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Cretaceous facies  
in Orogenic Belts**

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**ABSTRACTS**

## LOWER CRETACEOUS IN IRAN

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In Iran, the lowermost Cretaceous is represented by somewhat reddish clastic sediments. They overlie older rocks unconformably or paraconformably.

The change from marine to oxidized continental sediments, as well as the above-mentioned paraconformity at or near the Jurassic-Cretaceous boundary, have been caused by the Late Kimmerian tectonic event. In northeast Iran (Koppeh Dagh Mountains) and the southwest (Zagros Mountains), the Late Kimmerian event is solely accompanied by a shallowing of the sedimentary environment. In these regions, the differentiation between Upper Jurassic regressive sediments and Lower Cretaceous transgressive sediments is difficult. Everywhere else in Iran, the sea was spreading after a relatively long cessation of sedimentation over the Iranian plateau. This transgression began in the Hauterivian-Barremian. It brought back marine conditions to most of the Iranian territory in relatively short time.

The thickness of the reddish detrital Neocomian sediments is from a few metres up to 600 m. They unconformably overlie older sediments. Generally, the Neocomian clastic series pass into yellow to red arenaceous dolomites with marl intercalations. These series pass gradually into thick-bedded to massive *Orbitolina*-bearing limestones of Barremian age.

Barremian-Aptian limestones of Urgonian facies are widely distributed. They may be recognized by their morphologic significance. These limestones demonstrate a wide-spread Early Cretaceous transgression over almost the entire Central Iran. Upwards, they pass into the lower Albian which is rich in ammonites. The above-following Albian *Beudanticeras* Shale may reach 300 m in thickness.

The Cenomanian begins generally with glauconitic limestones which almost everywhere overlie the *Beudanticeras* shale paraconformly. This is related to the Austrian tectonic event.