



Eolianites and Paleosols as indicators of Sea Level Changes in the Elba Island (Central Italy) during Late Pleistocene

Luca Trombino (1,2) and Stephania Irmgard Elena Ern (1)

(1) University of Milano, Earth Sciences Department, Milano, Italy (luca.trombino@unimi.it, +39 02 50315494), (2) National Council of Research, Dynamic of Environmental Processes Institute, Milano, Italy

Late Pleistocene Calcareous eolianites exist along the coasts and islands of the Tyrrhenian Sea (Central Mediterranean), particularly on Sardinia Island (western coast), on the Tuscany coast and on the islands of Toscano and Pontino Archipelagos. In the second half of the last century, some authors interpreted Italian eolianites as hanging beach sediments, as shown in the geological maps of that time: in fact, studied eolianites often show hard interpreting facies and uncertain dating.

The aim of this work is focused on nature and paleoclimatic significance of the eolianites of Elba Island, which is located in the Tyrrhenian Sea, at about 10 Km from the coast of the Tuscany (Central Italy); the Elba Island is the greater of Toscano Archipelago.

The work is based on: field survey, with sedimentological, pedological and geomorphological description; laboratory methods, mainly grain size analyses; micromorphology, with observation and description of thin sections of eolianites and related paleosols and soils.