

Yiwei Xu, Xiumian Hu, Eduardo Garzanti, Marcelle BouDagher-Fadel, Gaoyuan Sun, Wen Lai, and Shijie Zhang, 2021, Mid-Cretaceous thick carbonate accumulation in Northern Lhasa (Tibet): eustatic vs. tectonic control?: GSA Bulletin, <https://doi.org/10.1130/B35930.1>.

Supplemental Material

Plate 1. Benthic foraminifers of the Langshan Formation

1. *Palorbitolina lenticularis* (Blum), sample 17BJ28, 2. *Sabaudia capitata* Arnaud- Vanneau, sample 17BJ34, 3. *Vercorsella camposaurii* Sartoni and Crescenti, sample 17BJ34, 4. *Vercorsella arenata* Arnaud- Vanneau, sample 17GJ03, 5. *Cuneolina parva* Henson, sample 17BJ83, 6. *Mesorbitolina aperta* (Erman), sample 17BJ93, 7. *Mesorbitolina texana* (Roemer), 16LS02, 8. *Palorbitolinoides orbiculata* (Zhang), 17DY02, 9. *Palorbitolinoides hedini* Cherchi and Schroeder 17BJ336, 10. *Conicorbitolina cf. cuvillieri* (Moullade), 17BJ289, 11. *Praeorbitolina wienandsi* Schroeder 16XM107, 12. *Conicorbitolina conica* (D'Archiac), sample 17DY58, 13. *Stomatostoecha plummerae* Maync, 17GJ16, 14. *Daxia cenomana* Cuvillier and Szakall 17DY55. Scale bars: 1 – 2, 3, 5, 11, 14 = 0.5mm; 4, 13 = 0.75mm; 6 – 10, 12 = 1mm.

Figure S1. Stratigraphy of the Langshan Formation in the Baoji section, showing sample positions and occurrence of larger benthic foraminifers, LBFB, Larger benthic foraminifera biozone.

Figure S2. Stratigraphy of the Langshan Formation in the Xiongmei section, showing sample positions and occurrence of larger benthic foraminifers, LBFB, Larger benthic foraminifera biozone.

Figure S3. Stratigraphy of the Langshan Formation in the Langshan section, showing sample positions and occurrence of larger benthic foraminifers and microfacies. See text for descriptions of microfacies MF1 to MF19. LBFB, Larger benthic foraminifera biozone.

Figure S4. Stratigraphy of the Langshan Formation in the Daya section, showing sample positions and occurrence of larger benthic foraminifers and microfacies. See text for descriptions of microfacies MF1 to MF19. LBFB, Larger benthic foraminifera biozone.

Figure S5. Stratigraphy of the Langshan Formation in the Geji section, showing sample positions and occurrence of larger benthic foraminifers and microfacies. See text for descriptions of microfacies MF1 to MF19. LBFB, Larger benthic foraminifera biozone.

Figure S6. Stratigraphy of the Langshan Formation and microfacies distribution in the Xiagezi section. See text for descriptions of microfacies MF1 to MF19. LBFB, Larger benthic foraminifera biozone.

Table S1. The stratigraphy, age and lithology in the north Lhasa

REFERENCES CITED

- Lai, W., Hu, X., Garzanti, E., Xu, Y., Ma, A., and Li, W., 2019a, Early Cretaceous sedimentary evolution of the northern Lhasa terrane and the timing of initial Lhasa-Qiangtang collision: *Gondwana Research*, v. 73, p. 136–152, <https://doi.org/10.1016/j.gr.2019.03.016>.
- Lai, W., Hu, X.M., Garzanti, E., Sun, G.Y., Garzione, C.N., BouDagher-Fadel, M., and Ma, A.L., 2019b, Initial growth of the northern Lhasaplano in the early Late Cretaceous (ca. 92 Ma): *Geological Society of America Bulletin*, v. 131, no. 11–12, p. 1823–1836, <https://doi.org/10.1130/B35124.1>.
- Sun, G., Hu, X., and Sinclair, H.D., 2017, Early Cretaceous palaeogeographic evolution of the Coqen Basin in the Lhasa Terrane, southern Tibetan Plateau: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 485, p. 101–118, <https://doi.org/10.1016/j.palaeo.2017.06.006>.
- Xu, Y.W., Hu, X.M., BouDagher-Fadel, M.K., Sun, G.Y., Lai, W., Li, J., and Zhang, S.J., 2020, The major Late Albian transgressive event recorded in the epeiric platform of the Langshan Formation in central Tibet, in Wagreich, M., Hart, M. B., Sames, B. and Yilmaz, I. O. eds., *Cretaceous Climate Events and Short-Term Sea-Level Changes*: Geological Society, London, Special Publications 498, p. 211–232, <https://doi.org/10.1144/SP498-2019-8>.

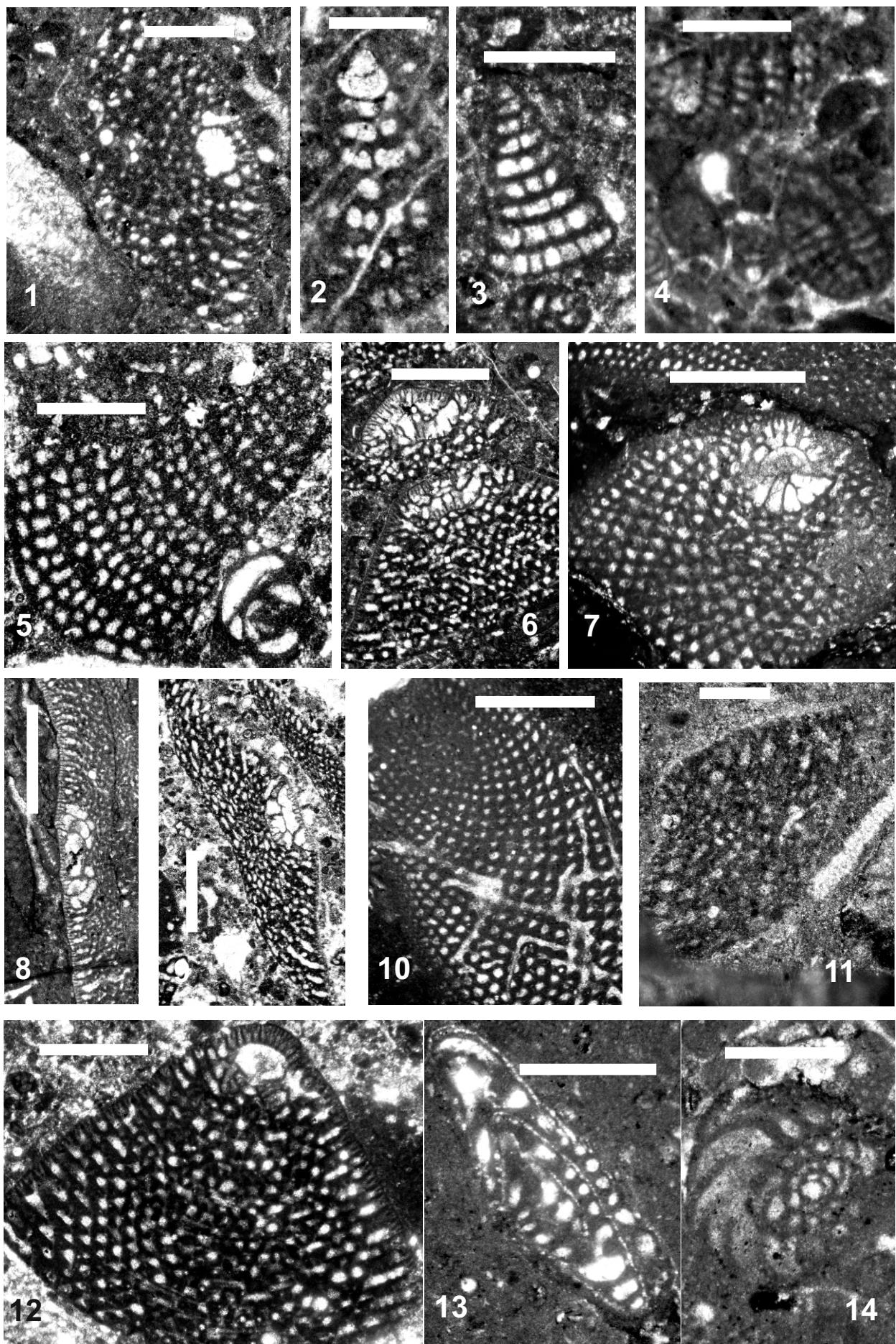


Plate 1

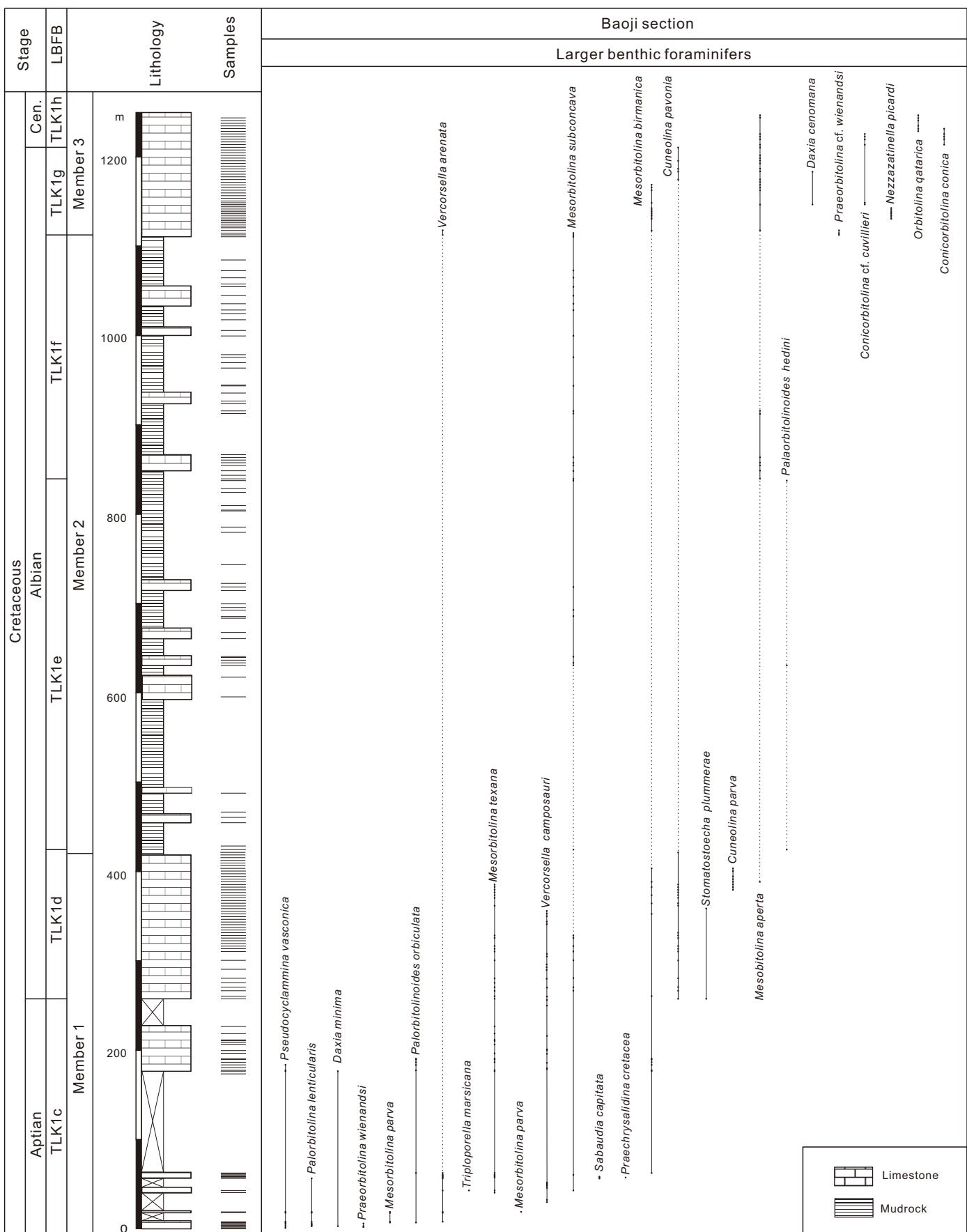


Fig. S1

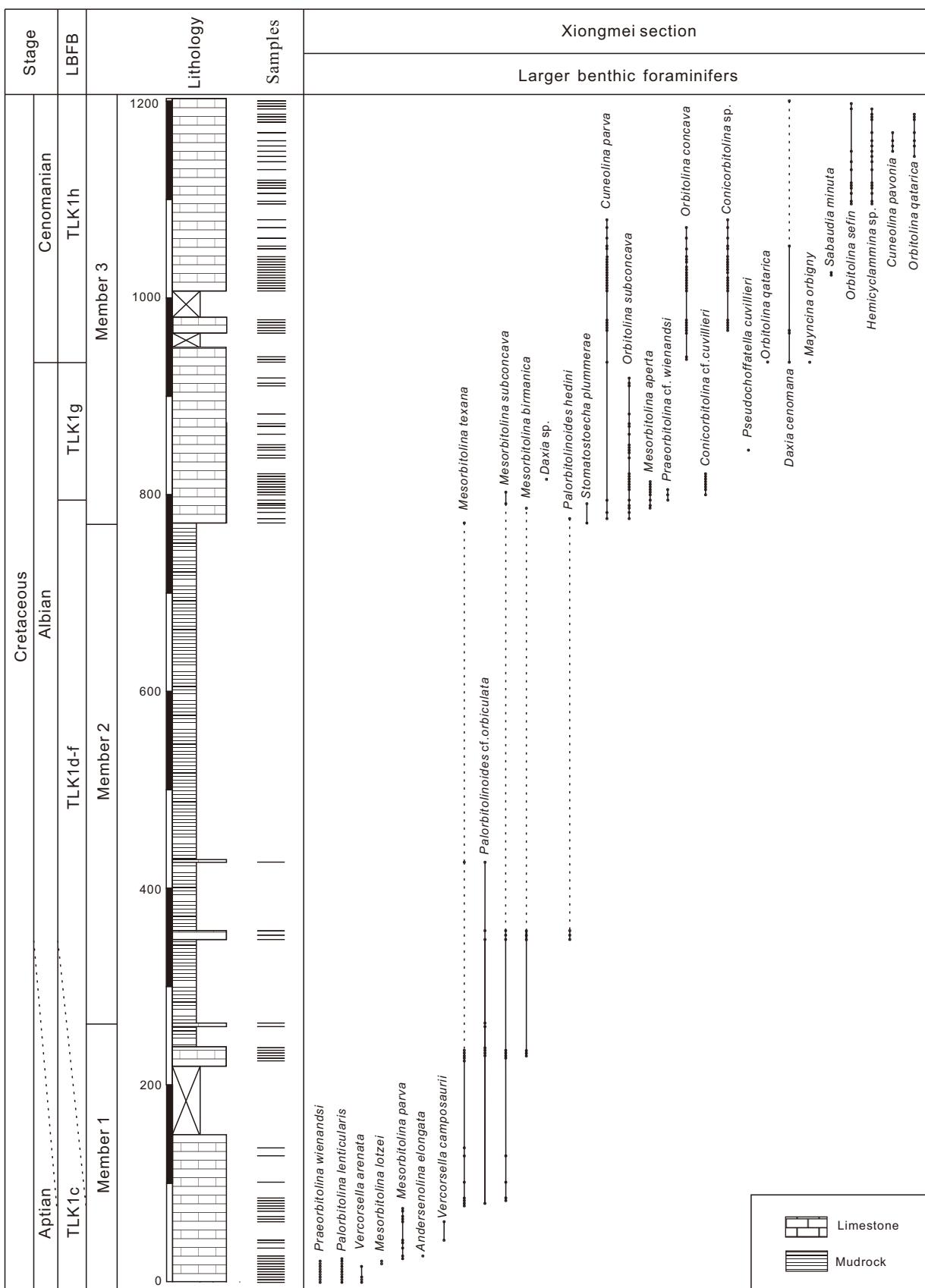


Fig. S2

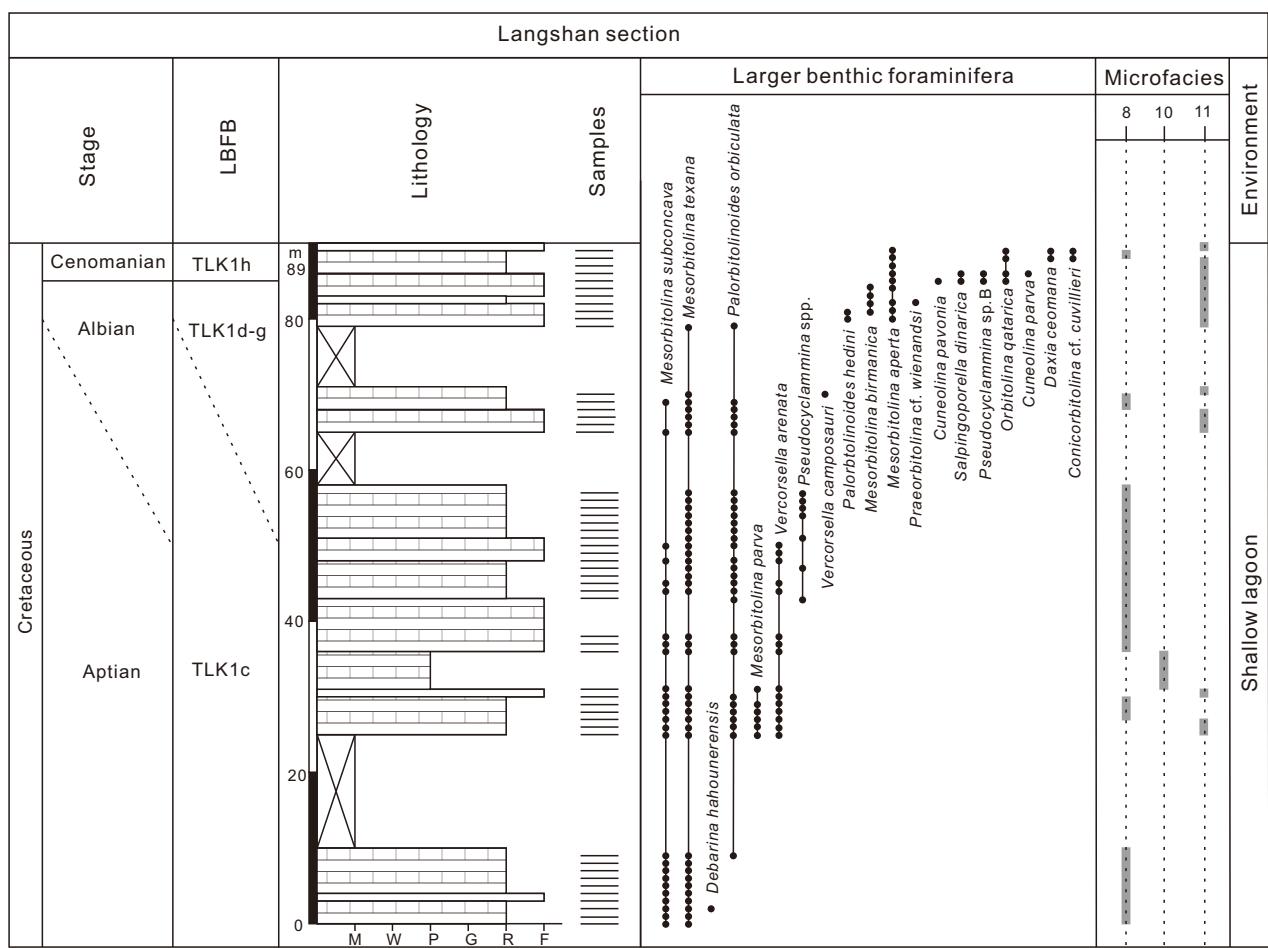


Fig. S3

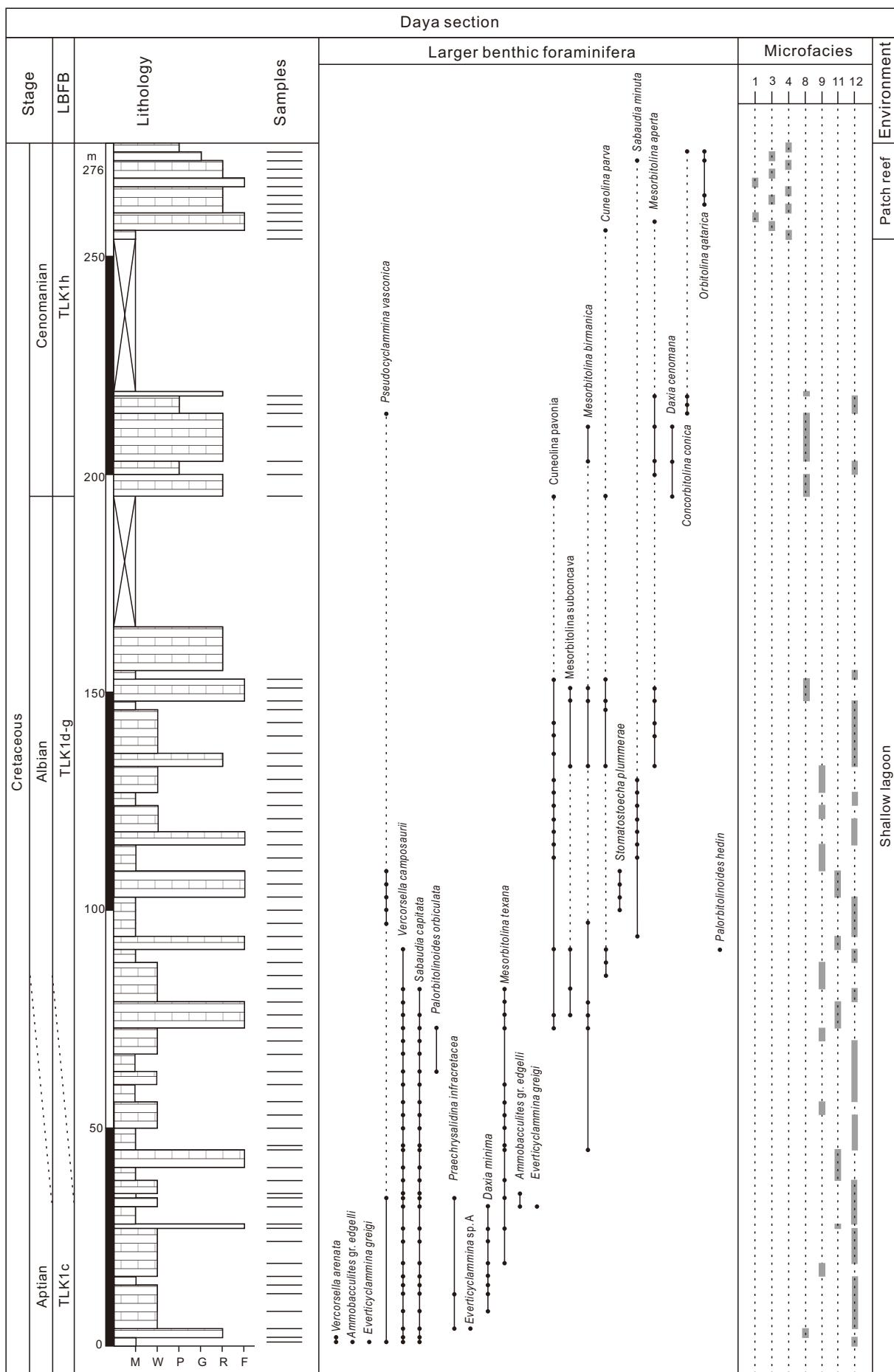


Fig. S4

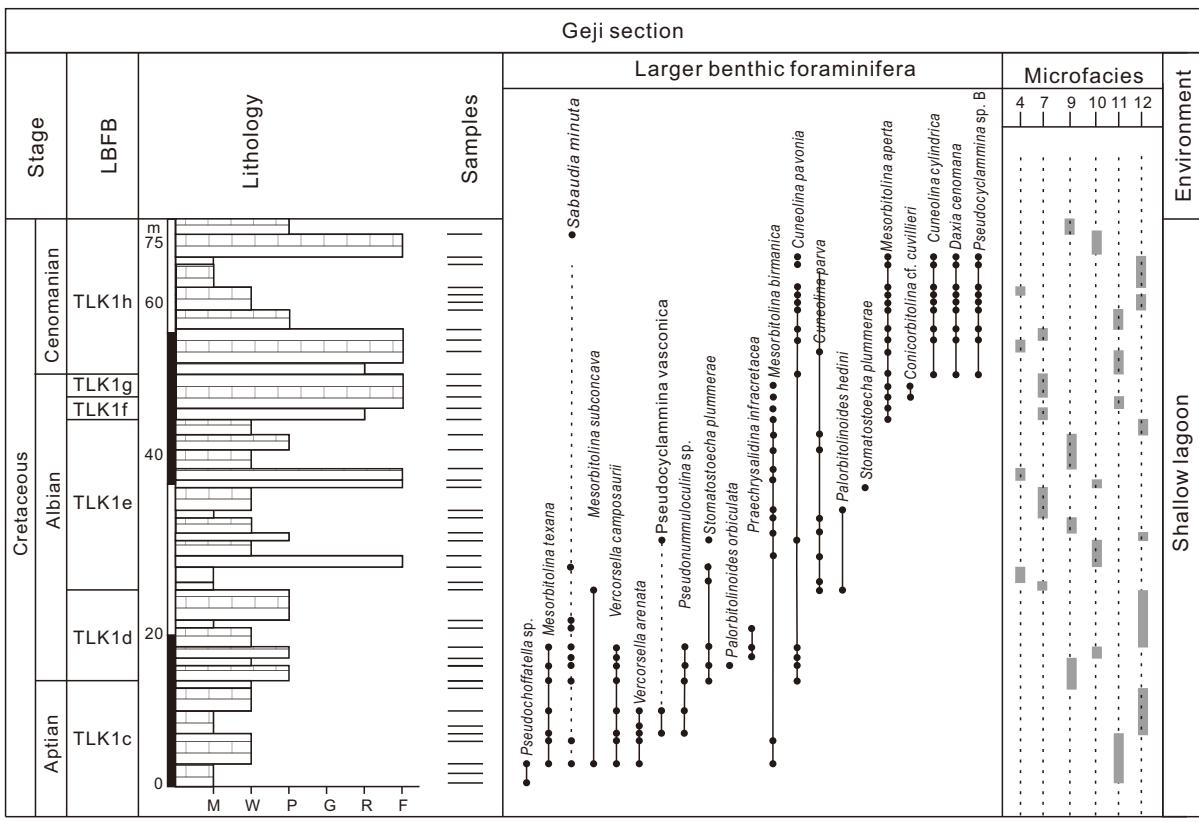


Fig. S5

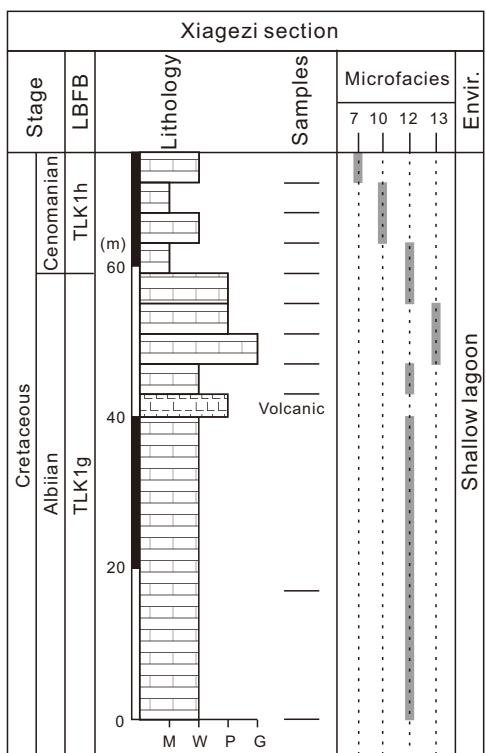


Fig. S6