TECTONIC SIGNIFICANCE OF LÜTZOW-HOLMBUKTA IN GONDWANALAND RECONSTRUCTION

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Abstract: Three age groups ranging from *ca.* 500 to 1900 Ma have been distinguished in the Lützow-Holmbukta region as reflecting distinctive tectonic-metamorphic events. Similar age groups are recognized in East Antarctica and other Gondwanian regions.

Ca. 2000 Ma ages in East Antarctica are sporadic relic ages in the predominant *ca.* 1000 Ma age belt. *Ca.* 1000 Ma ages can be traced as a zone from Antarctica to other Gondwanian continents. This zone is regarded as a mobile belt, and we propose to denote this belt as the Rayner Belt. *Ca.* 500 Ma ages are extensively developed along almost all the boundary areas of the Gondwanian continents except at the Antarctica-Australia boundary.

The similarity of the tectonic-metamorphic belt including the Lützow-Holmbukta region to the northern part of the Irumide Belt of southern Africa is pointed out. The Napier zone of Enderby Land and the Indian granulite-charnockite belt may be an Archaean mobile belt which suffered multiple metamorphism with youngest event of *ca.* 2500 Ma. We propose to denote this belt as the Madras Belt. This belt has geotectonic similarities with the Limpopo Belt of southern Africa. The Peninsular Gneiss of Dharwar and the granitic rocks of the southern Prince Charles Mountains are regarded as the Archaean cratonic nuclei which are fringed by Archaean and Proterozoic mobile belts.

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