and IV respectively is discernible. The trackway is very narrow with a long pace length (106-166 cm).

Recently, six new trackways with the same features have been found in different parts of the syncline. This fact supports that it is a new ichnotaxon and must be defined formally. Normally, the bipedal dinosaurs (excluding prosauropods) are functional tridactyls or, in a few cases, didactyls. Tetradactyl footprints are normally found close to abnormal stance impressions, e.g. as tail and metatarsal marks. Such abnormal stance impressions are absent in "*E. atlasipodus*" trackways.

This study provides more information about the theropod ichnocenosis of the Iouaridène syncline, previously composed of *Megalosauripus* sp, *Carmelopodus* sp., and a giant indeterminate theropod footprint.

Prosauropods, some ornithischians, and some theropods (Therizinosauroidea) have a long digit I. Although the taxonomic affinity of these tracks cannot be determined with confidence, they can preliminary be regarded as theropod footprints.

Dinosaur tracks in an ancient lower deltaic plain-interdistributary bay

Piñuela, Laura, José Carlos García-Ramos & José Ignacio Ruiz-Omeñaca
Museo del Jurásico de Asturias (MUJA), Colunga & University of Oviedo, Oviedo, Asturias, Spain

The outcrops of Upper Jurassic rocks on the sea cliffs between Gijón and Ribadesella localities (Asturias, N Spain) show many beds with dinosaur footprints. This Asturian coastal section, about 60 km in length, is known as "The Dinosaur Coast", mainly due to its abundant and well preserved tracksites. Sauropod tracks are by far the most common ichnites in this area, although theropod, ornithopod, and stegosaur tracks are also frequent. Other reptile prints include turtles, crocodiles, pterosaurs, and lizards.

The dinosaur footprints of the Tazones lighthouse tracksite are shown on the top of a muddy sandstone bed (25º seaward-dipping). Much of them are sandstone casts disposed in several trackways in opposite directions showing a preferred orientation in a range of 50º.
In many cases, the tridactyl tracks (most of them theropods) preserve the hallux and metatarsal traces. When the latter is not preserved, the "heel" is wide and deep. The digit impressions show often anomalous shapes and high divarication angles owing to soft substrate consistency. Moreover, a winding trace about 10 cm wide is preserved in the same layer and is interpreted as a dinosaur tail drag, unusual in the fossil record. Due to these observations, we think the dinosaurs were walking on an unstable soft ground. For this reason they lowered the point of gravity, and crouched down, which in turn led to the formation of the metatarsal and tail traces.

Frequent invertebrate ichnofossils, such as *Arenicolites*, predate and postdate the reptile tracks.

The dinosaurs walked on soft and intensely bioturbated muddy sands of a very shallow, subaqueous, interdistributary bay and the tracks were filled by clean sands (quartzose sand without clay minerals) from a crevasse-splay deposit.