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High-pressure granulite-facies metamorphism in central Dronning Maud Land (East Antarctica): implications for Gondwana assembly

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Abbreviations: Mineral and end-member abbreviations are from Kretz (1983), with the addition of Liq (silicate melt liquid), Opm (opaque mineral) and Sulph (sulphide); "ppm" is used for µg/g.

Abstract

Central Dronning Maud Land (DML; East Antarctica) is located in a key region of the Gondwana supercontinent. The Conradsgebirge area (central DML) consists of orthogneisses, derived from both volcanic and plutonic protoliths, and minor metasedimentary rocks, intruded by Cambrian syn- to post-metamorphic plutons and dykes.

Mafic-ultramafic boudins in the metavolcanic and metaplutonic gneisses from Conradsgebirge consist of amphibolites and high-grade Grt-bearing pyroxene- and amphibole-rich granofels. They occur either as

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