

Dear Editor,

Thank you for your patience in this manuscript.

The manuscript has been proofread again. The files we uploaded include an *Abstract (.pdf)*, a *Manuscript (.pdf)*, an *Author's Response (.pdf)*, a *Text (.docx)* and a *Figures (.zip)*.

The corrections list are as follows.

1. The name of a co-author

Chuan-chou Shen → Chuan-Chou Shen

2. The geographical coordinates of the Kaiyuan Cave

In Section 2 and the figure captions of Fig.2

(36°24'32.20"N, 118°02'3.06"E) → (36°24'32"N, 118°02'05"E)

3. Acknowledgments

3.1 Correct a sentence

This research was funded by the National Natural Science Foundation of China (NNSFC, NO.41171158).

2.2 Add a sentence

U-Th dating was finished in the High-precision Mass Spectrometry and Environment Change Lab (HISPEC) with support of MOST (104-2119-M-002-003 to C.-C.S.) and the National Taiwan University (105R7625 to C.-C.S.).

2.3 Correct a sentence

The authors thank Professor Jiang Xiuyang (Fujian Normal University) for his help in sample collection and high precision dating with the U-Th techniques.

Looking forward to your kind reply. Thank you.

Regards,

The authors