

عنوان مقاله:

(A planktonic foraminiferal record from the Cenomanian/Turonian boundary interval of the Kopet-Dagh Basin (NE Iran

محل انتشار:

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خلاصه مقاله:

The shale-marlstone interval of the upper Aitamir-lower Abderaz formations in the southeastern part of the Kopet-Dagh Basin was investigated using planktonic foraminiferal studies to determine how surface and water column characteristics of the basin were influenced by Cenomanian/Turonian (C/T) boundary conditions. Three planktonic foraminiferal biozones (upper part of the *Rotlipora cushmani* Total Range Zone, *Whiteinella archaeocretacea* Interval Zone, and lower part of the *Helvetoglobotruncana helvetica* Total Range Zone) have been identified in the studied section, which suggests a late Cenomanian-early Turonian age for this interval. The Aitamir-Abderaz boundary is supposed to be conformable in this section because of the presence of all the C/T boundary planktonic foraminiferal biozones and no evidence of subaerial exposure in the field. The presence of benthic foraminifera throughout the studied section indicates that the anoxic event 2 (OAE<sub>2</sub>) interval in this succession has never experienced a complete oxygen depletion at the bottom water. However, the low diversity of planktonic foraminifera and low abundance of specialized species indicate more stressful conditions due to intensified weathering and higher productivity (eutrophic conditions) during the OAE<sub>2</sub> interval. This interval is punctuated by a transient period with higher diversity of planktonic foraminifera and more abundance of specialized species at the upper part of *R. cushmani* biozone-lower part of *W. archaeocretacea* biozone.

.This interval can correspond to the "Plenus Cold Event" and demonstrates more stable and oligotrophic conditions across the OAE<sub>2</sub>

کلمات کلیدی:

Palaeoecology, OAE<sub>2</sub>, Planktonic foraminifera, Biostratigraphy

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