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①

471000 ②

100875 ③

471500

33 ~ 31kaB. P.

33°47'24"N 111°36'28"E 2011 2~4

512

96

60

73

58

225

30%

P534.63\*1 P66 K871.11

A

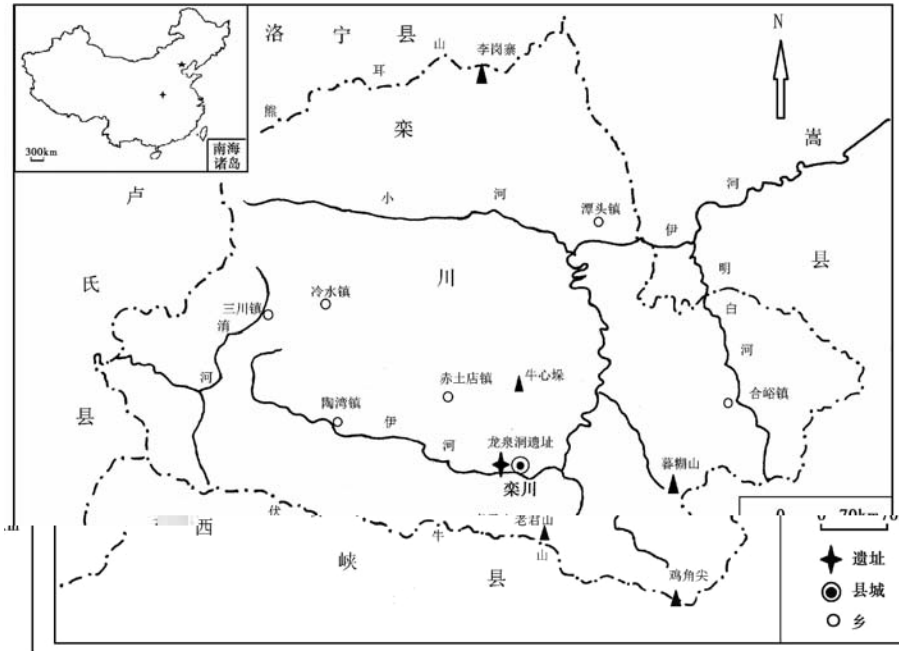
MIS 3

1

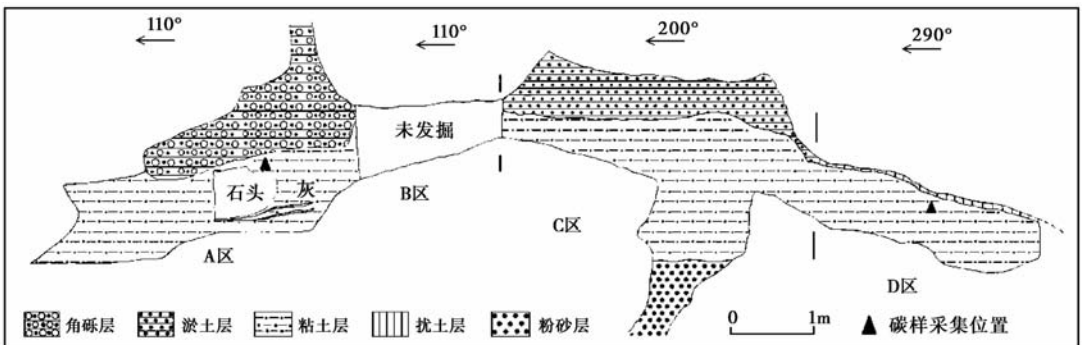
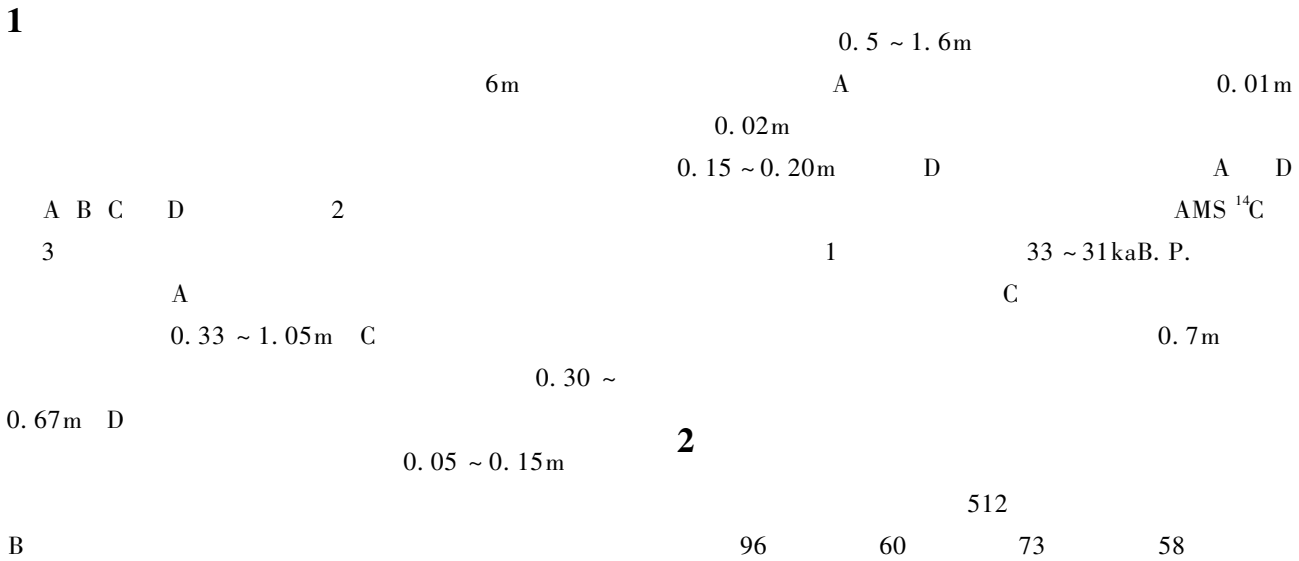
2

3

-



1  
Fig. 1 Geographic location of Longquan Cave



2  
Fig. 2 Section of the Longquan Cave

**1 AMS <sup>14</sup>C**

Table 1 AMS <sup>14</sup>C dating results

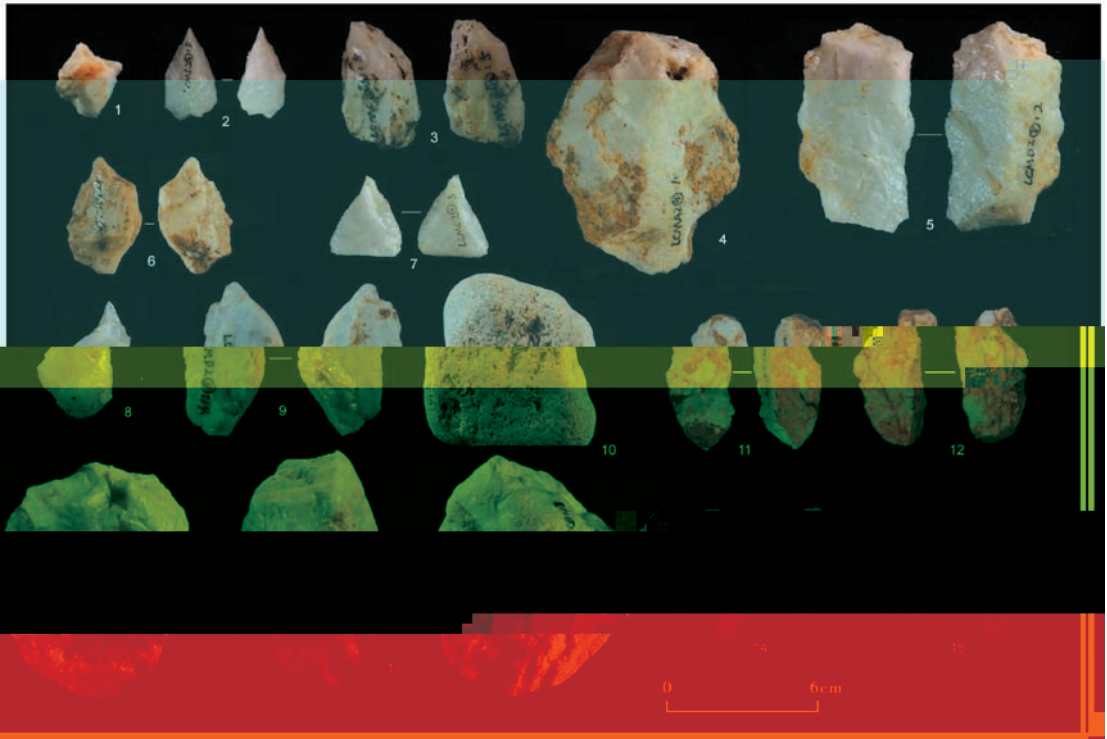
Lab	<sup>14</sup> C /kaB. P.	/cal. BC		
		1σ 68.2%	2σ 95.4%	
BA110237	LCMA2② 1	26620±210	29308 ~ 29084	29435 ~ 28931
BA110238	LCMD2① 1	28610±170	31376 ~ 30842	31608 ~ 30234
225			2 cm	1327
	2 cm	16854	0.5 cm	

**2.1**

3km

**2.2**

96	18.7%	14
82		
1		
82	85.4%	76



4

- 1 — LCMA2③ 13    2 — LCMA2⑥ 5    3 — LCMC2⑩ 5    4 — LCMA2④ 10
- 5 — LCMD2⑤ 2    6 — LCMC2⑤ 10    7 — LCMC2⑧ 3    8 — LCMC2④ 2
- 9 — LCMD2⑧ 14    10 — LCMC2⑧ 8    11 — LCMC3① 4    12 — LCMC2② 32
- 13 — LCMD2⑦ 17    14 — LCMD2⑧ 36    15 — LCMC3① 7

Fig. 4 Stone artifacts

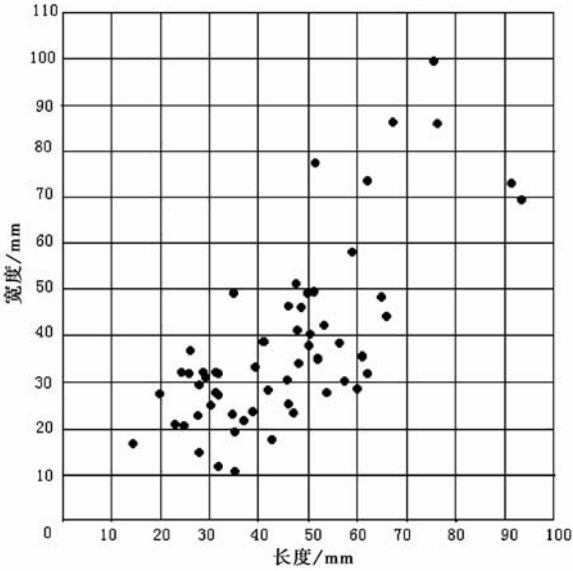
2.3

					15.6%				
				3		5		8.6%	
60		11.7%	2	7	12.1%	79.3%			
	58				57°	123°		97°	
1						9		15.52%	
		54						21	
	32		59.3%			36.2%			4
12		22.2%		10	6.9%	1/2			17
18.5%		1		3	29.3%	1/2		16	27.6%
	14.5mm		93.8mm					2	
45.2mm		10.5mm		99.2mm		25			
	37.7mm		5.5mm		2		17	29.3%	
36.7mm		16.1mm		2	41		70.7%	5	
		20		34.5%					9
65.5%				38		53.0%			
	10		11 ~ 20		2		22.2%		
	20					2	22.2%		
	47		19		1		11.1%		
40.4%		16		34%		4		44.5%	

2

Table 2 The main feature of hammering flakes

32	26	27	31	10	48	3	55
55.2%	44.8%	46.6%	53.4%	17.2%	82.8%	5.2%	94.8%



5

Fig. 5 Distribution of the length and width of flakes

4		23.5%	
" "	1		25%
3	75%		4
	23.5%	" Y "	2
50%	" Y "	1	25%
25%			1
LCMD2⑤	2	78.2mm	44.1mm
29.2mm		×	27.7mm ×
25.3mm		110°	
50%	Y	3	
			4-5
2			
2		1	1
LCMD2⑧	14		61.4mm
33.3mm		17.1mm	

2.4

	225		44.0%
	212	94.2%	12
1	0.5%		8
	173		6
9			210
	169.1mm		13.7mm
50.9mm		112.1mm	8.0mm
	35.4mm		75.7mm
4.1mm		21.9mm	
	58		11.3%
	57		9
1		32	14
2		71.6mm	11.5mm
	35.5mm		65.0mm
8.3mm		28.2mm	34.7mm
	3.2mm		12.8mm

2.5

	73		14.3%
	1		33
	34		60.6%
20		7	21.2%
	18.2%		14
1			29.4%
	29.4%	10	29.4%
		14	
		1	5
4		1	2
			13
3		15	2
		1	-
			13
5		7	
48.1mm			36.7mm ü
19.5mm		73°	
			LCMA2④ 10
			? p

LCMC2⑩ 5		42.5mm		3			
27.2mm	20.5mm						
25.3mm		38mm					
		72°	4-3				
3	2						
LCMA2③ 13						30%	
22.8mm	21.2mm	10.9mm					
20.1mm	15.1mm	84°	86°				
	65°	76°					
	4-1						
LCMC2⑤ 10		44.5mm					
26.2mm	14.4mm				6		
		17.5mm	10.3mm				
49°	45°	4-6				-	
4	2						
LCMA2⑥ 5		34mm				7	
20.4mm	11.7mm			"			
31.7mm	10.1mm	67°	50°				"
	50°	74°			<sup>14</sup> C	26kaB. P.	
4-2							
LCMC2⑧ 3		31.6mm					
26.4mm	8.6mm						
27.1mm	32.1mm					<sup>8 9</sup>	<sup>14</sup> C
	62° 67°	30°	4-7		28130±1370	28945±1370	33155±645
5	1						
LCMC2⑭ 2		43.3mm					
28.5mm	13.7mm						
		19.5mm					
		16.7mm	31.1mm				<sup>10</sup>
	60° 71°	45°					
	75°	4-8					150m
6	31	5					
16.1%	22	71.0%					
12.9%		84.9mm				<sup>11</sup>	
	67.2mm	46.7mm					
LCMC2⑧ 8		65.2mm					
61.5mm	44mm						30kaB. P.
1	36.1mm×35.7mm	4-10					

12

28

25kaB. P.

3

—

13 ~ 15

16 ~ 22

25kaB. P.

23

<sup>14</sup>C 24100±500aB. P.

9

24 25

23 ~ 16kaB. P. <sup>26 27</sup>

27

392

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40

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# PRELIMINARY ANALYSIS OF LITHIC ASSEMBLAGE EXCAVATED IN LONGQUAN CAVE HENAN PROVINCE CENTRAL CHINA

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## Abstract

Longquan Cave is situated in the Longquanshan park in Luanchuan County of Henan Province 33°47'24" N and 111° 36'28" E. It is an upper Paleolithic site.