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Correction: The resilient Middle Triassic habitable climate following Early Triassic severe carbon isotope oscillations: contributions from microbialites, Upper Yangtze Block

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A Correction on

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There was a mistake in the captions of **Figures 1, 3, 4, 9, 10, 11** published. In **Figure 1**, the global paleogeographic map has been replaced with a new version created using GPlates software to ensure proper copyright compliance. Typographical errors in **Figures 3** and **4** have been corrected. **Figure 9** caption has been revised to acknowledge the source of the global paleogeographic map included as an inset. **Figure 10** and its caption have been modified to correctly credit the conceptual model adapted from [Boussagol et al. \(2024\)](#). The caption of **Figure 11** has been updated to cite the source of the global paleogeographic map shown in the inset.

The corrected **Figures 1, 3, 4, 9, 10, 11** and their captions appear below.

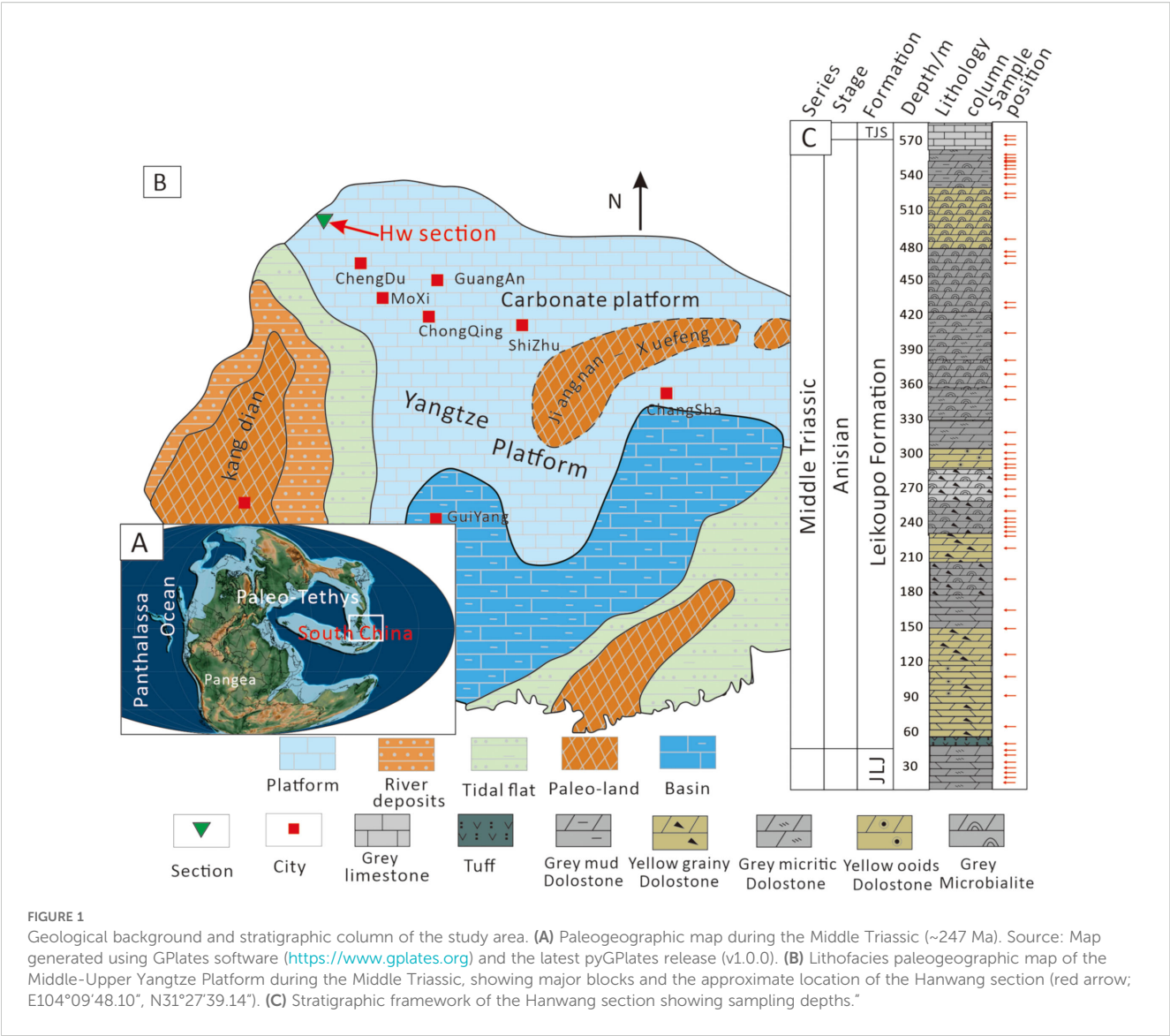


FIGURE 1 Geological background and stratigraphic column of the study area. **(A)** Paleogeographic map during the Middle Triassic (~247 Ma). Source: Map generated using GPlates software (<https://www.gplates.org>) and the latest pyGPlates release (v1.0.0). **(B)** Lithofacies paleogeographic map of the Middle-Upper Yangtze Platform during the Middle Triassic, showing major blocks and the approximate location of the Hanwang section (red arrow; E104°09'48.10", N31°27'39.14"). **(C)** Stratigraphic framework of the Hanwang section showing sampling depths."

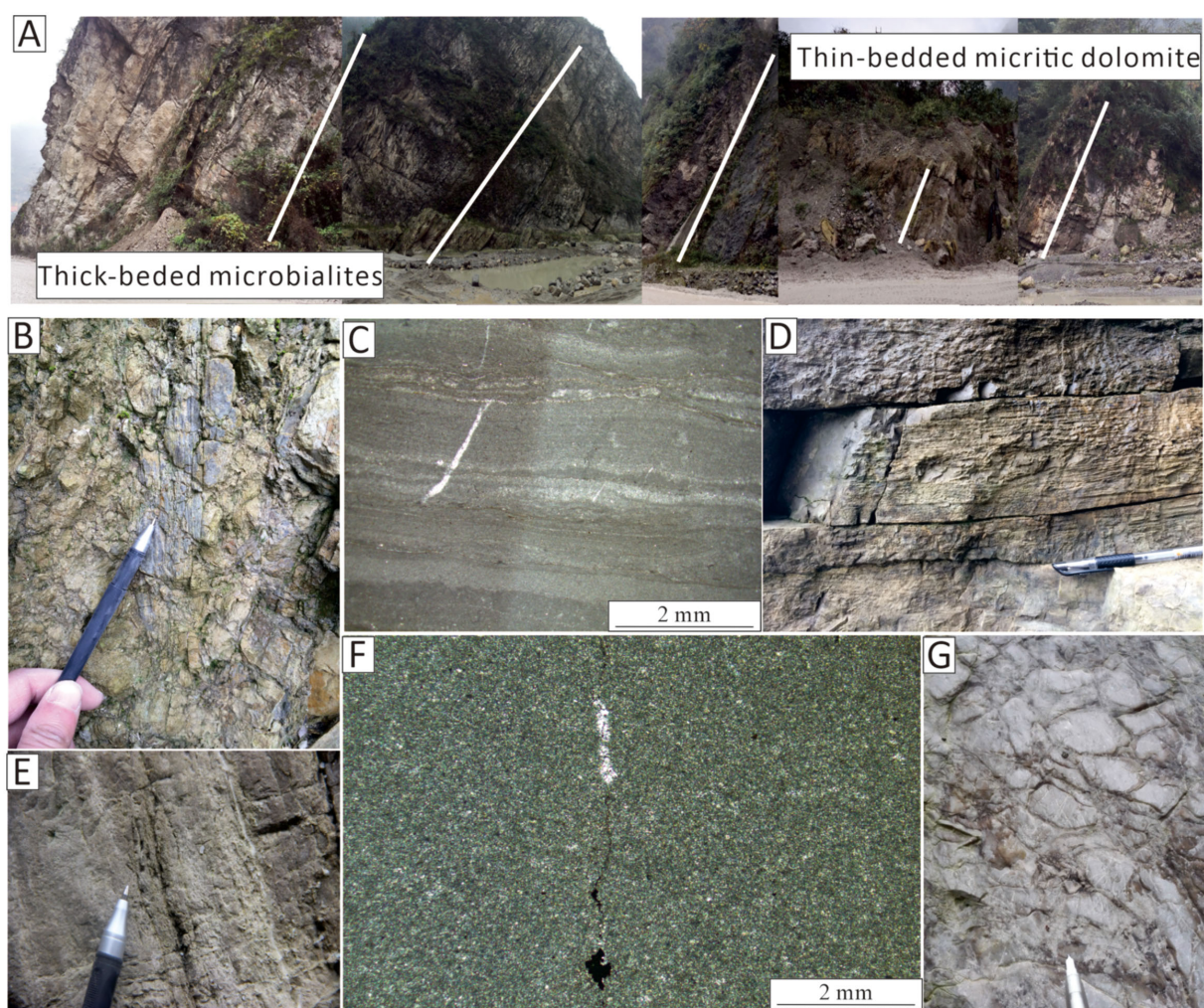


FIGURE 3

Field photographs of the Hanwang outcrop showing the features of the depositional transition from underlying thin-layered micrite dolostones to overlying thick-layered microbialites. (A) Panoramic macro-photos of HW sections (multiple images stitched together). (B) Horizontal bedding at the bottom of the Leikoupo Formation. (C) Micritic dolostones at approximately 160 m. (D) Layered structure at the bottom of the Leikoupo Formation. (E) Thin dolostone bed interspersed with dolomicrite at the bottom of the Leikoupo Formation. (F) Granular dolostone at 180 m. (G) Bioclastic grain-dominated dolostone at the bottom of the Leikoupo Formation.

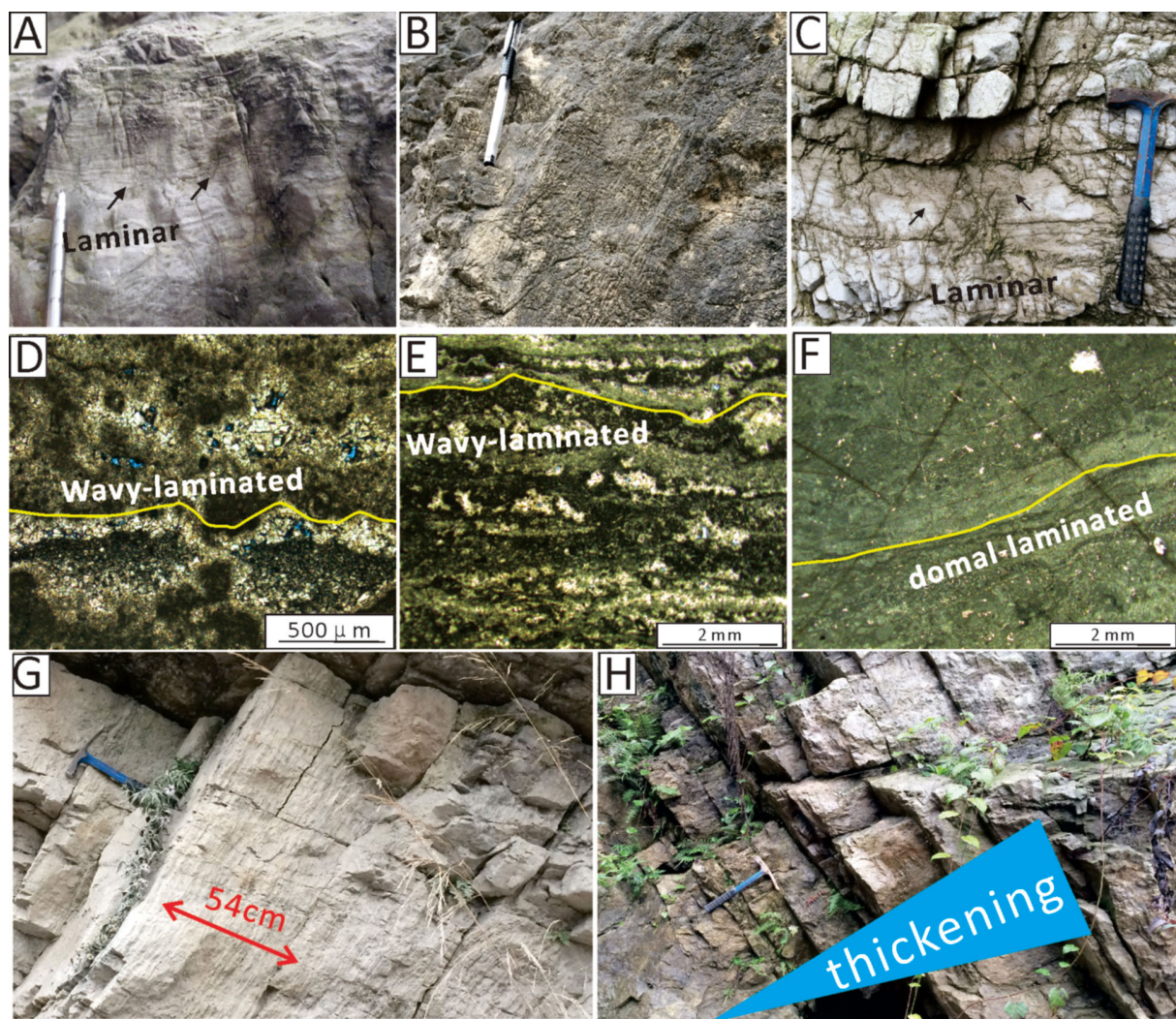
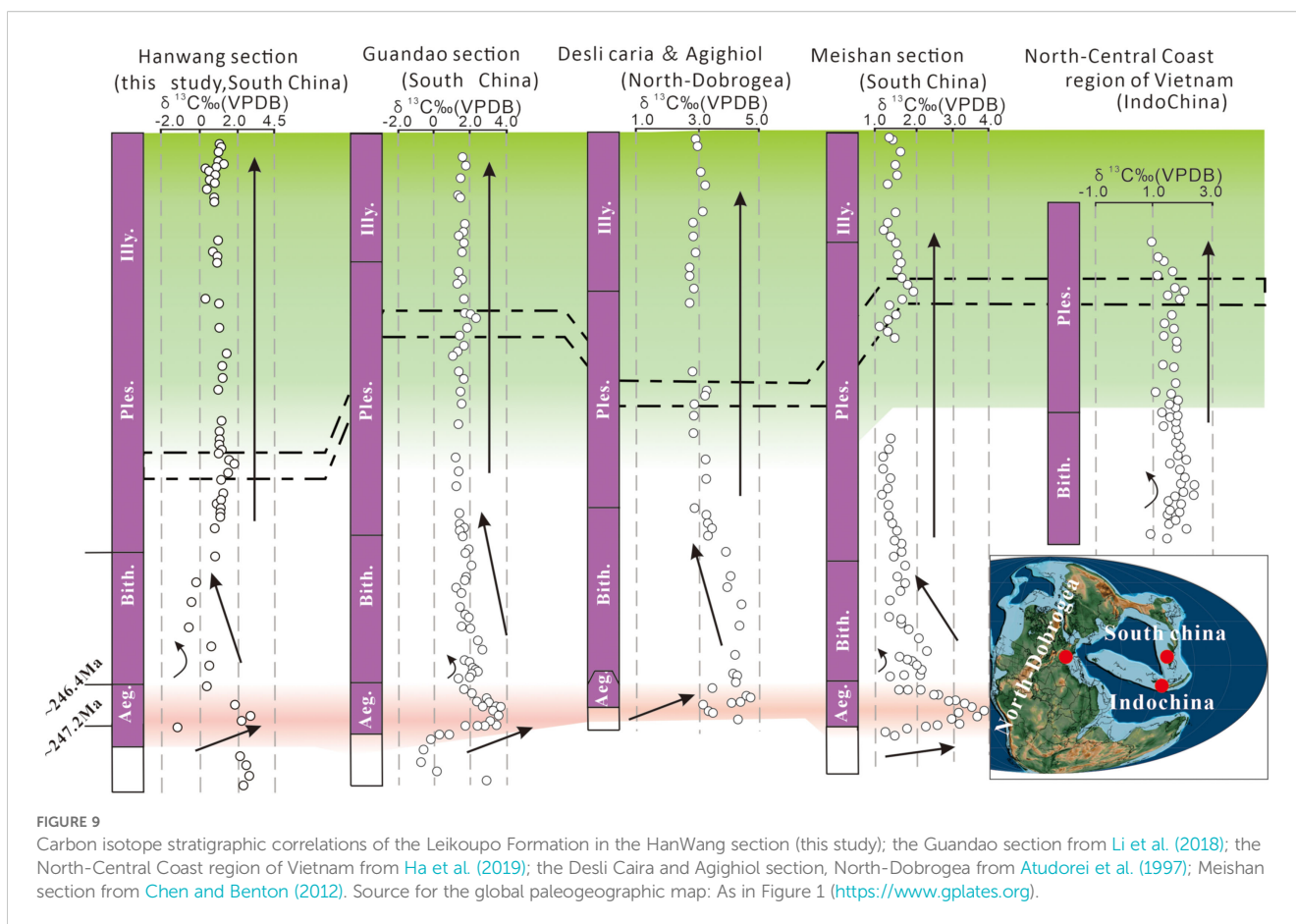


FIGURE 4

Field photographs of the stromatolite outcrops and thin-section photomicrographs of the Stromatolites. **(A)** Field photo showing domal stromatolite morphology (HW sample 540 m), interpreted as *in-situ* microbial buildup. Note that the black arrows indicate the laminar structure formed in the microbialites. The pen is 20 cm in length. **(B)** Stromatolite with laminar structure at approximately 517 m. **(C)** Light grey stromatolite with laminar structure in the middle of Leikoupo Formation (approximately 470 m). Note that the black arrow conveys the same meaning. **(D)** Stromatolite at approximately 420 m. Note that the yellow wavy line represents the structure of wavy-laminated. **(E)** Stromatolite at 400.15 m. Note that the yellow wavy line represents the structure of wavy-laminated. **(F)** Dark grey stromatolite at the top of the Leikoupo Formation (approximately 510 m). Note that the yellow wavy line represents the structure of a domal-laminated. **(G)** The single-layer thickness of Microbialites (approximately 500 m). The geological hammer is ~40 cm in length. **(H)** Transition from thin layer to thick layer in the middle part of the Leikoupo Formation (approximately 250 m).



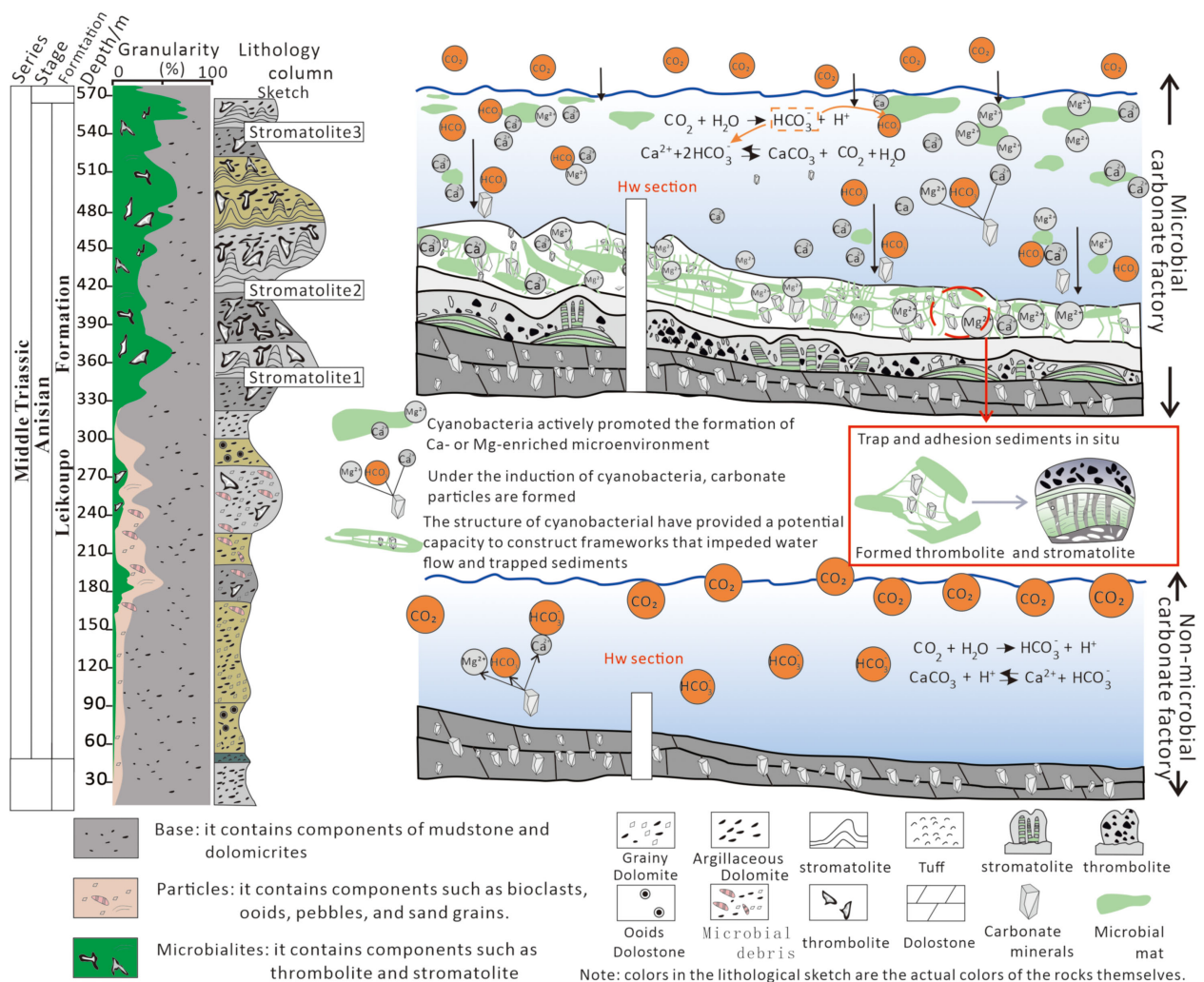


FIGURE 10

Expansion of microbialites and changes in carbonate factories from the late Early Triassic to the Middle Triassic, as well as the pattern diagram of the formation of stromatolites and thrombolites promoted by microorganisms. Source: Pattern diagram adapted from Boussagol et al. (2024), published under CC BY NC ND 4.0 License.

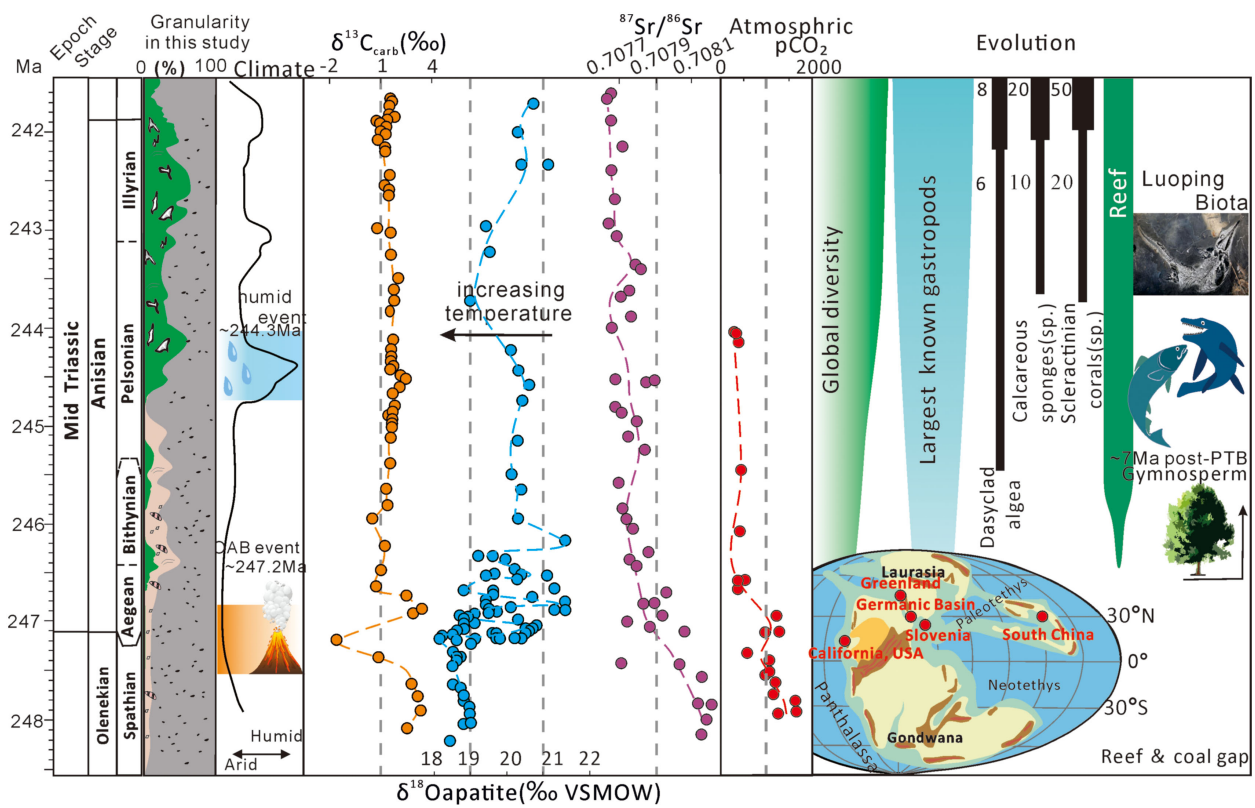


FIGURE 11

The expansion of the microbial carbon sink coincided with the stabilization of the Middle Triassic climate and the recovery of Earth's ecosystems. The $\delta^{13}\text{C}_{\text{carb}}$ is from this study; $\delta^{18}\text{O}_{\text{apatite}}$ is from Li et al. (2018); Luoping faunas are from Benton et al. (2013); Reef, Global Diversity, Largest known gastropods and Dasyclad algae are from Flügel (2002) and Payne et al. (2004); Calcareous sponges and Scleractinian corals are from Kiessling, (2010); Reconstruction of atmosphere pCO_2 is from Joachimski et al. (2022); Climate is from Stefani et al. (2010). Source for the global paleogeographic map: As in Figure 1 (<https://www.gplates.org>).

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