1   BrGDGTs-based seasonal paleotemperature reconstruction for the last 15,000 years from a

2   shallow lake on the eastern Tibetan Plateau

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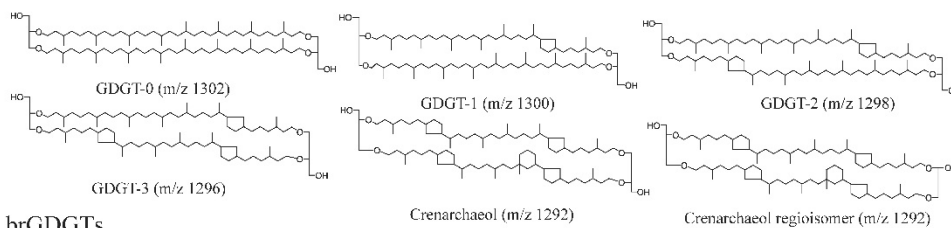
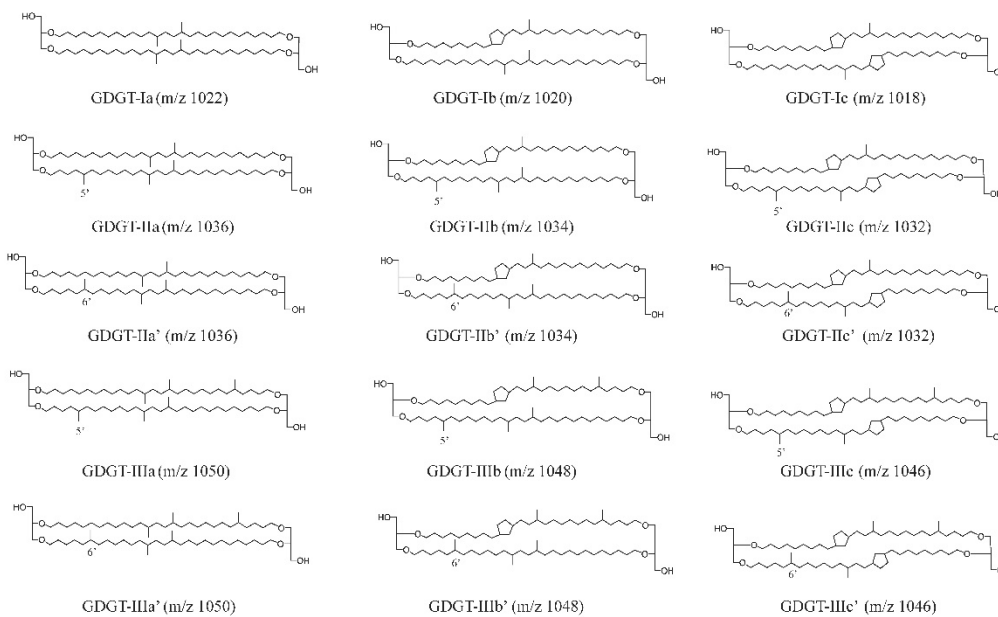
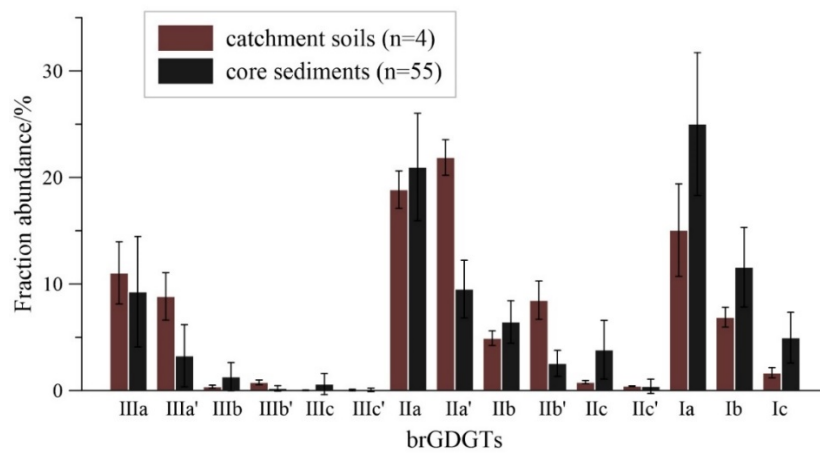
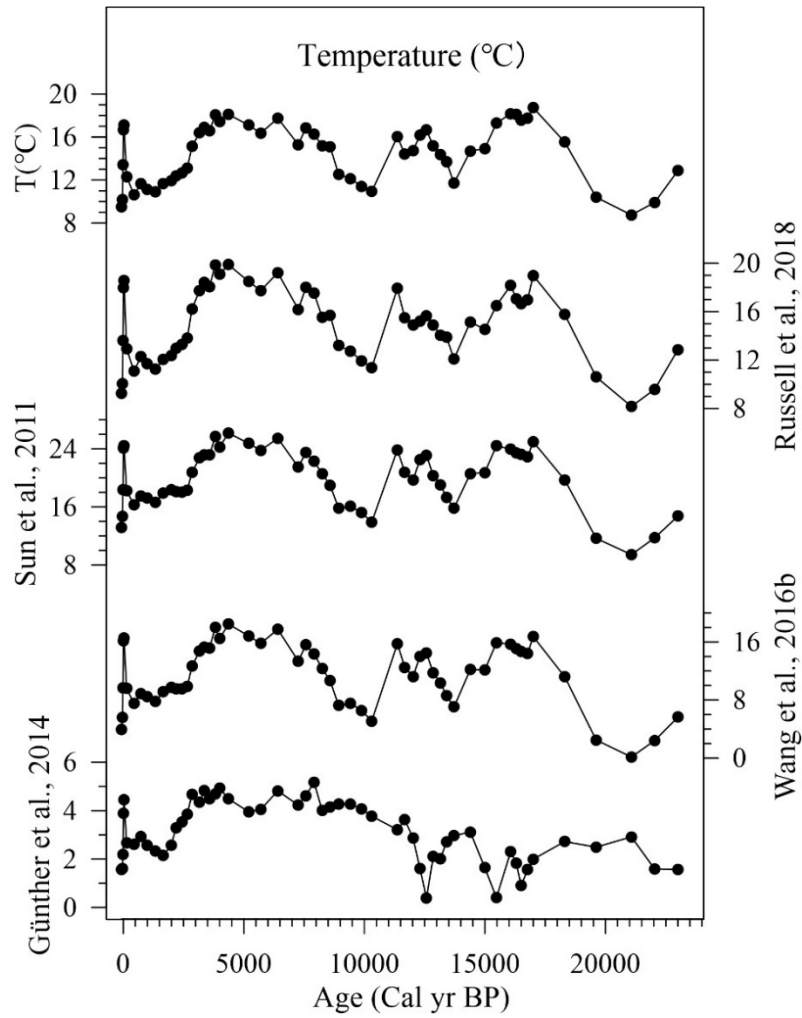
15 **Supplementary Figures**

iGDGTs

brGDGTs

16
17 Fig. S1 Molecular structures of GDGTs.

18

19   Fig. S2 Mean fractional abundances and standard deviations of brGDGTs in the downcore sediments and

20   catchment soil samples at Gahai lake.

21

22

23 Fig. S3 Comparison of reconstructed MAAT records at Gahai lake based on different temperature
24 calibrations from lakes. a. Lines with the same color indicate a similar trend in the reconstructions. Red line
25 represents the MAF result using the calibration proposed by Martínez-Sosa et al. (2021) which is adopted in
26 this study.