Available online at http://geology.uaic.ro/auig/
Analele Stiintifice ale Universitatii "Al. I. Cuza" din Iasi
Seria Geologie 61 (1–2) (2015) 41–46

AUI GEOLOGIE

Preserving history. "Calcariul de la Răpidea" 3d virtual tour (Iași, Romania)

Tony-Cristian Dumitriu[1], Mihai Brânzilă[1], Dorin-Sorin Baciu[1]

[1] "Alexandru Ioan Cuza" University of Iaşi, Department of Geology, 20A Carol I Blv, 700505 Iaşi, Romania

Abstract

Considered to be the first Romanian geological scientific paper, "Calcariul de la Răpidea" describes an outcrop from an area that later became the first geological reserve. Geologically, the area belongs to the Moldavian Platform corresponding to Besarabian age (middle Sarmatian) and it is a reserve since 1955. During this span of time, the Repedea reserve has passed through many administrative changes. It was enlarged from 0.019 km^2 to 0.058 km^2 as a strict preservation area and received an additional transition afforested area of 0.385 km^2. Today, the transition area is deforested by locals and the strict protection area is in constant destruction due to garbage disposal and stone extraction. In this paper we propose a new approach regarding the reserve preservation and protection by creating a 3D immersive interactive virtual tour of the area with the help of "Structure form Motion" Photogrammetry, 3D modelling and game industry tools. By providing this 3D virtual tour freely over the internet we hope to raise the awareness among general public and organizations.

Keywords: unity3D, "Structure from Motion" photogrammetry, 3D Virtual Tour, Repedea Hill, geological reserve, Iași, Romania.

© 2015 Ed. Univ. „Al. I. Cuza" Iași. All rights reserved
Corresponding author's e-mail: dtonycristian@yahoo.com