

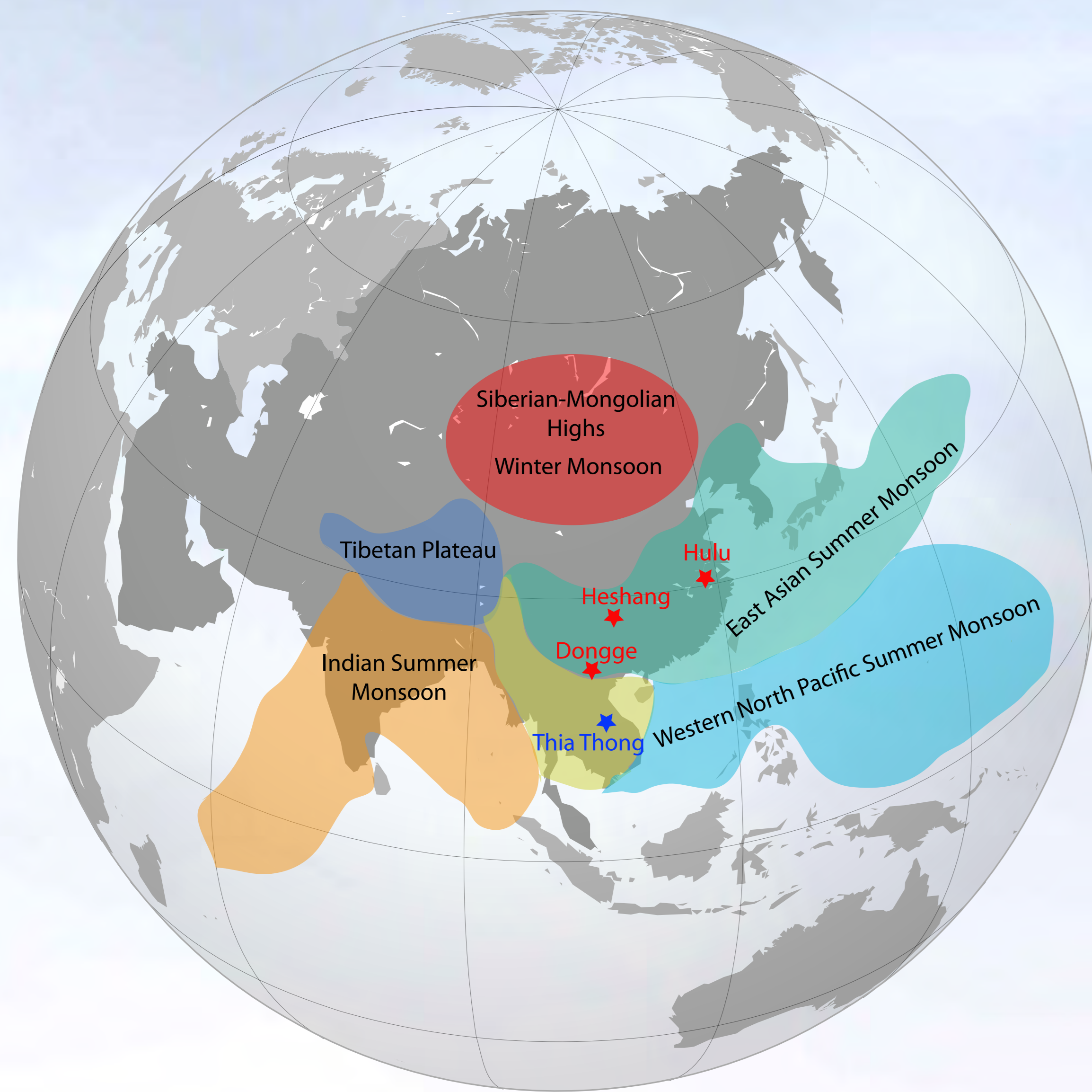
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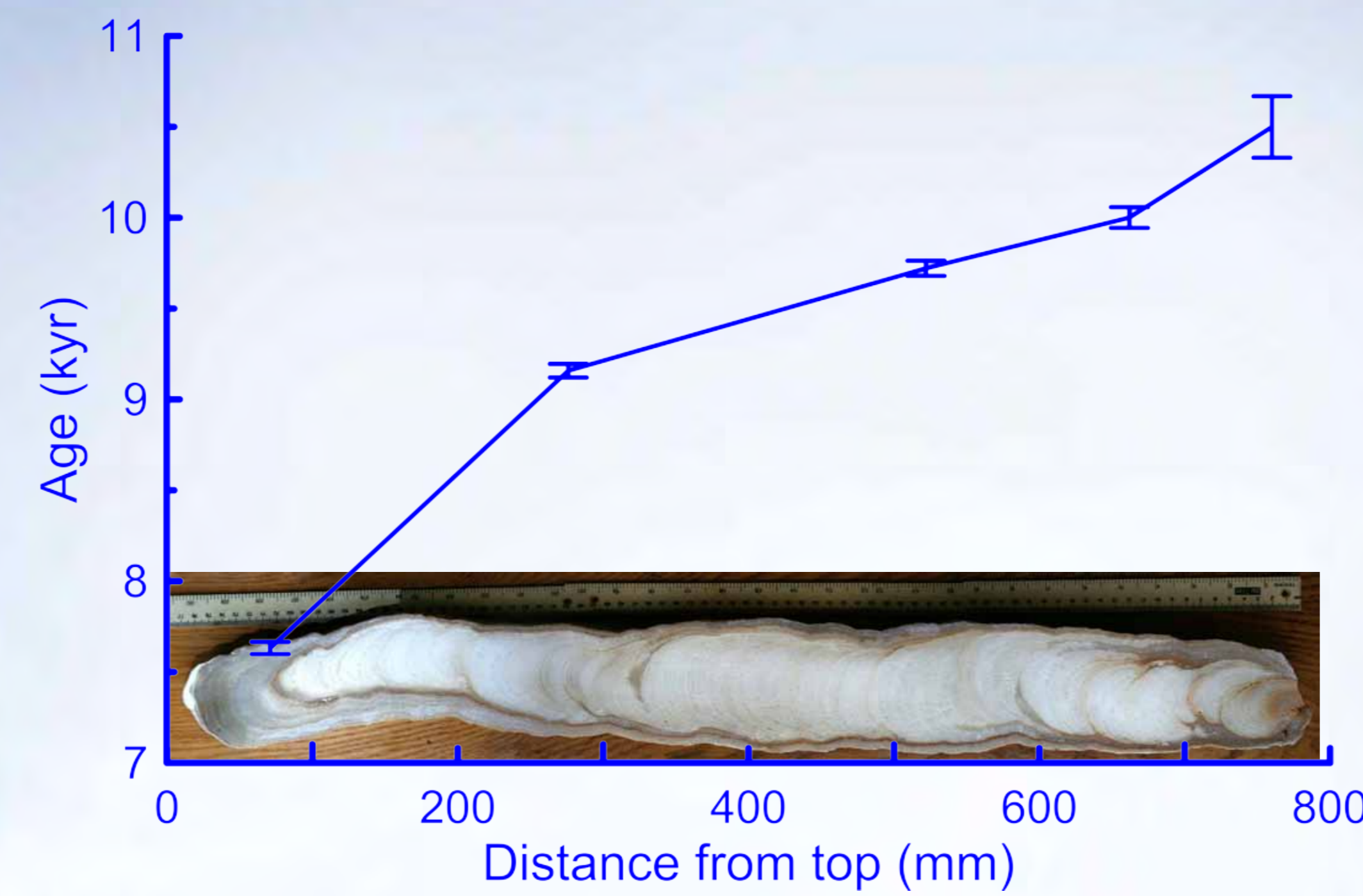
Introduction

Although people in Southeast Asia are one of the most affected by monsoon-related changes in precipitation, little is known about the range of monsoon variability in this area. Here we present the first results from two speleothems collected in Thia Thong Cave, Houaphan Province, in northern Laos, which grew during the early and late Holocene respectively.

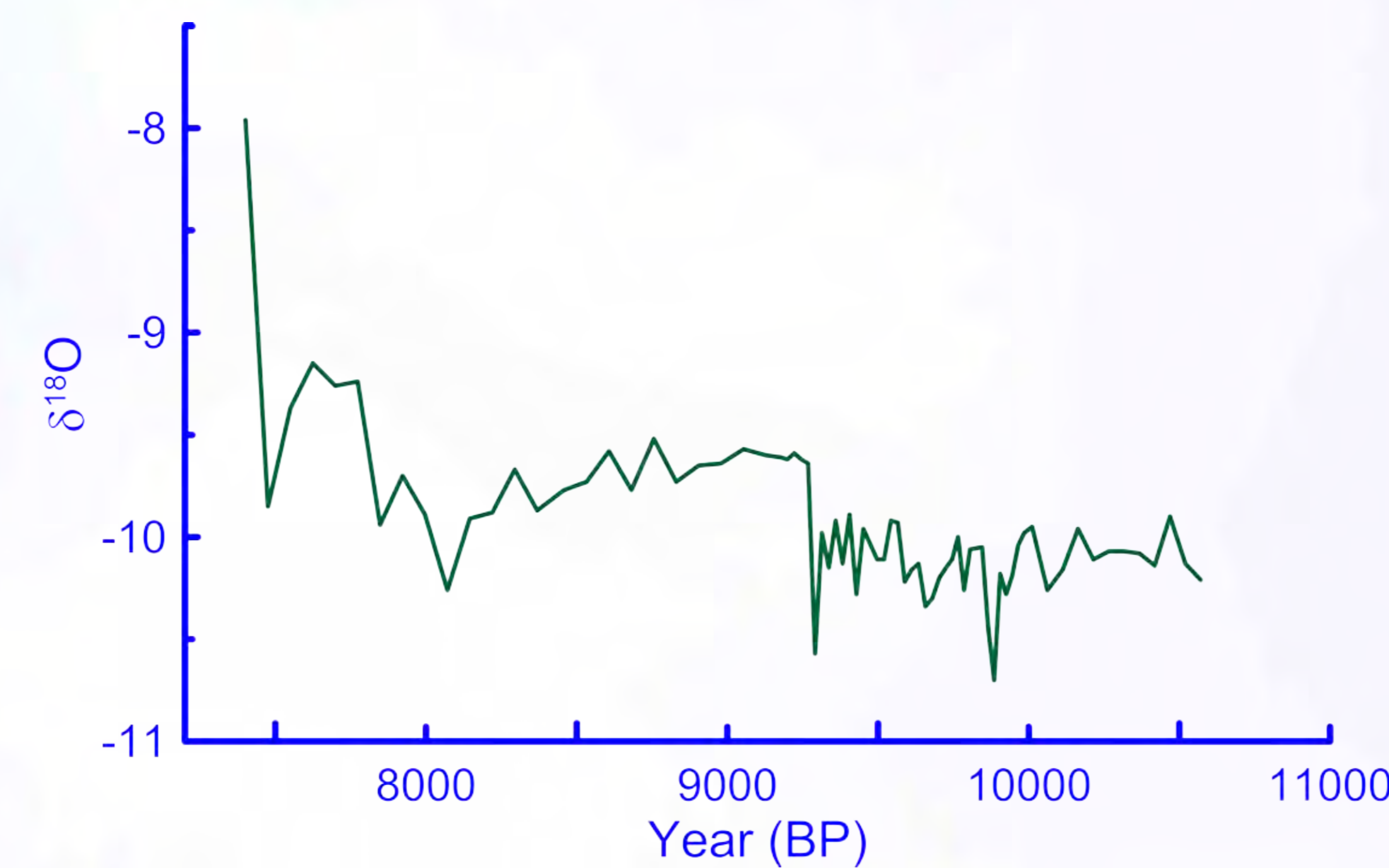


Idealised components of the Asian Monsoon system. The Indian Summer Monsoon and the East Asian Monsoon share a broad corridor in Indochina¹ represented by the Southeast Asian Monsoon. Thia Thong cave is located in this boundary region in northern Laos.

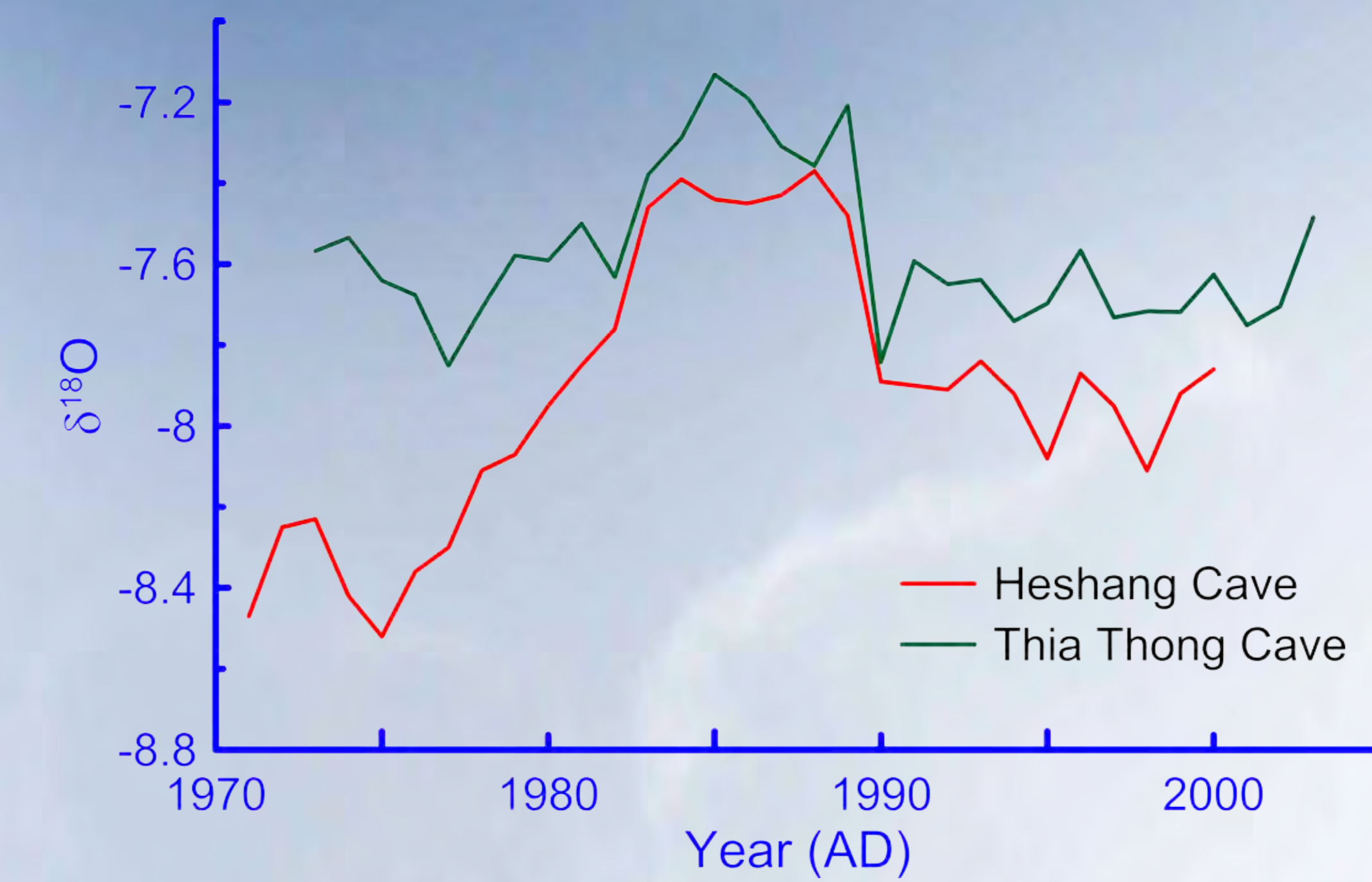
Results



Age model for stalagmite TTT10-6 based on five U-Th dates.



The oxygen stable isotope record for stalagmite TTT10-6. Early Holocene monsoon variability in Southeast Asia shows potential abrupt changes in monsoon circulation.



Comparison between the modern stable isotope record from Thia Thong Cave in northern Laos and Heshang Cave in China. The chronology for the Thia Thong record is given by annual layers and a U-Th age of 18 ± 3 years near the top of the stalagmite. The black rectangle shows the location of the milling track.

Conclusions

Recent monsoon variability in northern Laos shows similarities with the East Asian Summer Monsoon. Development of a higher resolution Holocene record in this region will allow us to evaluate if this relationship was valid for the entire Holocene or only during short intervals.

Acknowledgements

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References

1. Wang, Y. J. et al. Millennial- and orbital-scale changes in the East Asian monsoon over the past 224,000 years. *Nature* 451, 1090-1093 (2008).