

An experimental study for evaluating weathering susceptibility of cave sediments with relief structure on the wall

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Weathering is a universal phenomenon which is observed not only in natural landscapes but also many historic buildings. Salt weathering is often reported, however, there are very few studies of slaking at these historical sites. The Taya cave in Kanagawa Prefecture is now suffering from exfoliation, which has been attributed to damage by slaking (wetting and drying weathering). To explore these phenomena, simple slaking tests were carried out. Physical properties of the rocks were also measured. The results indicate that the rocks of the Taya cave system are susceptible to slaking.

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