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## An insight into the principle of uniformitarianism

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"The present is a key to the past" (Charles Lyell, 1797 –1875). Geology students learn that quote at the first lecture. It summarizes the principle of uniformitarianism, which assumes that we can reconstruct the formation of geological features and past events by observing the present processes which lead to similar results. However, that simple rule demands proper understanding as erroneously used may lead to misinterpretations of past Earth history events. My talk will be a basic introduction to the one of the fundamental assumptions used in geology. I am going to briefly outline the theory of uniformitarianism proposed by Charles Lyell in 1830. Moreover, I will explain some changes which occurred in the interpretation of that theory since 20th century when research proved that some phenomena occurred contrary to the then assumptions of the principle of uniformitarianism. As over the years some research findings seemed to be contradictory to the then interpretations, some adjustments were made to the understanding of the principle of uniformitarianism in order to explain the geological history of Earth more precisely.

## Field

Geography and Geology

## Length

Short 15 min

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