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THE MARINE ARCHAEOLOGICAL DISCOVERIES IN CAMBAY AND THE BHUJ EARTHQUAKE OF JAN 26, 2001, GUJARAT, INDIA

Recently, some very interesting marine archaeological findings have been reported from gulf of Cambay, Gujarat, in India, at water depths of 22-40 meters. Carbon dating of wood pieces indicate that these sites, running some 9 km in length and up to ½ km in width could be in existence some 9000 to 10000 years before present. In a more detailed work, archaeological samples were subjected to TL and OSL analysis. The dates derived from these studies clearly indicate that originally Gulf of Cambay was not covered by sea and human activity prevailed there from late Pleistocene period (13,000 BP) to Holocene (3560 BP). While looking into causes of this submergence, a combination of sea-level rise and tectonic movements appears very attractive. This inference is based on the fact that during the Jan 26, 2001 Bhuj earthquake of M8, upheavals and subsidences of the order of 1 meter were reported. Earlier, during the June 16, 1819 Kutchh earthquake also of M8), Allah Bund with a height of up to 6m. and length of almost 100 km was created. At the same time, there were observations of subsidence of up to 6 m. Allah Bund is visible and traceable to some 95 km in length, at places being taller than 5m, even today. A combination of sea level rise and violent earthquakes between Pleistocene and Holocene period appears to be responsible for submergence of Cambay.