

Metadata Details

Title

Geological mapping (1:10000 scale) in the central part of Schirmacher Range, East Antarctica to constrain its tectono-metamorphic evolution and place in Gondwana configuration

Science Keywords

Category	Paleoclimate
Topic	Geomorphology
Expedition Year	2013-2014
ISO Topic	Geodesy

Summary

Abstract

The Schirmacher Range in East Antarctica has undergone a complex tectono-metamorphic evolution and emplacement of various intrusives. The geological map of GSI (1998) shows NE-SW trending litho-units represented mainly by orthogneiss, paragneiss, mafic granulite, ultramafic enclaves and lamprophyre dykes. The orthogneiss is dominantly of enderbitic affinity whereas paragneiss is represented by interlayered sequence of khondalite and calc silicate rocks. Mafic granulite variants include orthopyroxene - and two-pyroxene bearing rocks. It is proposed to map a transect on 1:10000 in the central part of the Schirmacher, which exposes all the major litho-units. Emphasis would be given to bring out the details of rock associations, to decipher the deformation fabric and to constrain the host-enclave relationships.

Purpose

Establishing tectono-metamorphic evolution of the Schirmacher Range. Validation of the existing information on Gondwana assembly.

Data Center