

## Present state and future challenges of deep all-core drilling in coastal zones

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Information on the geological environment of a region is essential for designing urban infrastructure, selecting industrial locations, devising disaster plans, etc. Recently, interest in such geological information for regions at a depth of over several 100 m has been rising because such information is useful for the utilization of underground spaces and the exploration of undeveloped natural resources. All-core drilling and core analysis are necessary to obtain information on subsurface geological environments. However, many technological challenges exist in the deep all-core drilling of sedimentary soft rocks, which are thickly distributed in coastal zones, where economic and social activities are concentrated. Herein, we review some previous studies and report the present state and future challenges of deep all-core drilling in coastal zones.

Keywords: Deep all-core drilling, Coastal area, Sedimentary soft rocks