

## Early Permian crinoids from Laurasia and their paleogeographic implications

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A new crinoid fauna is described from the Trogkofel Group of the Southern Karavanke Mountains, Slovenia (lower Permian, Artinskian). This fauna is from a shallow platform or upper slope setting and is comprised primarily of isolated aboral cups. One taxon, *Protencrinus baliensis*, previously described from the lower Permian of Crete, is the only species known from elsewhere. New taxa from the Trogkofel Group include *Karavankecrinus bedici* gen. et sp. nov., *Moapacrinus dovjensis* sp. nov., *Parastachyocrinus sloveniaensis* sp. nov., and *Sinocrinus websteri* sp. nov. Several taxa are left in open nomenclature, including *Dieuryocrinus?* sp., *Platycrinidae* indet., *Euclidida* indet. A, and unidentified Crinoidea. If *Dieuryocrinus?* sp. belongs to *Dieuryocrinus*, this would expand the range of this genus, previously known from the Viséan (Mississippian) of the United Kingdom. Other genera are well known as lower Permian taxa. In addition, the species-level systematics of *Parastachyocrinus* is revised, and one new species from the lower Permian of Timor is described, *P. wanneri* sp. nov.

**Key words:** Echinodermata, Crinoidea, Permian, Europe, Southern Calcareous Alps, Slovenia.

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