



First evidence of accumulation of mega boulders on the Mediterranean rocky coast of Provence (southern France).

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An accumulation of boulders was recently discovered along the rocky coast of the Gulf of Fos located in Provence, in an area exposed to a south-westerly wave regime. The coast around this locality forms the western extremity of the calcareous Nerthe range between Marseille and the Rhone Delta. Several mega blocks are scattered to a distance of 30 m behind the coast line. The largest block (37 tonnes) has been transported about 39 m inland, up to about 2 m above sea level. On the Mediterranean coast, the origin of such blocks is often attributed to tsunami-generated waves, but in the case examined here, although the origin is unclear, the differences in surface state between boulders indicates several events generated by south-westerly storms. Radiocarbon dating on several different shells collected from seven different boulders yields a wide dispersion of ages ranging from 4000 BP to the Modern Period. The differences in surface appearance, as well as the differences of fauna conservation and surface coloration, in some cases in a very fresh state, along with the dispersion of radiocarbon ages, suggest that historic storm events have affected these megablocks.