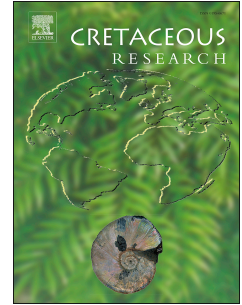


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Shallow water agglutinated foraminiferal response to Late Cretaceous–Early Paleocene sea-level changes in the Dakhla Oasis, Western Desert, Egypt

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1 **Shallow Water Agglutinated Foraminiferal response to Late Cretaceous – early Paleocene**  
2 **sea-level changes in the Dakhla Oasis, Western Desert, Egypt**

3  
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10  
11 **ABSTRACT**

12  
13 The Late Cretaceous (Maastrichtian) to early Paleocene (Thanetian) shallow water (<100  
14 m) agglutinated foraminifera from a section at Dakhla Oasis (Western Desert, Egypt) were  
15 analyzed for their assemblage, species and genera distribution, diversity, depositional  
16 environment, community structure and palaeobathymetry with respect to regional tectonics,  
17 climate and global eustasy. Data suggest an equitable benthic environment with low species  
18 dominance deposited in a brackish littoral and/or marsh setting. Sea level curves using  
19 characteristic benthic foraminiferal species, genera and assemblages corroborate quantitatively  
20 generated estimate and statistical analysis. Data suggests that in the absence of or of an  
21 impoverished benthic foraminiferal fauna, a high resolution agglutinated foraminiferal dataset  
22 can be as good a predictor of the benthic community structure and environment, as its calcareous  
23 counterpart, at least for shallow settings (<100 m). Present data also provides a good window in  
24 better understanding the distribution and interrelationship between the three dominant genera,  
25 *Haplophragmoides*, *Trochammina* and *Ammobaculites*. Faunal changes at boundaries  
26 (Cretaceous/Paleogene, Danian/Selandian and Selandian/Thanetian) are also evaluated.

27  
28 *Key words:*

29 Late Cretaceous,

30 Paleocene,

31 Agglutinated foraminifera,

32 Shallow water,

33 Egypt

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