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Isotopic variation of carbonate cements sampled by different techniques

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Several studies have been carried out using the isotopic signature of carbonate cements in the marine-phreatic environment. This study aims to compare the isotopic composition of specific levels inside a carbonate formation like beachrock. In particular, samples from the same level were analyzed, differing from each other on the sampled material. Bulk rock sample, macroscopic and microscopic selection, stirred and dried material are some of the selected methods of sample extraction for isotopic analysis. The results are plotted on diagrams and compared, in order to evaluate the reliability and suitability of sampling methods for isotopic analysis. Samples were taken from the same level of the formation in order to avoid differences of values originated in different precipitation conditions.