Uvigerinammina jankoi.Taking into account both the lithostratigraphical and foraminiferal data, the authors conclude that only one Albian-Cenomanian black flysch complex should be distinguished in the Grajcarek thrust-sheet of the Pieniny Klippen Belt in Poland. Such a sequence of deposits is typical of the Outer Carpathian basins and records the global Mid-Cretaceous phenomena in the world ocean followed by the Cretaceous Oceanic Red Beds (CORB) deposition.

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The analysis of reservoir heterogeneity from Well Log DATA

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All reservoirs are characterized by a sum of matrix and fluids properties. They are evaluated by a complex investigation consisting of core sampling analysis, geological, geophysical and hydrodynamic investigation and production data. These properties can be constant for the whole field when the reservoir is a homogenous one, or these properties can be variable and the reservoir is a heterogeneous one. But, what is the reservoir heterogeneity and how we can find its magnitude? According to Jensen et al (1997), "Heterogeneity is the property of the medium that causes the flood front, the boundary between the displacing and displaced fluids, to distort and spread as the displacement proceeds". There are more statistics methods (static and dynamic) for determination of reservoir heterogeneity. The static methods are: The Coefficient of Variation, Dykstra-Parsons Coefficient, Lorenz Coefficient and Gelhar-Axness Coefficient. This work is focused on the static methods, more specifically on Lorenz coefficient, while the dynamic methods are not discussed. For calculation the Coefficient Lorenz is necessary to know porosity, permeability and thickness of the reservoir. The number of values has to be enough and have a uniform distribution on the field for a statistical calculus. The following aspects of this application are emphasizing: wide domain of values for permeability data, the number of permeability values is not always enough for statistical analysing methods; the parameters from well logs are more representative and easy to obtain for the whole reservoir. This paper presents a new mathematical model and a novel practical method to evaluate the reservoir heterogeneity with Lorenz Coefficient using properties of rocks determined from well logs. The mathematical model uses field parameters, such as reservoir porosity, porosity of shale, shale volume and thickness to evaluate the reservoir heterogeneity. The technical contribution of this paper consists not only in a novel practical method to evaluate reservoir heterogeneity, but new challenges are expected from a technological point of view. The application data are provided by the wells from the oil structure named Barbuncesti (Beca, C., Prodan, D., 1983). Barbucesti structure is situated in the southern part of the inner (folded) flank of the Eastern Carpathians foredeep, known as the Mio-Pliocene or Diapiric Folds Zone.

Biometrical study of post-cranial deer material from the Late Pleistocene of Crete and Karpathos

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A characteristic endemic fauna, restricted to the island of Crete occurred during the Middle and Late Pleistocene, consisting of cervids, small sized elephants, dwarf hippos and

mammoths, giant murids, shrews, birds and reptiles but almost lacking carnivores (only a lutrinid has been discovered). This rather unbalanced fauna, typical for oceanic and oceanic-like islands, is related with the tectonic processes that led to the final configuration of Crete in the late early Pleistocene. It evolved as only a few vertebrate groups, capable for migration via open sea, colonized the virgin island and underwent genetic changes after their forced settlement in terms of 'sweepstake dispersal', adapting to the insular isolated environment. Examples of insular evolution can also be found in the fossil record of other islands of the Greek archipelago and the Mediterranean basin.

In the endemic mammal fauna of Crete, the ungulates were by far the most successful forms during Late Pleistocene (0.3-0.01 My). Cervid fossils have been known since the end of 19^{th} century and different taxonomic units have been described based on the dental, cranial, post-cranial and antler morphology of the remains. The Cretan deer has been represented by some eight species or morphotypes ranging from dwarf to relatively gigantic size, which adapted to different habitats and probably occupied different ecological niches indicating an adaptive radiation of the ancestral stock that probably resulted from sympatric speciation. However, the strong endemism, induced by insularity, the overall higher diversity than on mainland and the poor stratigraphic record make their taxonomy, ancestry and evolutionary history rather problematic. Different hypotheses concerning the phylogenetic and systematic relationship of the Cretan cervids have emerged. All these taxa belonged either to one genus (*Candiacervus*) on the basis of monofyly or to more implying different ancestors. Two other endemic Pleistocene cervids, with size resembling that of the dwarf Cretan forms, have been mentioned from the nearby island of Karpathos since the early seventies. The smaller species was defined as *Candiacervus cerigensis* while a larger species named *C. pygadiensis* was recognized from different antler morphology.

In the present study, the biometrical analysis of size variation and limb morphology of the Cretan deer and comparison with Karpathos findings were attempted. The studied fossil material, currently stored in the Natural History Museum of Crete, was originally collected from numerous cave localities in the late sixties and early seventies by the German palaeontologist S.E. Kuss, and is part of the so called Kuss collection formely housed in the Natural History Museum of Karlsruhe. The two smallest size groups (size 1 and 2) and partly the mid-sized morphotype (size 3) of De Vos classification were distinguished in the material from Crete as scatter plots of combinations of several measurements on full grown bones have shown. The most typical forms are the dwarfed species being widely spread and abundant while the larger sizes are extremely rare. These likely last representatives of the Cretan deer had short and massive limbs displaying a much greater degree of robustness that continental cervids and probably occupied a niche similar to that of the wild goat of Crete today. Furthermore, multivariate analysis (PCA) resulted in a definite morphological distinction between the post-cranial material from the two islands. The Karpathos endemic cervids differ significantly from the deer remains found on Crete both in size and morphology, bearing unique anatomical features, and implying no direct link with the Cretan stock. Therefore, the original deer genus determination is certainly under question. However, despite insufficient evidence, the existence of two different species in Pleistocene Karpathos, as Kuss originally concluded, is also suggested.