

The genetical types of caves in the Polish Lowlands

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Abstract

Twenty cavities and mainly short caves have been noted in the vast area of the Polish Lowlands. Most of them developed in the Pleistocene sands cemented by calcite (sandstones). The formation of the caves (cavities) has been influenced by the shape and spatial position of the sandstone bodies, stimulated by various gravitational processes (fall, slide, creep) and accompanied by weathering and water erosion (wash, piping). In some cases these processes were triggered by human activity (mainly sand and gravel exploitation). The formation of these caves has probably taken place for the last thousand years, in the cases of partly anthropogenic forms – possibly even several tens years. The second group of the caves represent forms situated in the cliff along the sea coast. Some of them have been produced by storm waves and then destroyed by gravitational processes within the cliff. The origin of the two longest caves of this group has not yet been explained precisely enough. As important scientific sites and often picturesque landforms, the majority of the caves (cavities) of the Polish Lowlands are either legally protected or the subject of proposed protection.

Key words

Caves, pseudokarst, sandstones, boulder clays, Quaternary, Polish Lowlands.