

# Large scale thrusting across the Kango Inlier, Cape Fold Belt, South Africa.

M.J. de Wit<sup>1</sup>, S Moore<sup>2</sup>

1. AEON - Africa Earth Observatory Network and Department of Geological Sciences, University of Cape Town, Rondebosch 7701, South Africa, [maarten.dewit@uct.ac.za](mailto:maarten.dewit@uct.ac.za)
2. Mineral Services South Africa (Pty) Ltd Pinelands, Cape Town 7430, [mssa@minserc.co.za](mailto:mssa@minserc.co.za)

## ABSTRACT

Structural mapping and analyses of the Table Mountain Group in the Cape Fold Belt along both the northern and the southern margins flanking the Kango Inlier, 10km west of Calitzdorp, reveals km-scale thrust stacks (duplexes) with more than 70% horizontal shortening along the southern boundary between the Huisriver Formation of the Kango Supergroup and the Peninsula Formation of the Cape Supergroup. In addition, 100-1000m scale folding is documented within the overturned Baviaanskloof Formation to the north of the northern boundary of the Kango Inlier in the Gydo Formation along the Gamkapoort section in the Hell. Strain analysis along this section provides evidence that the extensive thrusting predates the ubiquitous upright folding in the Swartberg Mountain range, suggesting that Peninsula Formation allochthons were emplaced across the Kango inlier early during the deformation history of the Cape orogeny.

**Key words:** Cape Fold Belt, thrusting, large scale duplexes, tectonics, Kango inlier.