Pacifichelys urbinai were found. Several hundreds of fossil marine vertebrates are identified and reported in a geological map and in a joined stratigraphic section. All the fossils are from the lower strata of the Pisco Formation, dated in this area to the late middle or early late Miocene; they are particularly concentrated (88%) in the stratigraphic interval from 40 to 75 m above the unconformity with the underlying Chilcatay Formation. The impressive fossil assemblage includes bony remains belonging predominantly to cetaceans (81%), represented by mysticetes (cetotheriids and balaenopteroids) and odontocetes (kentriodontid-like delphinidans, pontoporiids, ziphiids, and physeteroids including *L. melvillei*). Seals, crocodiles, sea turtles, seabirds, bony fish, and sharks are also reported from various levels in the locality. Isolated large teeth of *Carcharocles* and *Cosmopolitodus* are common throughout the entire investigated section, whereas other shark teeth, mostly of carcharinids, are concentrated in one sandy interval.

This work represents a first detailed census of the extraordinary paleontological heritage of the Pisco Basin and the basis for future taphonomic, palaeoecological, and systematic studies, as well as a much needed conservation effort for this extremely rich paleontological site.

FIRST RECORD OF *PELOBATES SYRIACUS* (ANURA, AMPHIBIA) IN THE EARLY PLEISTOCENE OF ITALY

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Spadefoot toads (Pelobatidae, Anura) are quite rare in the Italian fossil record, being recorded only in the Late Pliocene of Arondelli (Piedmont Region, north-western Italy) and in the Early Pleistocene of Pirro 21 (Apulia, southern Italy). Here we present for the first time the abundant fossil remains from the Early Pleistocene fissure of Pirro 13 (Apulia, southern Italy), represented by maxillae, frontoparietal, squamosal, sphenethmoids, vertebrae, sacra fused to the urostyle, scapula, humeri, ilia, and tibiofibula, and attributed to *Pelobates syriacus*, a toad currently living in South-East of the Balkan Peninsula, Caucasus and Middle East. It is the first time that this species is found in the Italian fossil record. In spite of this only fossil record, *P. syriacus* is shown to have certainly good dispersal abilities for toads and dispersal routes to reach the Apennine

Peninsula may have been favoured by a lower level of the Adriatic Sea, furnishing new habitat suitable for spadefoot toads. Our finding is confirmation that the range of this species was broader in the past than at present. Noteworthy is that according to niche modeling the potential ecological niche for *P. syriacus* is extended outside the known range, westwards in the Mediterranean (e.g., Italian Peninsula) and northwards in the Pannonian Basin and north of Black Sea and of Caucasus in a similar way during glacial and interglacial periods.

PALEOCLIMATIC AND PALEOCEANOGRAPHIC RECONSTRUCTION OF THE MIDDLE PLEISTOCENE – HOLOCENE THROUGH THE STUDY OF PLANKTONIC FORAMINIFERA OF THE ATA13-OF-KT1 SEDIMENTARY CORE (SW – AZORES ISLANDS).

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The aim of this research was to reconstruct the paleoclimatic and paleoceanographic trend during the Middle Pleistocene and Holocene, through the study of the planktonic foraminiferal assemblages in a sedimentary core (ATA13-OF-KT1), collected off of the Azores Islands (North Atlantic). The core was taken with a piston corer during the OCEANOGRAFLU 2013 oceanographic cruise (Atalante) at the bathymetry of 3.431 m. The core is 4,03 m length and it was sampled every cm.

The residual fraction >63 µm was constituted by foraminifera, radiolarians, ostracods and rare lithic fragments of volcanic origin. Quantitative analysis on planktonic foraminifera were performed on the fraction >125 µm allowed to obtain their abundance variations. A total of 54 species, sub-species and eco-morphotypes were recognised following Bè & Tonderlund, (1971) and Kenneth & Srinivasan (1983) classifications. Foraminiferal species were grouped into 4 groups. These groups were differentiated on the basis of their ecological preferences as proposed by Bè & Tonderlund, (1971). In particular, cold species contain Polar-Subpolar forms (*Neogloboquadrina pachyderma, N. incompta, Turborotalita quinqueloba, Globigerina bulloides, Globorotalia scitula*), while warm species contain subtropical and tropical forms (*Globigerina falconensis, Globigerinoides conglobatus, G. elongatus, G. pyramidalis, G. quadrilobatus, G. ruber, G. trilobus, G. sacculifer, Globoturborotalita rubescens, G. tenellus, Globigerinella calida, G. obesa, G. siphonifera, Orbulina universa, Globorotalia crassaformis, G. menardii, Neogloboquadrina dutertrei, Tenuitella anfracta, T. atlantisae*). The group of temperate species contain (*Globigerinita glutinata, Globorotalia inflata, G. hirsuta, G. truncatulinoides, G. bermudezi, Turborotalita humilis, Tenuitella iota*), while that of upwelling conditions contain typical species of high nutrient concentration (*G. bulloides, G. glutinata and T. quinqueloba*).

The age model of the studied core was based on the correlation between the abundance curves of warm/cold species with oxygen isotopic data of NGRIP (Artic) and VOSTOK (Antarctica), respectively. Finally, all data were compared with those proposed by Shackleton et al., (2000) for MD95-2042 core and by Champman & Shackleton (1998) for SU90-03 core. The good fitting