

continued during the Middle Triassic. At the same stratigraphic levels as the acid volcanics there are scarce mafic dyke-like bodies and extrusives now metamorphosed to greenschists. Intermediate volcanic rocks are noticeably rare. The association appears to be a bimodal suite with the acid members dominant.

The geochemistry of the basic rocks is consistent with high degrees of melting of an asthenospheric source with no detectable arc signature. The acid volcanics have trace elements contents indistinguishable from the western Vertiscos group basement migmatites and schists.

We envisage continental extension occurring from sometime during the Permian up to the Middle Triassic, during which time asthenospheric upwelling and basalt underplating produced extensive melting of the thinned continental crust and extrusion of the resulting acid melts. Later, probably in the Middle Jurassic, extension and rifting culminated in the opening of the Axios (Vardar) ocean.

## **THE ROLE OF EXTENSION IN UNROOFING THE CYCLADIC BLUESCHIST BELT**

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Peak metamorphic pressure conditions of 15 kbar indicate that the Cycladic blueschist unit emerged from a depth of ca. 50 km. The HP rocks are delimited from above by low-angle faults which cut-out crust and hence operated with a normal sense of motion. These normal faults facilitated the exhumation of the HP rocks by removing and dispersing the overburden laterally. A ca. 30 km thick section was removed from above the blueschist unit in the oligocene but extensional structures of this age are not known. Oligocene - Miocene ductile stretching, probably enhanced by elevated temperatures, occurred in Naxos and Paros, whereas contemporaneous low-angle normal faulting attenuated the crust in the western part of the Cyclades (Tinos). Continuous extension is documented by lowangle normal faults which cut through foot-wall Miocene granites and which show a prolonged deformation history.

The blueschist unit overthrust a lower pressure paraautochthon when a significant portion of the overburden was removed. Therefore, the extensional unroofing of the Cycladic blueschist unit occurred during plate convergence.