

Catastrophism verses uniformitarianism essay examples

[Science](#), [Geology](#)



Introduction

Catastrophism and Uniformitarianism are theories that describe the alternative process which could be primarily responsible for the formation of the geological strata and embedded fossils. Catastrophism is a principle that states that geologic change occurs suddenly through a gradual geologic change which is interrupted by calamities such as floods, asteroids, and earthquakes. Uniformitarianism on the other hand is a principle that portends that geologic processes that occurred in the past can be explained by the current geologic processes.

Uniformitarianism states that the present is the key to the past. It ignores the possibility of the past cataclysmic activity upon the surface of the earth. This version of geology is considered to have come from a fierce insistence that the processes that alter the earth are uniform through time and constant in space as acknowledged by (Pidwirny, M., 2006). Deep soil profiles were formed by the weathering of bedrock over thousands of years and that supernatural theories were not needed to explain this. The eroded sediments formed layers of rock which could later be lifted above sea level and tilted by the force of the uprising rock and eroded away again. The earth could be vastly old and can be termed as a sort of perpetual motion machine passing through regular cycles of destruction and rebuilding making the planet suitable for mankind. Contrary to Uniformitarianism, Catastrophism is a concept put forward as an explanation for evidence of radical physical change discernible in the earth. The theory advances those great cataclysmic eruptions that ripped through natural law which could account for such changes as the destruction of dinosaurs, climate change and the movement

of the continents. This belief was advanced from the observations of the geological strata from which things as the lack of erosion between layers. According to (Baker . R. Victor., 1998), the indices for cataclysmic flooding processes are the characteristic landforms and deposits emplaced by that flooding. Like the fossil remains of animals found within those layers could have been of animals killed, buried and Preserved by flood.

The theory of Catastrophism is pegged on the old idea that geology is about what the earth has to say to us. On the other hand Uniformitarianism believes so much in the laws of physics that is in the precision of logic that is detached from its symbols but the super principle is also required to regulate the relationship of that logic to the natural world mirrored in the explanation. The world has both uniformitarian and catastrophic characteristics depending on the phenomenon in question and accuracy depends on subject matter since scientists believe catastrophes are caused by laws of physics and vice versa.

References

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