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# A new basal eusauropod from the Middle Jurassic of Yunnan, China, and faunal compositions and transitions of Asian sauropodomorph dinosaurs

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Many sauropod ghost lineages cross the Middle Jurassic, indicating a time interval that requires increased sampling. A wide taxonomic spectrum of sauropodomorphs is known from the Middle Jurassic of China, but the braincase of a new sauropod, named here *Nebulasaurus taito* gen. et sp. nov., is distinct. *Nebulasaurus* is sister taxon to *Spinophorosaurus* from the Middle Jurassic of Africa and represents a clade of basal eusauropods previously unknown from Asia. The revised faunal list indicates dramatic transitions in sauropodomorph faunas from the Jurassic to Cretaceous of Asia; these are consistent with geographic isolation of Asia through the Late Jurassic. Non-sauropod sauropodomorphs, non-mamenchisaurid eusauropods (including basal macronarians), and mamenchisaurids successively replaced previous grades through the Jurassic, and titanosauriforms excluded all other sauropod lineages across the Jurassic–Cretaceous boundary.

**Key words:** Dinosauria, Sauropoda, Eusauropoda, Jurassic, China.

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