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Weathering process in eocene flysch in Croatia

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The Eocene flysch in Croatia is characterized by the presence of layers with different characteristics. It mainly includes thin-layered marls, clayey marls, calcareous marls, clastic layered limcstones, calcarenites and breccias. Those parts that can be described as the soft rocks or hard clays by the mechanical means, exposed to weathering reduce the durability within "an engineering time scale". The paper **deals** with the factors that influence the weathering process. The analyzed weatering is a combination of processes acting simultaniously. Most of these processes depend on the change of the water content, thus the weathering process mainly dcvelops when a material is subjected to the wetting-drvinu process. On the base of these results form of degradation process is modelled. The weathering process can be mainIy described as physical weathering combined with chemical weathering on the free surfaces and on the cracks walls. Erosion as a result of weathering, is the dominant geomorphic process on analyzed tlysch terrain. According to the analwsis, as the most appropriate due to the characteristics, the tests are chosen as index properties. Some of these tests are modified in order to adapt them to the determined characteristics of materials from tlvsch lay ers. The correlations benwecn the measured values are used as the basis for the classification proposal of the analyzed material, according to its resistance to weathering processes