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Southern Scientific Centre, Russian Academy of Sciences
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QUATERNARY STRATIGRAPHY AND PALEONTOLOGY OF THE SOUTHERN RUSSIA: connections between Europe, Africa and Asia

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The conference is devoted to the memory of Andrey Dodonov – geologist, colleague, friend and teacher

Quaternary stratigraphy and paleontology of the Southern Russia: connections between Europe, Africa and Asia: Abstracts of the International INQUA-SEQS Conference (Rostov-on-Don, June 21–26, 2010). Rostov-on-Don, 2010. 228 p.

The book presents the materials of the International Conference held in Rostov-on-Don (Rostov Region, Russia). Reports concern a wide spectrum of issues connected to the study of Quaternary marine and continental deposits of Eastern and Western Europe, Asia, and Africa. Paleobiological record of the Eastern Europe, faunal connections with Asia, Africa, and Western Europe are considered. The special attention is given to questions of paleogeography, climatic changes in the Quaternary, stratigraphy and sedimentology of Eastern Europe. Also presented are the newest data on the tectonics and climatic record. Questions of distribution and chronology of Paleolithic sites, adaptations of the ancient people to paleoenvironment are discussed.

Addressed to geologists, stratigraphers, paleontologists, paleogeographers, and archaeologists.

Materials are published with the maximal preservation of the authors' texts

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Международный союз по изучению четвертичного периода
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Южный научный центр РАН
Геологический институт РАН

ЧЕТВЕРТИЧНАЯ СТРАТИГРАФИЯ И ПАЛЕОНТОЛОГИЯ ЮЖНОЙ РОССИИ: взаимосвязи между Европой, Африкой и Азией

Материалы международной конференции
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При поддержке INQUA, грантов РФФИ № 10-05-06045-г, 09-05-00307а, Программы фундаментальных исследований Президиума РАН «Происхождение биосферы и эволюция геобиологических систем», Программы фундаментальных исследований ОНЗ РАН «Состояние окружающей среды и прогноз ее динамики под влиянием быстрых глобальных и региональных природных и социально-экономических изменений»

Конференция посвящена памяти Андрея Евгеньевича Додонова – геолога, коллеги, друга и учителя

Редакционная коллегия: В.В. Титов, А.С. Тесаков

Четвертичная стратиграфия и палеонтология южной России: взаимосвязи между Европой, Африкой и Азией: Материалы международной конференции INQUA-SEQS (Ростов-на-Дону, 21–26 июня 2010 г.). Ростов-на-Дону, 2010. 228 с.

Книга содержит материалы международной конференции INQUA-SEQS 2010, проведенной в г. Ростов-на-Дону (Ростовская область). Сообщения касаются широкого спектра проблем, связанных с изучением четвертичных морских и континентальных отложений Восточной Европы, Западной Европы, Азии и Африки. Рассматриваются палеобиологическая летопись Восточной Европы, фаунистические взаимодействия с Азией, Африкой и Западной Европой. Особое внимание уделяется вопросам палеогеографии, климатических изменений в четвертичном периоде, стратиграфии и седиментологии в Восточной Европе. Показаны новейшие данные изучения тектонической и климатической летописи. Обсуждаются вопросы распространения и хронологии палеолитических стоянок, адаптации древнего человека к палеосреде.

Издание предназначено для геологов-стратиграфов, палеонтологов, палеогеографов и археологов.

Материалы публикуются с максимальным сохранением авторской редакции

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THE UPPER PLEISTOCENE MAMMAL RECORD FROM CAVERNA DEGLI ORSI (San Dorligo della Valle – Dolina, Trieste, Italy): A FAUNAL COMPLEX BETWEEN EASTERN AND WESTERN EUROPE

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Caverna degli Orsi is located near S. Dorligo della Valle – Dolina in the Trieste Karst (NE Italy), at 360 m a.s.l. on the western slope of Monte Carso in Rosandra valley.

The cave is tunnel-shaped, about 130 m long and 5–10 m wide. The present day access is an 11 m deep vertical passage found by cavers during systematic surveys in the area, while the original one is at present completely buried by a debrisfall deposit that covers a wide area of the mountain side.

Since the cave entrance closed, sedimentation rate and weathering processes have been very low inside the cave; therefore a paleosurface, especially in the inner of the cave, has been preserved with minor changes. Typical traces of the presence of *Ursus spelaeus* are evident on the floor surface and on the walls: mostly scattered and unarticulated bones, hibernations hollows, scratches and polished rocks.

Two excavation sondages were carried out by the Department of Archaeological Sciences of Pisa University between 1992 and 2006. Sondage "A" is the inner one, while sondage B is situated in the outer part of the cave, where the tunnel entrance is obstructed by a debrisfall coming from the slope.

The preliminary results of the faunal analysis, related to the possible connections with the faunal assemblages of Eastern Europe, are presented.

Both stratigraphical sequences start from a flowstone, not dated but reputedly assigned to Eemian (MIS 5e). In the lowest layers there are large mammals with warm indicators such as cf. *Stephanorhinus kirchbergensis* in sondage "B" and *Dama* sp. in both sequences, in an association dominated by *Ursus spelaeus*. Among small mammals, common vole (*Microtus arvalis*) is dominant. In the upper layers animals of high mountain environments, such as *Marmota marmota* and *Capra ibex* and are quoted. Snow vole (*Chionomys nivalis*) is very abundant.

The presence of *Dama* sp. in the lowest levels, together with the change in the micromammals frequency and stratigraphic considerations, allow a calibration of the two sequences from 5 to 2 Marine Isotopic Stages (Late Pleistocene). In both sondages 26 *taxa* of small mammals and 24 ones of large mammals have been found.

The high biodiversity in the small mammals assemblage confirms the presence in this geographical area of an ecotone, with Balcanic and Western Mediterranean biocoenoses in the Late Pleistocene. In fact, the occurrence of *Dinaromys bogdanovi*, Balkan snow vole, together with *Chionomys nivalis* and northern and eastern European species, such as *Microtus oeconomus*, *Sicista betulina, Cricetulus migratorius* and *Mesocricetus* cf. *newtoni* mixed together with western ones, suggests that in this area animals of Pannonian and Western Mediterranean basins met.