

THE AFRICAN/ADRIATIC PROMONTORY AS A PALEOGEOGRAPHICPREMISE FOR ALPINE OROGENY

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Summary

The paleogeographic premise that the Adriatic region can be treated as a promontory of the African plate is evaluated. The recent evidence provided by paleomagnetism, facies considerations and crustal structure investigations is somewhat inconclusive but tends to suggest that, on a large scale, the assumption is valid. The movements of an African/Adriatic plate relative to Europe, as predicted by the Atlantic magnetic anomaly data, are correlated with geological data from the Mediterranean region. This hypothetical model for the evolution of the Alpine system is traced from the Early Jurassic to the Early Tertiary. Recent geological data provide new constraints on the definition and behaviour of microplates in the Carpatho-Balkan region. The existence of an African/Adriatic promontory is consistent with these data and it appears that the movements of such a promontory were a controlling influence on the relative movement of the Carpatho-Balkan microplates.

The concordance between the predicted movements of an African/Adriatic promontory and geologic evidence for phases of crustal accretion and subduction in the Periadriatic and Carpatho-Balkan regions suggests that the concept of an Adriatic promontory provides a useful paleogeographic framework for Alpine orogeny.

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