top of the Phyllite-Quartzite Unit. The existence of a high-P/low-T metamorphic belt in the external Hellenides places constraints on geodynamic models of this region.

EVIDENCE FOR TURONIAN RIFT RELATED EXTENSIONAL SUBSIDENCE AND TERTIARY BACKTHRUSTING: THE ALMOPIAS AND PAIKON ISOPIC ZONES, NORTHERN GREECE

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The Almopias and Paikon Zones, first defined by Mercier, form the western and central units respecively of the Vardar Zone of Northern Mainland Greece. The Paikon Zone has long been regarded as an area of neritic sedimentation from Triassic to Cretaceous times, whilst the Almopias Zone, classicaly was regarded as an area of basinal sedimentation.

In this paper we present new sedimentological and structural data from the western margin of the Paikon Zone.

Rather than being simply a shallow water carbonate platform unit in the Late Cretaceous, our sedimentological data establishes an important rifting event, heralded by a depositional hiatus, followed by clastic sedimentation, with limestone olistoliths, overlain by a deep water pelagic carbonate and radiolarite succession. New radiolarian determinations indicate a Late Cenomanian-Lower Turonian age for this break up event.

Rifting and subsidence took place elsewhere in the Vardar Zone at this time, associated with the generation of ophiolites (e.g. Eubeoa, Argolis, Sporades), and may reflect a regional Eastern Tethys lithospheric extensional event.

The nature of the Almopias-Paikon Zone contact will also be examined. This major tectonic contact was originally defined as a **southwestward** directed thrust contact, placing Cretaceous limestones of the Paikon Zone over pillow lavas and radiolarites of the Almopias Zone. However, our new structural data indicate that in fact large-scale **eastward**-directed thrusting and folding took place along this contact, emplacing lavas and radiolarites of the Almopias Zone towards the north east over the Paikon Zone in the Early Tertiary.

This large-scale Early Tertiary backthrusting at the Almopias-Paikon interface may be a result of the Tertiary thrust stack ramping westwards over the Pelagonian continental margin in the west. Full scale collision appears to have resulted in the

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expulsion of Almopias Zone ophiolitic units both westward on to the Pelagonian Zone, and eastwards on to the Paikon Zone.

A further implication is that the Paikon carbonate platform is restored as a continental fragment within the Mesozoic-Tertiary Neotethyan Vardar ocean basin, rather than part of a regionally much more extensive Pelagonian Zone continuing beneath the Almopias Zone as has recently been suggested.

GEOLOGY OF THE NON-METAMORPHIC FORMATIONS AROUND MILET (WESTERN TURKEY)

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The Neogene sequence of the Milet basin (about 400 m in thickness) was deposited in a synsedimentary subsiding basin on the crystalline basement of the Menderes Massif. It commences with fresh-water limestones (still unknown in its precise age), followed by some 300 m of marly, sandy, conglomeratic sediments with volcanoclastic intercalations (after regional similarities equivalent to Yatagan formation - upper part of Messinian age). The overlying fresh-water limestones (Milet formation; about 100 m in thickness) are believed to have been deposited in early Pliocene times.

Later on the basin fill emerged as testified by relics of red oils on top of the Milet formation. Subsequently the sequence became tilted to the S during the Plio-/Pleistocene. As a consequence the Milet formation at present dips below the sea in the S and is uplifted to more than 300 m in the N deeply dissected by erosion.

Pleistocene "proto-valleys" triggered the occurence and the position as well of huge mass movements (max. size 2 X 1,5 km; sliding distance up to 2 km) by gravity transport prior to the late Quaternary sea level rise.

The late Pleistocene/Holocene sea invaded into the "Latmos Bay" and may have reached the position of ancient Magnesia.

The position of ancient Milet and Didyma is intimately connected with the Pleistocene evolution of landscape and ground water resources.

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