

# **Palaeomagnetism of Mesoproterozoic dykes from the Protogine Zone, southern Sweden and the enigmatic Sveconorwegian Loop.**

G.Bylund and S.A.Pisarevsky1

Tectonics Special Research Centre  
Department of Geology and Geophysics  
The University of Western Australia  
Nedlands  
WA 6907  
Australia

Journal: Geologiska foreningens i Stockholm forhandlingar (GFF)

## **ABSTRACT**

A palaeomagnetic study of samples from dykes in the Protogine Zone (PZ) south of Lake Vattern has yielded four characteristic magnetic components, A-D. A comparison with previous data and the Sveconorwegian Loop of the Fennoscandian apparent polar wander path (APWP) make it possible to estimate the age of the corresponding palaeomagnetic poles. The results indicate that the D-component is oldest, approximately 1180-1250 Ma. Components A-C are situated close to the "Sveconorwegian Loop", which indicates ages between ca 110-850 Ma. The Loop is based mainly on three clusters of palaeopoles, two situated at low latitude and one at intermediate to high latitude. The possible configuration of the Loop discussed.