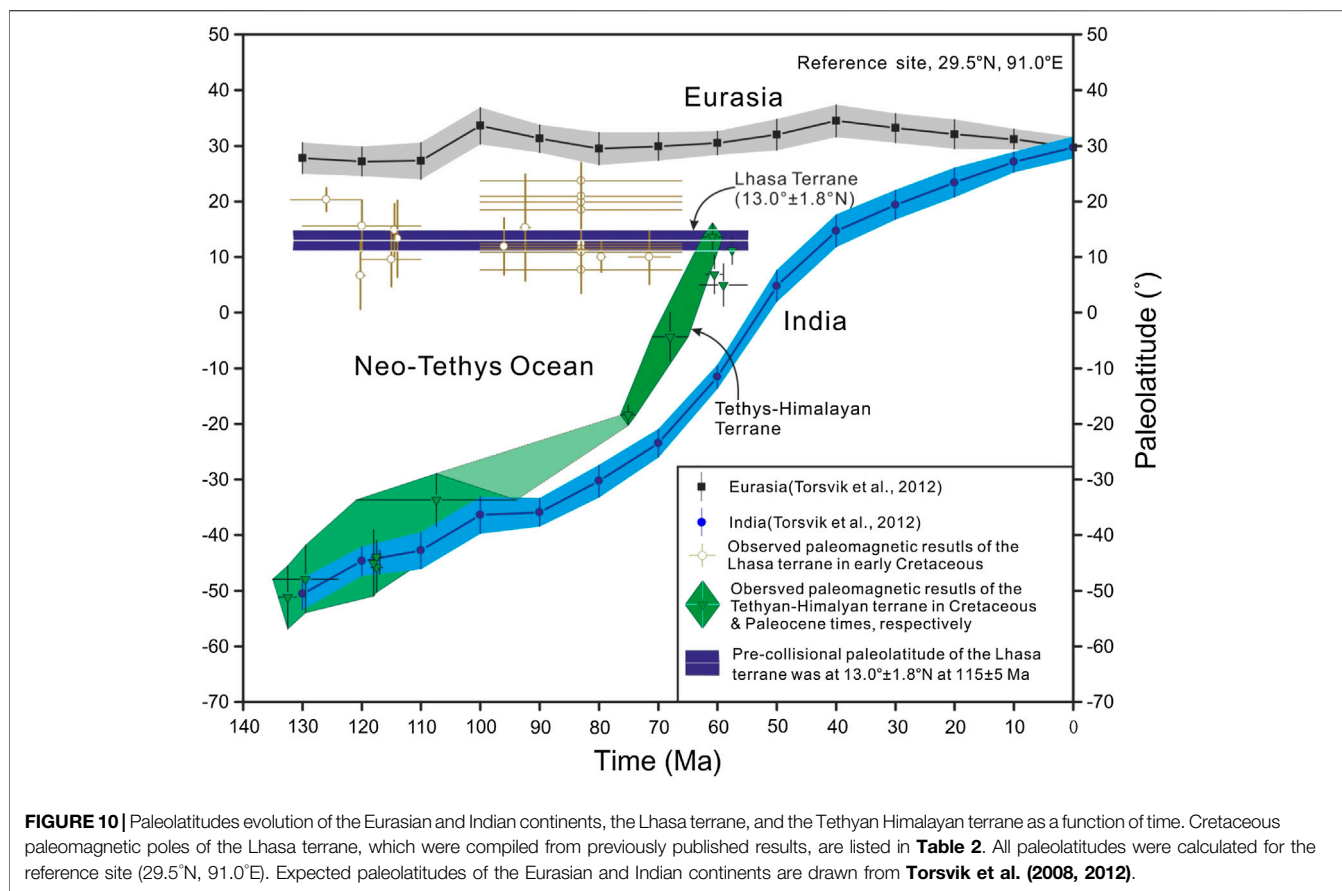
TABLE 2 | Summary of Cretaceous and Early Cenozoic paleomagnetic poles from the Lhasa and Tethyan-Himalayan (two are from interior of Indian craton) terranes.

ID	Formation/ lithology	Location	Age (Ma)	Slat (°N)	Slong (°E)	N (n)	Plat (°N)	Plong (°E)	A95 (dp/ dm)(°)	Paleolat (°N)	Field test	Reference
Cretaceous paleopoles for the Lhasa Terrane (29.5°N, 91.0°E)												
TKR1	Takena Fm. red beds	Linzhou	K2, 83 ± 17	29.9	91.2	7 (68)	68	340	6.7/ 11.6	19.9 ± 6.7	F, D	Pozzi et al. (1982)
TKR2	Takena Fm. red beds	Linzhou	K2, 83 ± 17	29.9	91.2	6 (57)	64	348	5.6/9.5	20.9 ± 5.6	F	Westphal et al. (1983)
SXV	Shexing Fm. volcanic rocks	Linzhou	K2, 83 ± 17	29.9	91.2	21 (132)	69.1	191.7	3.3/5.4	23.7 ± 3.3	F	Tan et al. (2010)
SXR1	Shexing Fm. red beds	Linzhou	K2, 83 ± 17	29.9	91.2	43 (377)	70.2	300.5	1.4/2.7	11.9 ± 1.4	F, D	Tan et al. (2010)
WRG	Woronggou Fm. volcanic rocks	Deqing	K1, ~114	30.5	90.1	15 (88)	66.4	220.3	6.9	13.3 ± 6.9	no	Sun et al. (2008)
SXR2	Shexing Fm. red beds	Maxiang	K2, 83 ± 17	29.9	90.7	17 (111)	71.9	327.2	4.5	18.5 ± 4.5	F	Sun et al. (2012)
TKR3	Takena Fm. red beds	Barda	K2, 83 ± 17	31.7	91.5	6 (49)	63.5	325.4	6.5	12.4 ± 6.5	F	Achache et al. (1984)
TKR4	Takena Fm. red beds	Linzhou	K2, 83 ± 17	29.9	91.1	8 (61)	71.2	288.4	7.9	11.4 ± 7.9	F	Achache et al. (1984)
ZC	Zenong Gp volcanic rocks	Cuoqen	120 ± 10	31.3	85	18	58.2	341.9	4.6	15.6 ± 4.6	F, R	Chen et al. (2012)
DJ	Duoi Fm. lava flow and Jiega Fm. limestone	Zuozuo	114.5 ± 1.5	32.22	80.43	19	69.1	319.8	4.8	14.8 ± 4.8	F, R	Bian et al. (2017)
LZZ	Linzong Gp volcanic rocks	Cuoqen	96 ± 3	30.6	85.2	10 (82)	65.2	222.3	5.1	11.9 ± 5.1	F	Tang et al. (2013)
QS	Qushenla Fm./ lava flows	Yanhu	126 ± 6	32.3	82.6	51 (444)	61.4	192.9	2.1	20.3 ± 2.1	F, D	Ma et al. (2014)
DN	Duoni Fm. volcanic rocks and redbeds	Nagqv	120.2 ± 0.5	31.3	91.9	19 (139)	66.9	281.2	6.1	6.7 ± 6.1	F, D	Li Z. et al. (2017)
ZG	Zonggei Fm./ volcanic rocks	Nagqv	112 ± 2	31.48	92.1	9 (59)	72.0	252.6	6.7	12.3 ± 6.7	no	This study
ZG+DN	Zonggei and Duoni formations/ volcanics + sediments	Nagqv	115 ± 5	31.48	92.1	20 (144)	70.3	270.5	5.2	9.8 ± 5.2	F, D	Combined analysis with results from Li Z. et al. (2017)
TK5	Takena Fm. red-beds	Linzhou	K2, 83 ± 17	29.9	91.2	8 (51)	68	279	3.5/6.9	7.7 ± 3.5	F	Lin and Watts (1988)
JZS	Jingzhushan Fm. red-beds	Dingqing	K2, 83 ± 17	31.22	95.98	15 (150)	71.4	273.1	5.2	10.9 ± 5.2	F	Tong, et al. (2017)
LR	Lava flow and red beds	Linzhou	71.5 ± 3.5	29.9	91.1	21 (164)	70.5	269.6	4.9	10.0 ± 4.9	F, R	Cao et al. (2017)
SV	Volcanic rocks	Shiquanhe	92.4 ± 0.9	32.34	80.03	10 (78)	64.1	209	9.6	15.3 ± 9.6	F, R	Yi et al. (2015)
CLC	Chalicuo Gp, volcanic rocks	Ya're	79.6 ± 0.7	31.56	82.24	15 (136)	68.4	298.8	2.7	10.0 ± 2.7	F	Yi et al. (2015)
JZSC	Upper Cretaceous Jingzhushan Fm. sediments	Cuoqin	K2, 83 ± 17	31.13	84.86	33	63.5	324.9	2.1/3.9	12.2 ± 2.1	F	Yang et al. (2015)
DZC	Dianzhong Fm., volcanics	Cuoqin	119.0 ± 2.0	31.12	84.38	12	70.5	292.9	7.4	11.2 ± 7.4	F	Yang et al. (2015)
Pre-Cretaceous paleopoles for the Lhasa Terrane (29.5°N, 91.0°E)												
SV	Sangri Gp, volcanic rocks	Sangri County	~180 Ma	29.3	92.05	60	51.7	305.9	3.4	-3.2 ± 3.4	F, D	Li et al. (2016)
DCS1	Dibu Co Lake, sediments	Coqin area	T1-2, 244.5 ± 7.5 Ma	30.9	84.7	8 (25)	16.6	204.6	5.6	-11.1 ± 5.6	F, R	Zhou et al. (2016)
DCS2	Dibu Co Lake, sediments	Coqin area	T3, 219 ± 18 Ma	30.9	84.7	6 (37)	19.7	211	4.7	-14.1 ± 4.7	F	Zhou et al. (2016)
Cenozoic paleopoles for the Lhasa Terrane (29.5°N, 91.0°E)												
LZZV1	Linzong Gp, volcanic rocks	Linzhou	54 ± 6	29.9	91.1	8 (46)	71.5	300.1	6.4/ 11.9	13.0 ± 6.4	F, D	Achache et al. (1984)
LZZT	Linzong, Gp, tuff	Mendui	~55	30.1	90.9	14 (99)	73.6	274.3	7.3	13.1 ± 7.3	F, D	Sun et al. (2010)
PNT	Pana Fm., tuff	Linzhou	41.5 ± 1.5	30	91.2	9 (76)	87.1	82.6	5.7	32.4 ± 5.7	F	Tan et al. (2010)

(Continued on following page)

TABLE 2 | (Continued) Summary of Cretaceous and Early Cenozoic paleomagnetic poles from the Lhasa and Tethyan-Himalayan (two are from interior of Indian craton) terranes.

ID	Formation/ lithology	Location	Age (Ma)	Slat (°N)	Slong (°E)	N (n)	Plat (°N)	Plong (°E)	A95 (dp/ dm)(°)	Paleolat (°N)	Field test	Reference
LZZV2	Linziyong Gp, volcanic rocks	Linzhou	62 ± 2	30	91.2	20	66.4	262.5	6.3	6.1 ± 6.3	F, D	Chen et al. (2010); Chen et al. (2014)
LZZV3	Linziyong Gp, volcanic rocks	Linzhou	55 ± 5	30	91.2	13	69.7	268.6	6.3	9.2 ± 6.3	F, D	Chen et al. (2010); Chen et al. (2014)
LZZV4	Linziyong Gp, volcanic rocks	Linzhou	47 ± 3	30	91.2	18	69.1	234.2	5.6	12.2 ± 5.6	F, D	Chen et al. (2010); Chen et al. (2014)
DykeL	Linziyong Gp, dykes	Linzhou	~53	30	91.1	9 (63)	72	225.5	5.8	16.2 ± 5.8	D	Liebke et al. (2010)
LZZV3	Linziyong Gp, volcanic rocks	Linzhou	50.5 ± 3.5	30	91.1	24 (195)	77.6	211.3	5.0	22.7 ± 5.0	F, D	Dupont-Nibet et al. (2010)
LZVS	Linziyong Gp, volcanics and sediments	Linzhou	52 ± 8	30	91.2	23 (148)	70.6	281	5.3	10.4 ± 5.3	F, D	Chen et al. (2010)
PVS	Pana Fm., volcanics and sediments	Linzhou	48.5 ± 5.5	30	91.2	(119)	68.4	243	1.9	10.1 ± 1.9	D	Huang et al. (2013)
CJD	Upper Cuojiangding Gp, sediments	Zhongba	50 ± 16	29.9	84.3	(62)	78	329	5.9	22.7 ± 5.9	F	Meng et al. (2012)
DZV2	Member II, Dianzhong Fm., volcanics	Linzhou	62 ± 2	30	91.2	35 (228)	65.8	254.1	4.4	6.2 ± 4.4	C	Chen et al. (2010); Chen et al. (2014); Huang et al. (2015); Yi et al. (2017)
Cretaceous-Cenozoic paleopoles for the Tethyan-Himalayan Terrane (29.5°N, 91.0°E)												
ZP1	Zongpu Fm., limestone	Gamba, Duela	59 ± 4	28.3	88.5	14 (113)	65.4	277.6	3.8/7.6	5.0 ± 3.8	F	Patzelt et al. (1996)
ZP2	Zongpu Fm., marine sediments	Gamba	60.5 ± 1.5	28.3	88.5	18 (171)	67.3	266.3	3.5	6.9 ± 3.5	F	Yi et al. (2011)
ZP3	Zongpu Fm., marine sediments	Gamba	57.5 ± 1.5	28.3	88.5	14 (141)	71.6	277.8	2.5	11.2 ± 2.5	F	Yi et al. (2011)
ZS	Zongshan Fm., limestone	Gamba, Duela	68 ± 3	28.3	88.5	14 (156)	55.8	261.4	4.4/8.6	-4.3 ± 4.4	F	Patzelt et al. (1996)
SM	Sangdanlin and Mubala sections	Saga	60.85 ± 1.65	29.3	85.3	(86)	74	278.5	2.5	13.6 ± 2.5	F, R	Yuan et al. (2020)
CAB	Cailangba A and B sections	Gyangze	75.1 ± 1.1	28.9	89.2	(127)	40.8	256.3	1.8	-18.4 ± 1.8	R	Yuan et al. (2020)
SD	Sangdanlin Fm., marine deposits	Zhongba	107.4 ± 13.5	29.7	84	12 (53)	25	285.7	4.8/7.1	-33.7 ± 4.8	R	Qin et al. (2019)
SAXV	Sangxiu Fm., volcanic rocks	Langkazi	129.5 ± 5.5	28.8	91.3	26 (216)	-5.9	308	6.1	-47.9 ± 6.1	F, R	Ma et al. (2016)
LKV	Lakang Fm., volcanic rocks	Cuona	132.5 ± 1.5	28.1	92.4	31 (225)	-26.8	315.2	5.7	-51.2 ± 5.7	F, R	Yang et al. (2015)
ZLWM	Zhela and Weimei formations, volcanic rocks	Zhuode	136.5 ± 1.5	28.9	91.3	31(219)	0.9	293.4	7	-52.8 ± 7.0	F,R	Bian et al. (2019)
TDS	Thakkhola-Dzong Fm., sediments	Dzong	~118	28.8	83.8	(95)	12	289	6.0/7.5	-45.0 ± 6.0	—	Klootwijk and Bingham (1980)
Cretaceous paleopoles for the Indian shield (29.5°N, 91.0°E)												
RT1	Rajmahal Traps, volcanic rocks	Rajmahal Traps	117.5 ± 0.5	24.2–25.3	87.4–87.8	25 (158)	7	297	4.5/6	-45.8 ± 4.5	D	Klootwijk, (1971)
RT2	Rajmahal Traps, volcanic rocks	Rajmahal Traps	117.5 ± 0.5	24.2–25.3	87.4–87.8	34 (120)	9.4	296.6	3.0/3.7	-43.9 ± 3.0	D	Rao and Rao (1996)



In the original article, there was an error. The authors mistakenly wrote “lower” as “higher.” A correction has been made to **Section 5 Magnetic Mineralogy and Petrography**, “Sub-section 5.1.2 Temperature Dependence of the Magnetic Susceptibility Measurements,” Paragraph 1:

“Moreover, all samples show that the heating curves are significantly lower than the cooling curves.”

In the original article, there was an error. The authors wrongly cited the reference citation of Li et al. (2016). A correction has

been made to **Section 8 Discussion**, “Sub-section 8.2 Implications to Timing of Initial India-Asia Collision,” Paragraph 12:

“Thus, given the originality of this batch of paleomagnetic data set, it is clear that we also demonstrate the robustness of the previously obtained paleomagnetic results from the Duoni Fm. volcano-sedimentary rocks (Li Z. et al., 2017).”

The authors apologize for these errors and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

REFERENCE

Li, Z., Ding, L., Song, P., Fu, J., and Yue, Y. (2017). Paleomagnetic Constraints on the Paleolatitude of the Lhasa Block during the Early Cretaceous: Implications for the Onset of India-Asia Collision and Latitudinal Shortening Estimates across Tibet and Stable Asia. *Gondwana Res.* 41, 352–372. doi:10.1016/j.gr.2015.05.013

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