



EC-PROMESS 1 project: stratigraphic synthesis of the hole PRAD1-2 (Middle Pleistocene-Holocene of the Central Adriatic)

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We present the stratigraphic synthesis of the borehole PRAD1-2 (EC-PROMESS 1 project) drilled in 186 m water depth on the western flank of the Central Adriatic basin. The borehole recovered ca. 71 m of continuous sedimentary sequence. The stratigraphy is based on the ecobiostratigraphy of planktic and benthic foraminifera, O and C stable isotope record, magnetic parameters, seismic stratigraphy, lithology, grain-size and XRF data. Based on semi-quantitative and quantitative analysis of the planktic and benthic foraminifera assemblages, we recognize a succession of glacial and interglacial intervals referred to MIS 1 to MIS 10. Interglacial periods are characterised by abundant planktic foraminifera. Glacial periods show very scarce or absent planktic foraminifera assemblages, and a generally very rich benthic foraminifera assemblage indicative of a mid- to inner-shelf environment.

The shallowest paleo-bathymetry (inner shelf) is reached during the MIS 10 when coarser grain-size values are observed. Several intervals are characterised by dark and, in some cases, laminated sediments, as well as by low values of the $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$, and low Anhyseretic Remanent Magnetization values. These intervals are dominated by (deep-) infaunal benthic foraminifera assemblages indicating low-oxygen bottom waters, and in some particular intervals the sediment is even void of benthic fauna. Dur-

ing these intervals Neogloboquadrinids or *Globigerinoides ruber* (pink variety with thin and inflated test) dominate the planktic assemblage during glacial or interglacial periods, respectively. These intervals are also associated with abrupt decreases in the sortable silt fraction. These intervals can be considered as the Central Adriatic equivalents of the Eastern Mediterranean sapropels S1, S3, S4, S5, S6, S7, S8, S9, S10 and they can be considered as control points for the chronology of the borehole. The magnetic parameters also allowed recognise a geomagnetic excursion between MIS 7 and MIS 6 that has been referred to the Iceland Basin Excursion (about 188 kyr B.P.).

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