**Covering letter**

1. Ospanova Narima Kazhenovna; the doctor of geological-mineralogical sciences; associated professor; the main scientific research

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3. The article reflects a new approach to the study of catastrophe as a natural phenomenon, which combines the mathematical approach and the traditional approach to understanding of phenomena of a catastrophic order. The properties of natural disasters are characterized. Knowledge of properties helps to explain and understand many natural phenomena. The aim of the work is to form an objective view of complex catastrophic phenomena.