

## **THE GONDWANA METAL - POTENTIAL GIS**

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The Gondwana Metal-Potential GIS is a product developed between the BRGM and the CIGCES, as part of a collaborative French - South African project. It has been developed using Arcview (© ESRI) and SynArc (© BRGM), and is available as a stand-alone CD-Rom (Gondwana Georama). This GIS endeavours to merge the Precambrian geology and the mineral deposits of Gondwana into a comprehensive and user-friendly metal-potential GIS. It is based on two main layers enriched by thematic layers such as maps produced by multicriteria analysis. The basic layers, developed by CIGCES, modified and completed in this project, are: -the geology, that contains more than 18,000 informed polygons (age, lithology, overprint) and is presented by simplified or detailed maps of the Gondwana terranes in a reconstruction at 150 Ma; -the mineral resources that contains more than 15,000 mineral deposits and occurrences, each linked to attributes reflecting their metallogenic and geologic environments. The thematic layers are: -statistical, chronological or spatial analysis of metal occurrences including assessments of Au, Ni-Cr, Sn-W, Fe-Mn, Cu and Pb-Zn mineralizations; -metal potential maps of the Gondwana terranes. Additional data such as animations showing the reconstruction of the Gondwana or a selection of pictures of terranes, mines and minerals complete this GIS and make it useful for education as well as for research or industry.