

Subsidence involves sinking of the ground surface. The movement generally is localised and may or may not involve some amount of horizontal movement. It may be rapid or take place gradually over a period of time. Subsidence may be brought about by natural causes as, for example, when the roof of a cavern in limestone is weakened to the extent that it is no longer self-supporting and so collapses. Other more exotic examples are associated with volcanism and earthquakes. Perhaps, however, subsidence is more frequently associated with movements caused by mining activities, that is, the removal of mineral deposits, be they in solid, liquid or gaseous form, from within the ground. Mining is one of the earliest activities of man and has taken place in every continent. Subsidence also can result from subsurface excavations such as tunnels, caverns, cellars and sewers. One of the added problems of some forms of subsidence is that it is impossible to predict. This, coupled with the fact that the presence of potentially collapsible voids may be unknown, unrecorded or simply forgotten about further complicates the problem. The objectives of this paper are to document and draw attention to a number of unusual examples of subsidence. These have been generated due to the mining of chalk in southern England, the collapse of slate mines and caverns in Germany, the underground extraction of evaporites in Northern Ireland, fault reactivation in Wales and northern England and the extensive extraction of pumice on the flanks of Galeras volcano in Colombia.