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THE FIRST RECORD OF PLACODONTS IN PORTUGAL AND ITS CHRONOLOGICAL AND PALEOECOLOGICAL IMPLICATIONS

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The base unit of the mesozoic sequence of the Algarve Basin in Portugal, standing over an unconformity, was first defined in 1850 by Charles Bonnet, who attributed it to the Triassic period. In 1887 it was named "Grés de Silves" by Paul Choffat. Since then the dating of the units that comprise it has been oscillating or not very precise, varying from the Lower Triassic to the Lower Jurassic, depending on the authors. In 2015 *Metoposaurus algarvensis* was described, a temnospondyl of the municipality of Loulé, coming from an almost monospecific bonebed with hundreds of bones. The distribution of the genus indicates a late Carnian age to the middle of the Norian for these layers (top of the term AB2) in the Grés de Silves Formation, where the fossil site was found. In the 2016 and 2017 expeditions, new fossil sites and more vertebrate material from the Algarve Triassic were discovered, namely the first record of placodonts in Portugal, based on osteoderms with an hexagonal and laterally elongated outline which have similarities with the genus *Henodus*. The genus *Henodus* is known from Lustnau Gipskeuper near Tübingen, of the Grabfeld Formation, Germany, from the lower Carnian, which suggests that the portuguese occurrences in units AA and AB2 are of the same age. This means that almost all the Grés de Silves is Carnian in age. The study of these fossils is a contribution to the knowledge of the geological heritage and palaeontological wealth of Algarve, namely the municipality of Loulé.