

Mercury (Hg) anomalies and carbon isotope excursions as a stratigraphic marker for the Permian-Triassic mass extinction

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Korte & Kozur, 2010.
Journal of Asian Earth Sciences

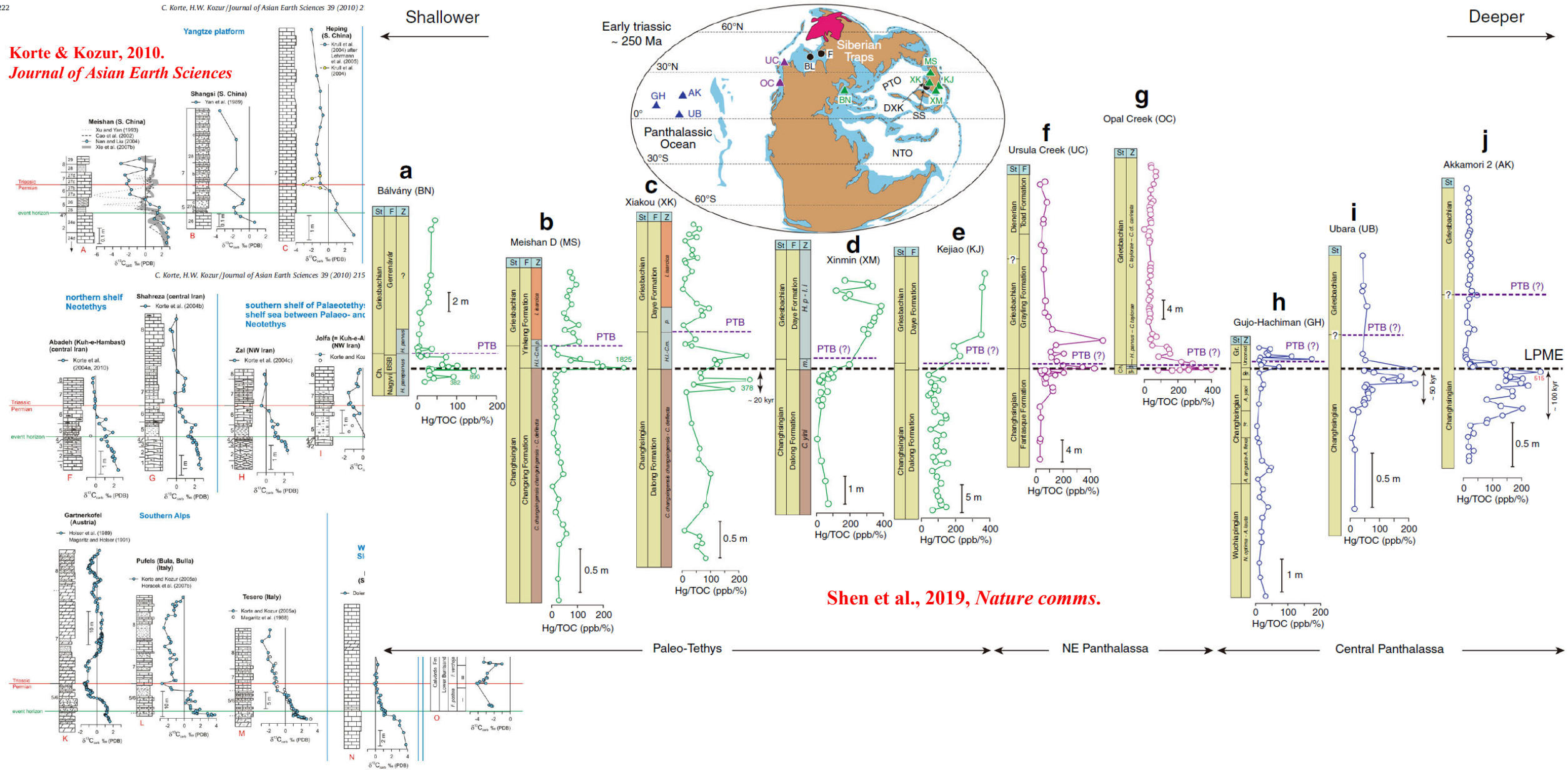
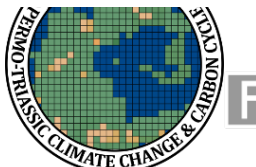
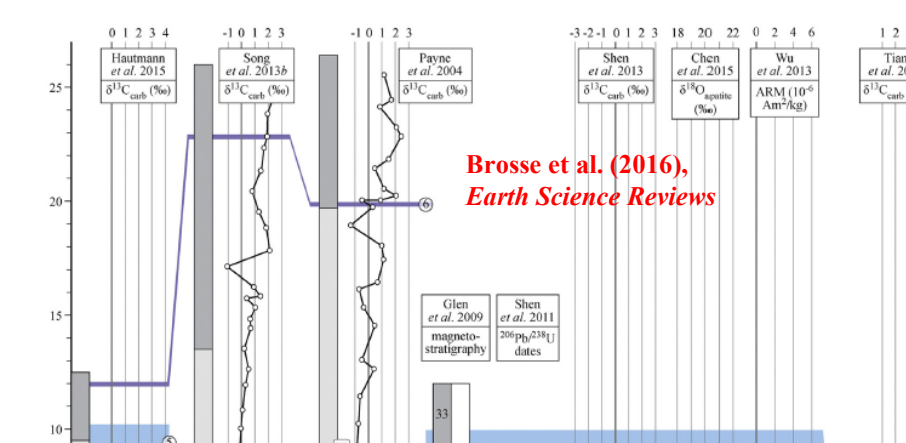
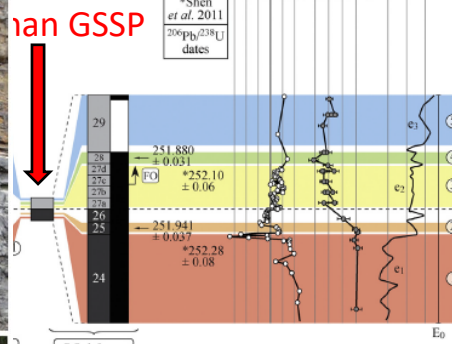
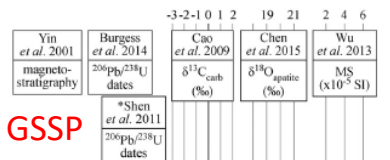
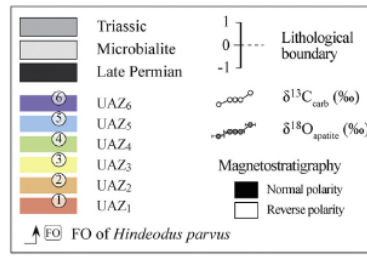


Fig. 4 (continued)





**Brosse et al. (2016),
Earth Science Reviews**



height scale x10 (total depth = 1m)
cannot be easily identified for every section in most of the studies, and does not reflect the absolute ages. The horizontal scales of carbon and oxygen isotope records respectively

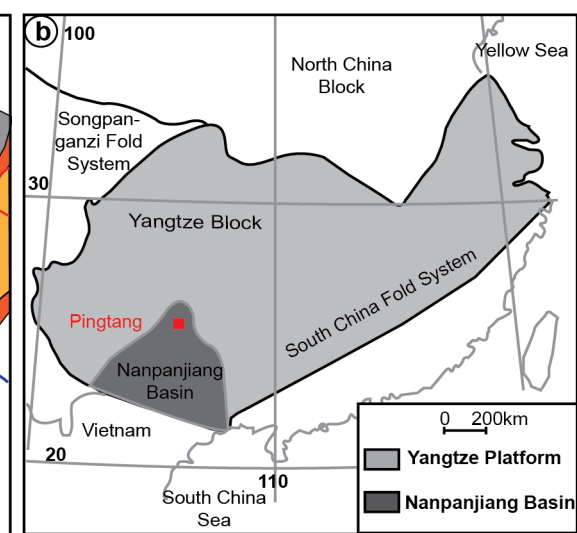
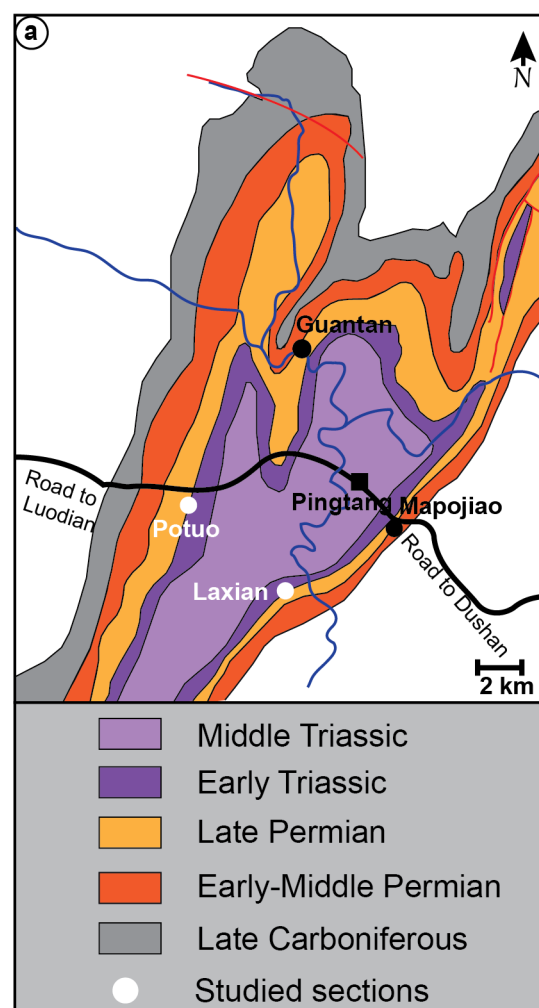
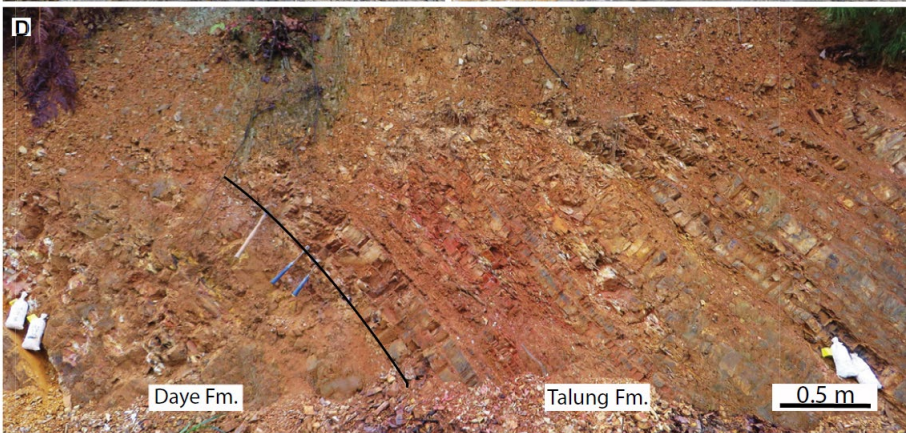
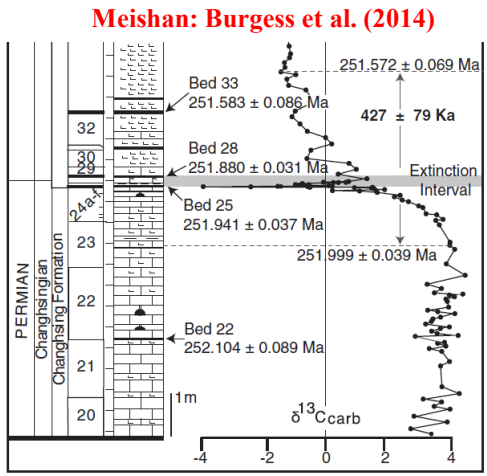
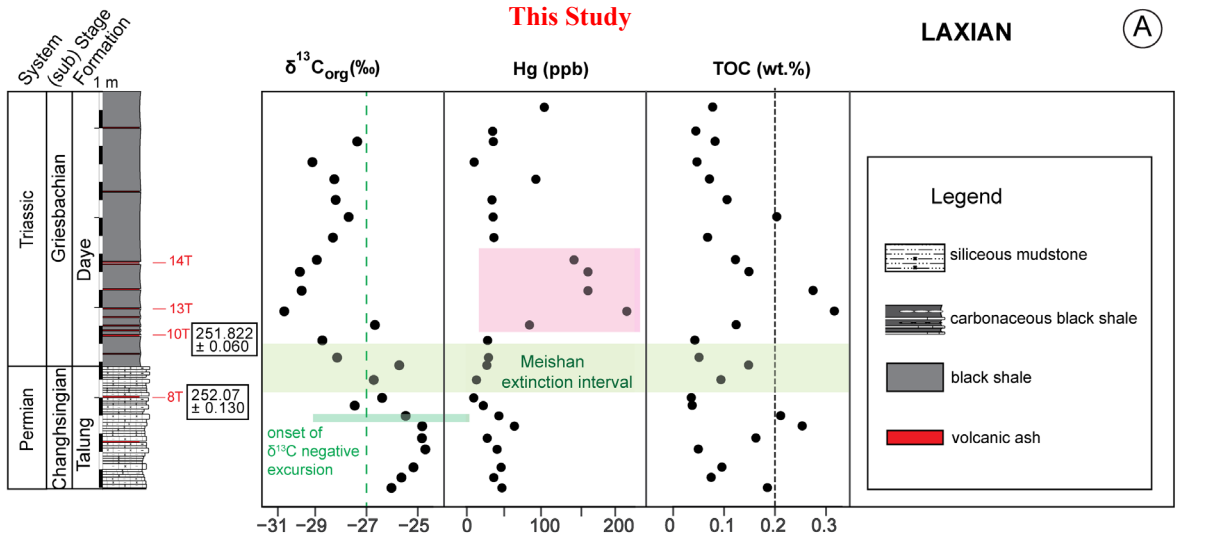
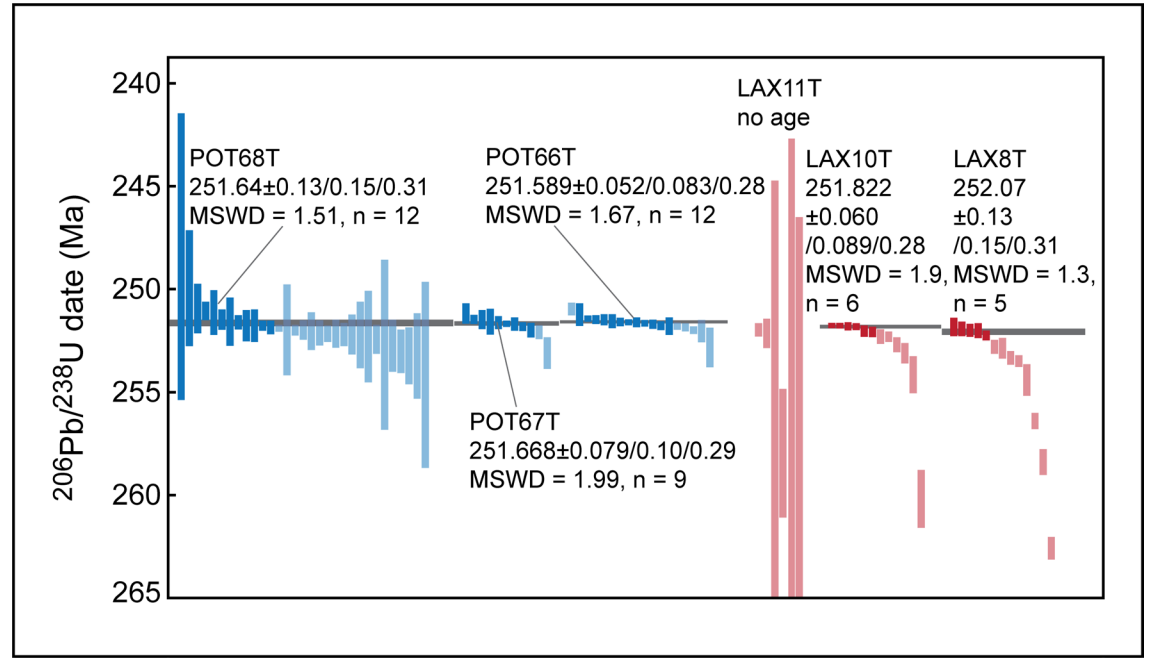
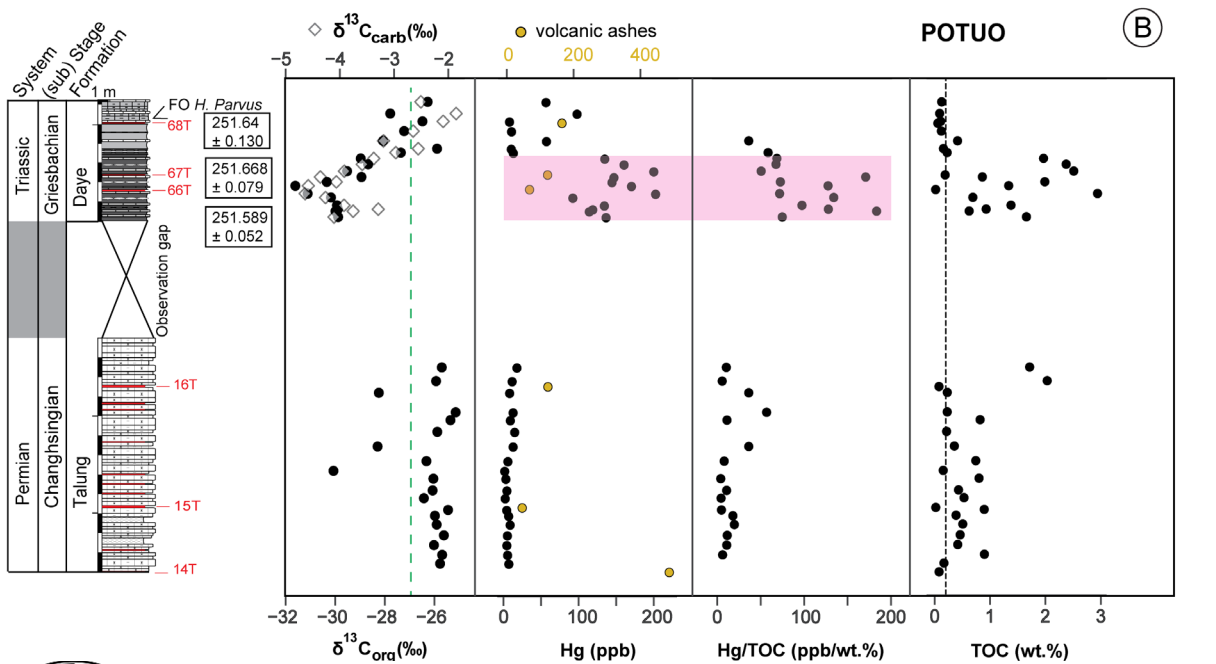


Figure modified after Bagherpour et al. (2020), *GSA bulletin*





1. The lithostratigraphic PTB in Laxian is within the interval between 252.07 ± 0.130 and 251.822 ± 0.060 Ma.
2. The first occurrence (FO) of *H. parvus* is younger than 251.64 ± 0.130 Ma.
3. Onset of C-isotope excursion predates 252.07 ± 0.130 Ma and coincides with that of the Meishan GSSP.
4. The peak of the Hg anomaly and coeval peak of negative CIE associated with the PTB postdates the extinction interval and PTB as determined from Meishan GSSP.



RESULTS

Penglaitan: Shen S.Z et al. (2019)

This Study

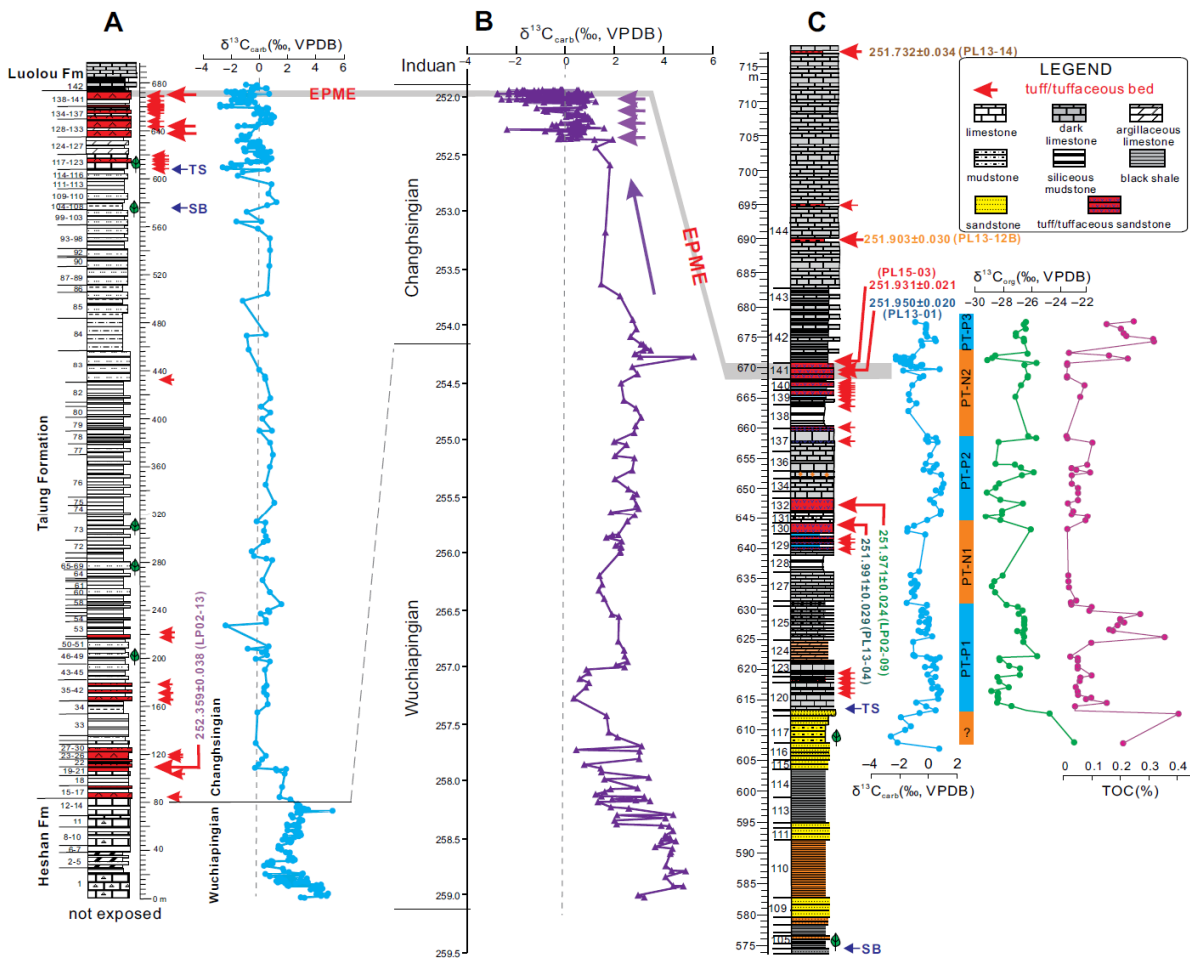
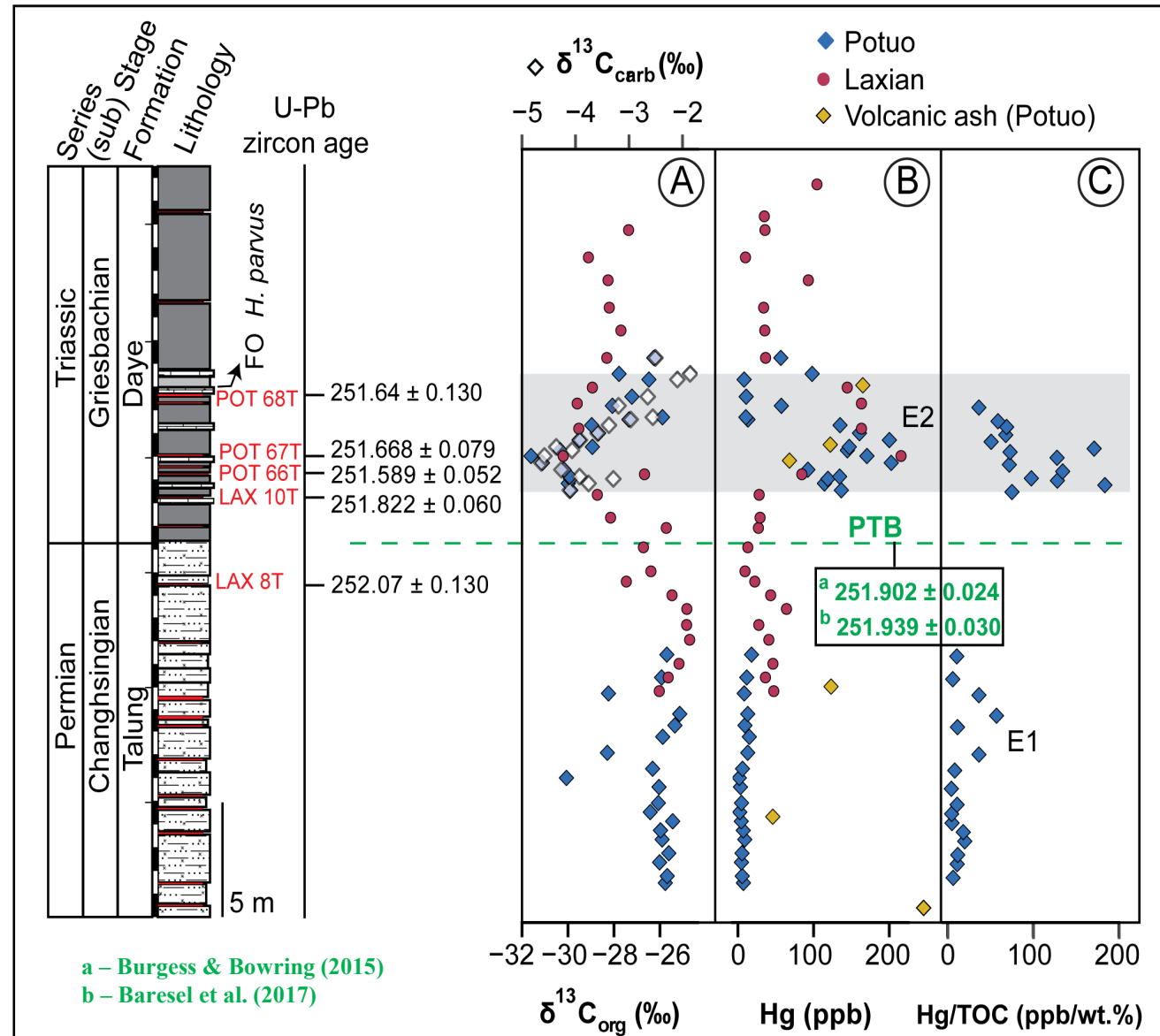


Figure 10. $\delta^{13}C_{carb}$, $\delta^{13}C_{org}$ and TOC (total organic carbon) profiles from the Lopینگian (A—scaled to thickness; B—scaled to absolute age) and across the end-Permian mass extinction (EPME) interval (C) at the Penglaitan section. SB—sequence boundary; TS—transgressive surface; VPDB—Vienna Pee Dee belemnite. Arrows indicate negative excursions. Full data are presented in Table DR2 (footnote 1).



a – Burgess & Bowring (2015)

b – Baresel et al. (2017)



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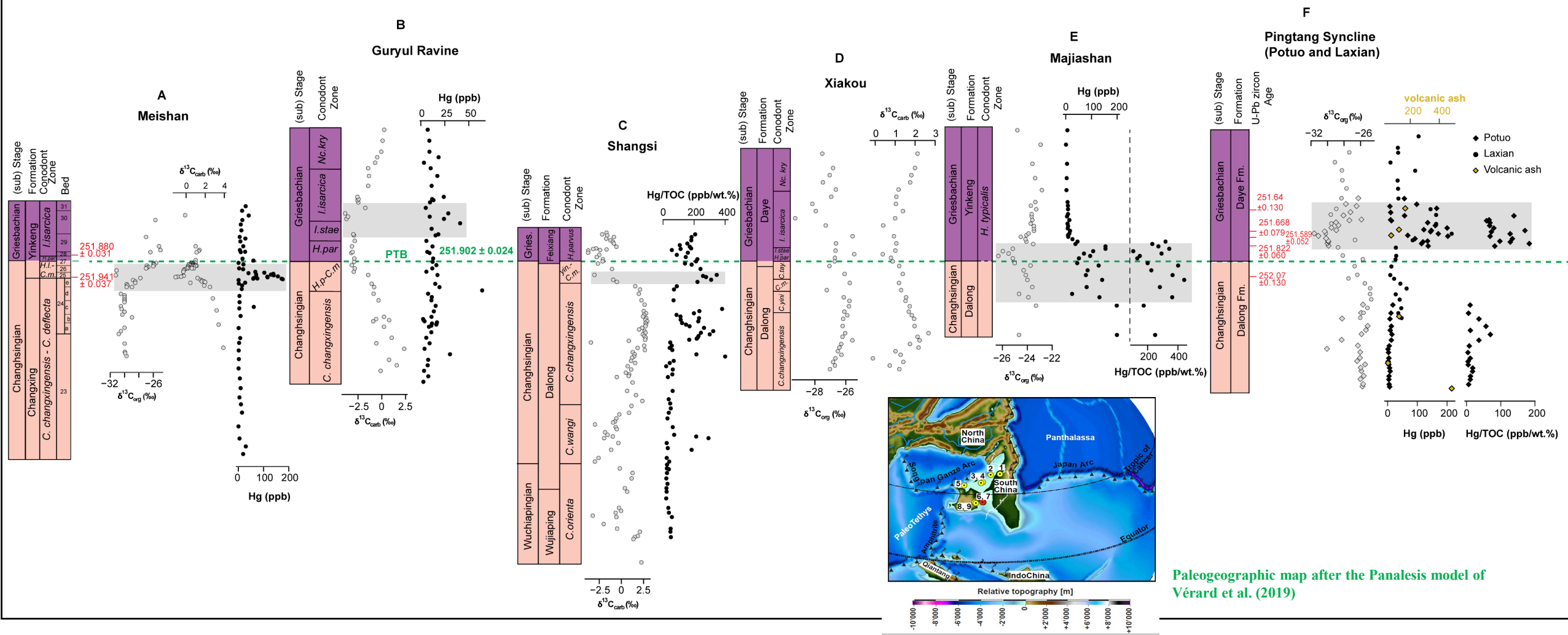
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Shallow-water shelf

Deep-water shelf / Basin



Paleogeographic map after the Panalaxis model of Vérard et al. (2019)

THANK YOU FOR YOUR ATTENTION !

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