

Supplementary information to “Palaeo-landslide dams controlled the formation of Late Quaternary terraces in Diexi, the upper Minjiang River, eastern Tibetan Plateau”

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We summarized 124 chronological data and 30 incision rate data from previous studies of the upper Minjiang River. Detail information is listed in Table 1.

Table S1. 124 chronological data and 30 incision rate data from previous studies of the upper Minjiang River

No	Area	Reach	Site	Elev. (m)	Depth (m)	Height above the river (m)	Terrace level	Material	Dating method	Ages (ka)	Error	Incision rate (m/×10 ⁴ yr)	Refers
1		Gamisi - Gonggaling	Doujitai	-	-	246	T4	-	ESR	376.3	-	6.5	Yang et al. (2003)
2		Gamisi - Gonggaling	North of Xiaoxitia n	-	-	40	T3	-	TL	31.2	-	12.8	Zhao et al. (1994)
3		Gamisi - Gonggaling	Kakagou	-	-	124	above T3	cave	ESR	322.67	-	3.8	Yang et al. (2003)
4	Up- stream	Zhangla - Gamisi	Chuanpa n	-	-	25	T2	-	ESR	287.27	-	0.9	
5		Zhangla - Gamisi	Chuanpa n	-	-	25	T2	-	TL	30.2	-	8.3	Zhou et al. (2000)
6		Zhangla - Gamisi	Chuanpa n	-	-	25	T2	-	TL	46.4	-	5.4	
7		Zhangla - Gamisi	Chuanpa n	-	-	28	T2	-	ESR	642.7	-	0.4	Yang et al. (2003)
8		Zhangla - Gamisi	Shanbaxi ang	-	-	150	T4	-	TL	134.8	-	11.1	Zhou et al. (2000)
9		Zhangla - Gamisi	Zhangla	-	-	45	top of T3	loess	14C	10.116	-	-	Zhu (2014)

10	Zhangla - Gamisi	Zhangla	-	-	90	top of T3	loess	14C	6.693	-	-	
11	Zhangla - Gamisi	Zhangla	-	-	35	T3	-	14C	35.16	-	-	
12	Zhangla - Gamisi	Zhangla	-	-	20	T3	-	14C	22.555	-	-	
13	Zhangla - Gamisi	North of Zhangla	-	-	60	T2	-	14C	7.75	-	77.4	Kirby et al. (2002)
14	Zhangla - Gamisi	North of Zhangla	-	-	35	T2	-	14C	6.12	-	57.2	
15	Zhangla - Gamisi	Zhangla	-	-	15	T2	-	14C	18.565	-	-	Zhu (2014)
16	Zhangla - Gamisi	Zhangla	-	-	15	T2	-	OSL	19.2	-	-	
17	Zhangla - Gamisi	Zhangla	-	-	40	T2	-	TL	15.3	-	26.1	Zhao et al. (1994)
18	Zhangla - Gamisi	Zhangla	-	-	80	T2	-	TL	23.6	-	33.9	
19	Zhangla - Gamisi	Zhangla	-	-	-	T2	-	TL	31.2	-	-	Gao and Li (2006)
20	Zhangla - Gamisi	Zhangla	-	-	-	T2	-	14C	22.78	-	-	Kirby et al. (2002)
21	Zhangla - Gamisi	Zhangla	-	-	-	T1	-	TL	15.3	-	-	Gao and Li (2006)
22	Zhangla - Gamisi	Zhangla	-	-	-	T1	-	14C	9.231	6.49	-	Kirby et al. (2000)
23	Zhangla - Gamisi	Zhangla	-	-	10	T1	-	14C	2.81	-	35.6	
24	Gamisi - Gonggaling	Qiming	-	-	120	T2	-	TL	27	-	44.4	Zhou et al. (2000)
25	Zhangla - Gamisi	Zhangla Chuanzh usi	-	-	35	T2	-	14C	12.94	-	27	Kirby et al. (2002)
26	Zhangla - Gamisi	Linpo- chuanzig ou	-	-	200	T2	-	14C	23.46	-	85.3	
27	Zhangla - Gamisi	Chuanzi gou	-	-	80	upper T4	-	IRSL	157	28	5.1	Kirby et al. (2000)
28	Zhangla - Gamisi	Chuanzi gou	-	-	300	lower T4	-	IRSL	254	35	11.8	
29	Zhangla - Gamisi	Chuanzi gou	-	-	160	T4	-	TL	157.6	-	10.2	Zhao et al. (1994)
30	Zhangla - Gamisi	Chuanzi gou	-	-	250	upper T4	-	TL	830	-	3	
31	Zhangla - Gamisi	East of Songpan	-	-	80	top of T3	-	ESR	107	-	-	Yang (2005)

32	Zhangla - Gamisi	East of Songpan	-	-	20	bottom of T2	-	ESR	25	-	-		
33	Diexi	Taiping	-	1	-	-	Lacustrine	OSL	9.5	0.5	-	Zhong	
34	Diexi	Taiping	-	2.1	-	-	Lacustrine	14C	13.395	0.209	-	(2017)	
35	Diexi	Taiping	-	4.1	-	-	Lacustrine	14C	14.327	0.192	-		
36	Diexi	Taiping	-	4.2	-	-	Lacustrine	OSL	10.3	0.5	-		
37	Diexi	Taiping	-	5.3	-	-	Lacustrine	OSL	8.9	0.6	-		
38	Diexi	Taiping	-	7.5	-	-	Lacustrine	OSL	11.1	0.5	-		
39	Diexi	Taiping	-	8.6	-	-	Lacustrine	OSL	10.2	0.7	-		
40	Diexi	Taiping	-	8.7	-	-	Lacustrine	14C	14.688	0.23	-		
41	Diexi	Taiping	-	8.9	-	-	Lacustrine	OSL	18.9	3.5	-		
42	Diexi	Taiping	-	9.6	-	-	Lacustrine	OSL	10.1	0.7	-		
43	Diexi	Taiping	-	10.1	-	-	Lacustrine	14C	14.173	0.153	-		
44	Diexi	Taiping	-	11.3	-	-	Lacustrine	OSL	8.4	0.8	-		
45	Diexi	Taiping	2239. 5	1.1	-	-	Lacustrine	OSL	25	3.2	-	Guo (2018)	
46	Diexi	Taiping	2239. 3	1.3	-	-	Lacustrine	OSL	19.6	2.7	-		
47	Diexi	Taiping	2232	8.6	-	-	Lacustrine	OSL	20.7	2.4	-		
48	Diexi	Taiping	2231. 6	9	-	-	Lacustrine	OSL	22.8	3.6	-		
49	From downstre am to	Maoxian - Zhangla	North of Jiaochan g	-	-	56	T2	Lacustrine	IRSL	14.2	1.7	39.4	Kirby et al. (2000)
50	upstream or Study area	Maoxian - Zhangla	Jiaochan g	-	-	162	T5	Lacustrine	14C	9.483	0.21	-	Wang et al. (2007)
51		Maoxian - Zhangla	Jiaochan g	-	-	180	T2	Lacustrine	14C	10	-	198	Duan et al. (2002)
52		Maoxian - Zhangla	Jiaochan g	-	-	90	T2	Lacustrine	14C	14	-	64.3	
53		Maoxian - Zhangla	Jiaochan g	-	-	35	T2	Lacustrine	14C	6.3395	0.16	-	Wang et al. (2007)
54		Maoxian - Zhangla	Jiaochan g	-	-	30	T2	Lacustrine	14C	22	-	13.6	Duan et al. (2002)
55		Maoxian - Zhangla	Jiaochan g	-	-	196	T2	Lacustrine	ESR	390	-	5	Yang et al. (2003)
56		Maoxian - Zhangla	Jiaochan g	-	-	180	T2	Lacustrine	ESR	504.74	-	3.6	
57		Diexi	Tuanjie	2254. 97	-	-	T5	Lacustrine	14C	8.3755	0.12	-	Wang et al. (2020)
58		Diexi	Tuanjie	2213. 84	-	-	T4	Lacustrine	14C	4.8105	0.07	-	
59		Diexi	Tuanjie	2185. 68	-	-	T3	Lacustrine	14C	3.7015	0.27	-	
60		Diexi	Tuanjie	-	-	-	-	Lacustrine	AMS 14C	24.445	0.653	-	

61	Diexi	Tuanjie	-	-	-	-	Lacustrine	AMS 14C	27.35	0.977	-	Wang et al. (2007)
62	Diexi	Tuanjie	-	-	-	-	Lacustrine	AMS 14C	24.447	0.519	-	
63	Diexi	Tuanjie	-	-	-	-	Lacustrine	AMS 14C	9.735	0.712	-	
64	Diexi	Tuanjie	-	-	-	-	Lacustrine	AMS 14C	13.602	0.128	-	Wang (2009)
65	Diexi	Tuanjie	-	-	-	-	Lacustrine	AMS 14C	15.08	0.065	-	
66	Diexi	Tuanjie	-	0	-	T2	Lacustrine	OSL	10.63	1.27	-	Jiang et al. (2014)
67	Diexi	Tuanjie	-	0.05	-	T2	Lacustrine	OSL	15.9	1.1	-	Mao (2011)
68	Diexi	Tuanjie	-	0.95	-	T2	Lacustrine	OSL	18.17	2.66	-	Jiang et al. (2014)
69	Diexi	Tuanjie	-	1.05	-	T2	Lacustrine	OSL	18	1.1	-	Mao (2011)
70	Diexi	Tuanjie	-	1.95	-	T2	Lacustrine	OSL	21.88	4.58	-	Jiang et al. (2014)
71	Diexi	Tuanjie	-	3.05	-	T2	Lacustrine	OSL	13.7	1.9	-	Mao (2011)
72	Diexi	Tuanjie	-	3.85	-	T2	Lacustrine	OSL	13.88	1.39	-	Jiang et al. (2014)
73	Diexi	Tuanjie	-	4.05	-	T2	Lacustrine	OSL	17.3	3.4	-	Mao
74	Diexi	Tuanjie	-	5.05	-	T2	Lacustrine	OSL	14.4	1.5	-	(2011)
75	Diexi	Tuanjie	-	6.05	-	T2	Lacustrine	OSL	14.19	1.91	-	Jiang et al. (2014)
76	Diexi	Tuanjie	-	6.05	-	T2	Lacustrine	OSL	16.5	2.1	-	Mao (2011)
77	Diexi	Tuanjie	-	6.9	-	T2	plant	14C	14.6295	0.32	-	Shi et al. (2020)
78	Diexi	Tuanjie	-	7.05	-	T2	Lacustrine	OSL	14.91	3.77	-	Jiang et al. (2014)
79	Diexi	Tuanjie	-	8.05	-	T2	Lacustrine	OSL	15.9	2	-	Mao (2011)
80	Diexi	Tuanjie	-	8.3	-	T2	plant	14C	16.48	0.18	-	Shi et al. (2020)
81	Diexi	Tuanjie	-	8.95	-	T2	Lacustrine	OSL	16.6	2.67	-	Jiang et al. (2014)
82	Diexi	Tuanjie	-	9.05	-	T2	Lacustrine	OSL	19	1.7	-	Mao
83	Diexi	Tuanjie	-	10.05	-	T2	Lacustrine	OSL	18.8	1.7	-	(2011)
84	Diexi	Tuanjie	-	10.95	-	T2	Lacustrine	OSL	18.6	2.86	-	Jiang et al. (2014)
85	Diexi	Tuanjie I	-	0.5	-	-	Lacustrine	OSL	10.9	0.6	-	Zhong
86	Diexi	Tuanjie I	-	1.5	-	-	Lacustrine	OSL	17.7	0.8	-	(2017)
87	Diexi	Tuanjie I	-	2.5	-	-	Lacustrine	OSL	12	0.7	-	
88	Diexi	Tuanjie I	-	3.5	-	-	Lacustrine	OSL	9.8	0.7	-	
89	Diexi	Tuanjie I	-	4.5	-	-	Lacustrine	OSL	17.8	0.9	-	

90	Diexi	Tuanjie I	-	5	-	-	Lacustrine	OSL	11.1	0.9	-	
91	Diexi	Tuanjie I	-	6.1	-	-	Lacustrine	OSL	10	0.8	-	
92	Diexi	Tuanjie I	-	8.15	-	-	Charcoal	AMS 14C	13.837	0.173	-	
93	Diexi	Tuanjie I	-	8.5	-	-	Lacustrine	OSL	16.1	0.7	-	
94	Diexi	Tuanjie I	-	9	-	-	Lacustrine	OSL	12.7	0.6	-	
95	Diexi	Tuanjie I	-	10	-	-	Lacustrine	OSL	19.2	3.4	-	
96	Diexi	Tuanjie I	-	10.5	-	-	Lacustrine	OSL	19.5	1	-	
97	Diexi	Tuanjie I	-	11.1	-	-	Charcoal	AMS 14C	14.23	0.15	-	
98	Diexi	Tuanjie II	-	0.1	-	-	Lacustrine	OSL	20.3	1.4	-	
99	Diexi	Tuanjie II	-	0.6	-	-	Lacustrine	OSL	12.1	0.7	-	
100	Diexi	Tuanjie II	-	0.7	-	-	Lacustrine	OSL	20.4	0.8	-	
101	Diexi	Tuanjie II	-	2.1	-	-	Lacustrine	OSL	14.2	1.2	-	
102	Diexi	Tuanjie II	-	2.4	-	-	Lacustrine	AMS 14C	14.67	0.23	-	
103	Diexi	Tuanjie II	-	2.9	-	-	Lacustrine	AMS 14C	14.439	0.176	-	
104	Diexi	Tuanjie II	-	3.7	-	-	Lacustrine	OSL	20.9	1	-	
105	Diexi	Tuanjie II	-	5.6	-	-	Lacustrine	OSL	15.5	1	-	
106	Diexi	Tuanjie	-	2.30 (thickness)	-	-	Lacustrine	14C	35.7815	0.37	-	Zhang et al. (2009)
107	Diexi	Tuanjie	-	4.55 (thickness)	-	-	Lacustrine	14C	31.1315	0.1	-	
108	Diexi	Tuanjie	-	7.70 (thickness)	-	-	Lacustrine	14C	30.655	0.03	-	
109	Diexi	TuanjieII I	2158.9	4	-	T3	Lacustrine	OSL	19	1.9	-	Guo (2018)
110	Diexi	TuanjieII	2161.8	3	-	T2	Lacustrine	OSL	22.9	2.7	-	
111	Diexi	TuanjieI	2165.6	7.5	-	T1	Lacustrine	OSL	23.7	3.2	-	
112	Diexi	valley	-	-	-	T5	Sand	TL	90.446	3	-	Gao and Li (2006)
113	Diexi	valley	-	-	-	T3	Sand	TL	50.8	3.9	-	
114	Diexi	valley	-	-	-	T2	Sand	TL	12.7	1	-	
115	Diexi	valley	-	-	-	bottom of lacustrine sediments	Lacustrine	14C	22.675	2.44	-	Xiaokang Luo et al., 2019

116	Wenchuan - Maoxiao	East of Yaogou, Maoxian	-	-	140	upper T3	-	ESR	110.25	-	12.7	Yang et al. (2003)
117	Wenchuan - Maoxiao	North of Maoxian	-	-	120	T2	-	TL	20.7	-	58	Zhao et al. (1994)
118	Wenchuan - Maoxiao	Maoxian	-	-	100	upper of T3	loess	ESR	62	-	-	Yang (2005)
119	Wenchuan - Maoxiao	Maoxian	-	-	90	upper of T3	loess	ESR	100.5	-	-	
120	Down- stream	Wenchuan - Maoxiao	-	-	80	bottom of T3	-	OSL	39.9	-	-	Zhu (2014)
121	Wenchuan - Maoxiao	Maoxian	-	-	35	T2	-	14C	27.84	-	-	
122	Wenchuan - Maoxiao	Maoxian	-	-	20	T2	-	14C	24.68	-	-	
123	Wenchuan - Maoxiao	Yantouz hai, Maoxian	-	-	160	lower T3	-	ESR	279.99	-	5.7	Yang et al. (2003)
124	Wenchuan - Maoxiao	North of Wenchua n	-	-	160	T4	cave	ESR	370.5	-	4.3	

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