sediments was used for a number of (transgressive) Upper Cretaceous successions within an area from the Eastern Alps of Austria up to the Carpathians of Romania. At its type locality in the Northern Calcareous Alps of Austria, the Gosau Group is defined by a basal angular unconformity above Permian to Lower Cretaceous rocks, thus marking a new sedimentary cycle starting in Late Turonian times. The Lower Gosau Subgroup (Upper Turonian - Campanian) consists of terrestrial deposits at the base, including bauxites, and passes gradationally into shallow-marine successions with abundant fossils like rudists. The Upper Gosau Subgroup comprises deep-water deposits such as marls and a broad variety of deep-water clastics up to the Eocene. Similar deposits are known from Slovakia (Brezová Group) and Hungary (Transdanubian Range). Largely similar transgressive successions with slightly different stratigraphic ages are also reported from Romania (Apuseni Mountains) and Serbia (e.g., Mokra Gora, Western Serbia). Although geotectonic positions and basins may have been different, this points to a common evolution of the area after a mid-Cretaceous tectonism followed by renewed marine transgressions and a deepening of the depositional areas.

Syn-rift and synorogenic olistostromes and their role in interpretation of tectonic evolution of the Neoproterozoic Lufilian orogen as background for comparative studies

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The Lufilian belt is a part of the Neoproterozoic-Lower Palaeozoic Pan-African orogenic system of southern and central Africa. Its sedimentary sequence of the Katanga Supergroup (880-500 Ma) is composed of five groups: Roan and Nguba that represent rifting stages and Kundelungu, Fungurume, and Biano, which reflect evolution of the synorogenic foreland region. The occurrences of olistostromes, traditionally called the Katangan "megabreccias", are a prominent feature of the Lufilian belt architecture. Some olistostrome bodies reach thickness of 2000 m and contain huge blocks of Katangan rocks, some of which host the famous copper-cobalt orebodies of the Dem. Rep. of Congo sector of the Central African Copperbelt. They were previously considered as tectonic mélanges ("friction breccias") marking regional decollement zones related to thrusting during the Pan-African orogenesis. However, these fragmental rocks were recently shown to be of sedimentary origin and to form two extensive olistostrome bodies, which shed new light on the stratigraphy and tectonic evolution of the Lufilian belt. Borehole cores available in this copper mining region reveal fine details of their stratigraphic, sedimentological and structural relations.

The main lines of evidence for the olistostrome genesis are following: (1) lack of pervasive shearing that would point to tectonic fragmentation; (2) textures and structures diagnostic for subaqueous sediment gravity flows ranging from debris flows to turbidites; (3) roundness and provenance of clasts, and lateral facies gradients implying erosion, abrasion and unroofing of the Katangan source rocks elevated in the source areas; (4) lower boundaries of fragmental bodies are not tectonic but stratigraphic; (5) injections of unconsolidated conglomeratic matrix filling open joints in megablocks and fragmented slide sheets, which represent olistoliths and olistoplaques.

The older olistostrome unit is a disorganised to locally organised syn rift complex with olistoliths reaching five metres across. The clasts were derived from the uplifted rift margin and redeposition resulted from mass-wasting (rockfalls producing sedimentary breccias), sliding of solitary blocks, and pebbly to cobbly debris flows, some of which evolve to turbidites. The underlying strata are deformed by slump folds, and the succeeding lowest part of the olistostrome contains slump-generated debris flows with fragments of the dismembered slump beds. This olistostrome succession consists of three complexes typified by matrix-supported debris-flow conglomerates with Roan clasts. Some of the conglomerate beds pass upwards to normally graded turbidite layers and are accompanied by solitary slump beds. The three conglomeratic assemblages are separated by two intervals of sedimentary breccia composed of allochthonous angular Roan blocks interpreted as mass-wasting debris redeposited into the basin by high-volume sediment-gravity flows. The breccia bodies document unroofing of the source area in that the older one contains dolomite clasts derived from the upper Roan strata, and the younger breccia consists of quartzite fragments sourced from the lower Roan.

Synorogenic olistostromes in the Fungurume Group deposited in the foreland basin of the Lufilian Belt and derived from the Katangan nappes thrust northwards are composed of nappe-derived olistoliths and olistoplaques up to several kilometres in size embedded in debris-flow conglomerates. They represent all units older than the Fungurume Group. Olistostrome at Kambove overlies a turbidite sequence, distally grades to a conglomerate complex and includes olistoliths of red-bed strata, which in the Katanga Supergroup occur in the foreland region. This is interpreted as recycling of the foreland sediments involved in a successive orogenic phase due to advancement of the orogenic front from the south and migration of the foreland depocentre during a punctuated orogenesis.

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The early Miocene rodents from Turija (Banovići), Bosnia and Herzegovina

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The coal bearing deposits in the Turija opencast mine near Banovići yielded a small-mammal assemblage. The general composition of the assemblage is very similar to the ones from the Early Miocene of Anatolia. This similarity is more marked on the subfamily and genus level than on the species level. The Muridae are dominating the assemblage in diversity (with five species of four genera) as well as in number of specimens (80%). The Gliridae are with three species of two genera the second group (18%) and the Sciuridae with two genera and two species are rare (2%).

The Muridae are represented by species of *Deperetomys*, *Mirrabella* and *Eumyarion*, and a new genus and species of a spalacid, the Gliridae by two species of *Bransatoglis* and a species of *Microdyromys* and the Sciuridae by *Palaeosciurus* and "*Ratufa*" *obtusidens.*

The biostratigraphical correlation of the rodent assemblage from Turija depends necessarily on comparison with faunas from central Europe and Anatolia, because our knowledge of the local succession is very limited. Moreover, the Oligo/Miocene rodent fauna from the east coast of the Paratethys appears to be very different from that on the west coast. The absence of Eomyidae hampers a straightforward correlation with the European sequence, but six out of the ten species recognized in Turija are known from Europe and/or Anatolia also. The stratigraphical ranges of the species relative to the European MP/MN scheme and the preliminary Anatolian zonation shows convincingly that the best fit of the assemblage from Turija is with MN1 in Europe and zone B in Anatolia. In combination with magnetostratigraphical measurements the age estimate of this rodent assemblage is between 23.8 and 23.5 Ma.