



CENOZOIC INVERSION OF THE WEALD-BOULONNAIS AND THE DOVER STRAIT. NEW DATA

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The Boulonnais is a former marine gulf superimposed on a zone of tectonic inversion, which was already excavated at least at the early Middle Eocene. New sedimentological and paleopedological data discover within the Boulonnais and fresh seismic sections able now to better understand the process of inversion step by step. The initial breaching probably took place in the late Eocene. The Dover Strait was probably open during the Lutetian, a part of the Oligocene and of the Late Neogene. Oligocene and Pliocene faunal assemblages are identical on both sides of the Strait. It was closed again for tectonic and eustatic reasons in the early Quaternary and reopen lately from Last Interglacial. This reopening is related with the evolution of the Western Channel and of its paleovalley system. This inversion of the Variscan front accommodates most of the shortening induced by the Pyrenean Orogen on the Western border of the European plate. The inversion of the Dover Strait region is almost synchronic with those of other basins of the Channel and North Sea areas. Tectonic, geomorphologic and climatic implications of this dynamic are discussed within the Western European context.