WHAT HAPPEN NORTH OF THE CONGO CRATON BETWEEN 900 AND 500 MA?

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Central Africa, north of the Congo basin, is geologically poorly known and exposed. Yet, it holds an important key to unraveling geologic links in Africa between the Precambrian shield of central Africa and the regions to the north that include the West African Shield and central Sahara domains. Understanding these links bear ultimately on the deep history of formation and growth of the entire African continent, and the widespread Neoproterozoic tectonism that dominates the accretion history of Africa´s continental lithosphere during amalgamation of Gondwana. The general picture of African north of the Congo basin comprises vast Pan African tectono-metamorphic terrains (Neoproterozoic in age, ca. 500-800Ma with few older relicts) separating the shields of Central and West Africa. In the west, this Neoproterozoic terrain is marked by the Trans-Saharan belt along the eastern edge of the West African Craton; it contains both juvenile Neoproterozoic crust, as well as large areas of remobilized older crust, including Archean terrains as, in central Nigeria; it has been interpreted as a mid-lower crustal root zone of a former, Neoproterozoic, Himalaya-size mountain chain.

The northern margin of the Central African Shield is marked by a belt stretching east-west for ca. 3000 km from the Gulf of Guinea to the western rift of East Africa. This Neoproterozoic belt was initially known as the Oubanguides that forms the southern sector of a large Neoproterozoic orogenic belt, recently named the Central African Orogen, and which has been compared to an Andean like orogenic Belt.

The Oubanguides is the least well-known of all major Pan African belts, and is often left off synthesis maps of Africa and Gondwana. This lack of geological knowledge is in part due to poor outcrop and access to this region, especially in Central African Republic (CAR) and southern Sudan. In contrast, the western extremity of the central Oubanguides, particular in Cameroon, has been more extensively studied recently, updated and correlated across the Atlantic to the similar geology of NE Brazil. A major finding of these studies is that the belt here also contains vestiges of older, including Archean, remobilized terrains. The Oubanguides contains a number of well know Pan African mylonite zones that for long have been used to correlate across the south Atlantic to similar mylonites in the Borborema region of NE Brazil. Whilst such correlations across the Atlantic are generally well-accepted, the precise details of correlations remain uncertain. A general lack of good geochronology within the Oubangides, particularly beyondthe borders of Cameroon is partly to blame. We present new U-Pb data of some major unit of the Central African Republic, compare the available information in the western regions, particularly in Cameroon, and discuss their implication on the overall evolution of the Pan-African belt north of the Congo basin between 850 and 500 Ma.