

First record of dinosaurs in the Late Jurassic of the Adriatic-Dinaridic Carbonate Platform (Croatia)

Aleksandar Mezga,* Blanka Cvetko Tešović, and Zlatan Bajraktarević

*Department of Geology and Paleontology, Faculty of Science, University of Zagreb,
Horvatovac 102a, 10 000 Zagreb, Croatia
e-mail: amezga@geol.pmf.hr*

*Corresponding author.

Keywords: dinosaur track, sauropod, late Tithonian, Istria

ABSTRACT

All previously known dinosaur remains on the Adriatic-Dinaridic carbonate platform (ADCP) were described from Cretaceous deposits. A new trackbearing locality is late Tithonian in age and represents the oldest evidence of dinosaurs on the ADCP. The site is in an active quarry near the village of Kirmenjak in western Istria. Almost a thousand sauropod footprints including 23 single trackways have been found on the outcrop. Oval impressions represent pes prints, and horseshoe-shaped impressions represent manus prints; pes prints are 23 to 52 cm long. Calculated heights at the hip range from 153 to 306 cm. The main direction of dinosaur movement was toward the northeast, and some of the individuals were moving together. The trackways show a characteristic narrow gauge, and pace and stride lengths indicate a slow walk. The footprints are similar to *Parabrontopodus* ichnogenus, and the ichnocoenosis could be assigned to the *Brontopodus* ichnofacies. The presence of the sauropods on the Adriatic-Dinaridic carbonate platform during the Late Jurassic could be explained by connection with the African continent via its southern margins during emersion.