

Tectonic evolution of the Congo area

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Eight major tectonic units are represented in Congo area: the Kibaran fold belt at east; the Katanga-Lufilian belt at SE, the Kasai-Angola craton at south, the Chaillu-Ntem complex at NW, the Sembe Ouesso-Likibembian belt at north, the northeastern Archaean complex, and the Congo Basin in the middle.

Three units(Kasai-Angola, Chaillu-Ntem and ~~No~~theastern Archaean complex) are of Archaean age. Two others(Kibaran and Sembe Ouesso-Likibembian) are Mesoproterozoic. The Mayumbian-West Congolian and Katanga-Lufilian are Panafrikan. All these units encircle a phanerozoic(tertiary to quaternary) unit, the Congo basin.

A tentatively correlation of Archaean terrains and events in those complexes shows that two main orogenic cycles can be deduced: a $\pm 3.5-3.1$ Ga and a $3.0-2.5$ Ga, separated by a period from about 3.2 to 3.0 Ga characterized by a general fracturing of the crust^{and} formation of intracratonic rifts from which evolved greenstone belts.

The proterozoic units evolved by fracturing Archaean cratons: Congo and Tanzania at east, Congo and Sao Francisco at West, Congo craton at north. They evolved from a basin created at about 1.4 Ga and closed at about 1.1-1 Ga, but the Mayumbian-West Congolian and Katanga-Lufilian evolved through the Neoproterozoic.

Finally, the Congo basin appears as phanerozoic filling of a large ditch created by the uplift of the surrounding Precambrian folded terrains.