

REVISITING THE GONDWANIDES WITH NEW AFRICAN DATA ▯ LESS CONVERGENCE, MORE UNCERTAINTIES OR NEW HORIZONS FOR GREATER CONSILIENCE?

MAARTEN DE WIT

AEON and the Earth Stewardship Centre, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa.

Email: [HYPERLINK "mailto:maarten.dewit@nmmu.ac.za"](mailto:maarten.dewit@nmmu.ac.za) maarten.dewit@nmmu.ac.za

The last decade has seen a significant improvement in the knowledge about the geology, geophysics and geochemistry of the southern African lithosphere, through a number of major geoscience programmes such as, for example, Inkaba yeAfrica and !Khure Africa. These findings have direct bearings on the accuracy of paleo-links between Africa and South America across the southern Oceans and the evolving processes that led to their separation. I will highlight results from a number of new geophysical transects across the Karoo Basin/ Cape Fold Belt and continental shelves of South Africa; across the Aghulas LIP and Mozambique Ridge, as well as from a number of new geochronology, thermochronology and cosmogenic studies, to emphasize that our knowledge is far from complete, even within this small sector of the Gondwanides. Correctly linking the Cape Fold Belt of Africa with the Sierra de la Ventana in South America, and their respective basement geology, for example, remains first order tasks before apparent divergent geotectonic/geodynamic models of the Gondwanides can be reconciled with greater certainty.