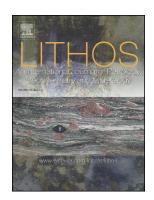
Accepted Manuscript

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



Rosaria Palmeri, Gaston Godard, Gianfranco Di Vincenzo, Sonia Sandroni, Franco M. Talarico

PII: S0024-4937(17)30449-8

DOI: https://doi.org/10.1016/j.lithos.2017.12.014

Reference: LITHOS 4513

To appear in:

Received date: 4 September 2017 Accepted date: 18 December 2017

Please cite this article as: Rosaria Palmeri, Gaston Godard, Gianfranco Di Vincenzo, Sonia Sandroni, Franco M. Talarico, High-pressure granulite-facies metamorphism in central Dronning Maud Land (East Antarctica): Implications for Gondwana assembly. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Lithos(2017), https://doi.org/10.1016/j.lithos.2017.12.014

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

High-pressure granulite-facies metamorphism in central Dronning Maud Land

(East Antarctica): implications for Gondwana assembly

Rosaria Palmeri^{a,*}, Gaston Godard^b, Gianfranco Di Vincenzo^c, Sonia Sandroni^a, Franco M. Talarico^{a,d}

^a Museo Nazionale dell'Antartide, Università degli Studi di Siena, via Laterina 8, 53100 Siena, Italy

^b Institut de Physique du Globe, Université Paris Diderot, UMR 7154 CNRS, F-75252 Paris, France

^c Istituto di Geoscienze e Georisorse, CNR, via Moruzzi 1, 56124 Pisa, Italy

^d Dipartimento di Scienze Fisiche, della Terra e dell'Ambiente, Università degli Studi di Siena, via Laterina 8,

53100 Siena, Italy

* Corresponding author.

E-mail address: rosaria.palmeri@unisi.it (R. Palmeri)

Keywords: Antarctica, Grenvillian orogeny, East African Antarctic (Pan-African) orogeny, Gondwana,

Mafic/ultramafic rocks, HP-HT granulite

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 Conradgebirge 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 Conradgebirge consist of

amphibolites and high-grade Grt-bearing pyroxene- and amphibole-rich granofels. They occur either as

Palmeri et al.

1

Download English Version:

https://daneshyari.com/en/article/8911773

Download Persian Version:

https://daneshyari.com/article/8911773

<u>Daneshyari.com</u>