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4, S8-S10, 2009

Interactive Comment

## Interactive comment on "Holocene evolution and sedimentation rate of Alikes Lagoon, Zakynthos island, Western Greece – preliminary results" by P. Avramidis and N. Kontopoulos

## P. Avramidis and N. Kontopoulos

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We would like to thank both referees for their constructive comments and suggestions. We take into account the reviewers suggestions, and we II accommodate most of their comments in the final revised version.

According to Prof. Pascucci comments we would like to mention the following points:

- 1. We have made corrections in English text and we correct some grammar mistakes.
- 2. Magnetic susceptibility in this paper is used only as an indicator for different sediment source and we refer to these results in discussion chapter (page 9 line11-12). We don not try to infer a fundamental conclusion only from susceptibility data. We present

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these measurements as they indicate differentiation along the 21m stratigraphic column, which could be related both to the sediment source area and to tectonic activity. But this assumption has to be supported with geochemistry data and mineralogical data, a task in which we are working for. The purpose of the paper is only to present preliminary results.

3. In the Abstract chapter, page 2 line 13 and in the Discussion - Conclusion chapter, page 9 line8, we explain that both the depositional environments and the fauna suggest a coastal environment (restricted shallow) with reduced salinity, such as a lagoon margin and in a tidal flat and/or march. We do not distinguish the lagoon the tidal flat or the marsh sub-environments. Moreover, along the Mediterranean region and particularly in Greece, we have examples of tidal flats for which other researchers have already written. Scott et al. (1979) examined in Greece tidal marsh Foraminifera from areas with an extremely compressed tidal range (mean range of 45 cm and a extreme range of 75 cm). Moreover, Piper Panagos (1981) refer to tidal flats in Acheloos delta, Ionian Sea, an area which is located near Zakynthos island. In order to support this conclusion we II add the below two references in the final revised version of the paper.

Scott, D.B. Piper, D.J.W. and Panagos A.G. (1979). Recent salt march and intertidal mudflat foraminifera from the western coast of Greece. Riv. Ital. Paleont., n. 85, n.1 pp. 243-266. Milano, Italy.

Piper D.J.W., Panagos AG (1981) Growth patterns of the Acheloos and Evinos deltas, western. Greece. Sedimentary Geology 28 (2): 111-132.

4. Radiocarbon Dates are reported as RCYBP (radiocarbon years before present present = AD1950). By international convention, the modern reference standard was 95 the 14C activity of the National Institute of Standards and Technology (NIST) Oxalic Acid (SRM 4990C) and calculated using the Libby 14C half life (5568 years). The Conventional Radiocarbon Age represents the Measured Radiocarbon Age corrected for isotopic fractionation, calculated using the delta 13C (13C/12C ratio). In order not to

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be any misunderstanding we II add in the final revised version a more detail description for the dating. But as we refer on page 7 line 26 we use the delta 13C (13C/12C) only for the conventional radiocarbon age.

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