

THE WEST CONGOLIAN (PAN AFRICAN) BELT: AN UPDATED 1:1MILLION GEOLOGICAL COMPILATION MAP

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The linear West Congolian belt stretches subparallel to the Atlantic coast between 1°N and 12°S. There is now a renewed interest in this belt in relation with the geodynamic modelling of the Pan African - Brasiliano belts as part of the Western Gondwana and/or Rodinia aggregation and Supercontinent reconstruction. A confusing literature exists on its regional geologic setting. In colonial times, studies undertaken by French (Gabon and Congo-Brazzaville), Belgian (DR.Congo) and Portuguese (Cabinda and Angola) geological schools resulted in distinct terminologies and a profusion of local lithostratigraphies. Later bilateral and multilateral programs (UNDP, former Communist block,...) gave rise to additional concepts and terminologies. Some areas have benefitted more recently from new studies, whereas in other areas (parts of Angola, DR.Congo) field access proved impossible since several decades. The result is a general knowledge of the belt which can be dramatically different from place to place. Re-appraisal of the different mappable units in the various countries showed an obvious continuity across political borders. Comparison of cross-sections and lithostratigraphic charts from each country also resulted in the construction of a general W-E type-section of the tectono-metamorphic domains and of a reference lithostratigraphic succession for the entire West Congolian belt. This enabled the GIS-based compilation of a new 1/1,000,000 geological map for the entire belt. A tentative reconstruction of the basin development and evolution since Neoproterozoic times illustrates a clear west to east depositional polarity from early Neoproterozoic up to Phanerozoic times, which parallels the deformational and metamorphic polarity of the belt.