



Evidence of ca 1.6 Ga detrital zircon in the Bafia Group (Cameroon): implication for the chronostratigraphy of the Pan-African Belt north of the Congo craton

S.F. Toteu (1), J. Numbem Tchakounté (2), W.R. Van Schmus (3), J. Penaye (1), E. Deloule (4), J. Mvondo Ondoua (2), M. Bouyo Houketchang (1), A. A.Ganwa (5), W. M. White (6)

(1) Centre de Recherches Géologiques et Minières, B.P. 333, Garoua, Cameroun, (2) Département des sciences de la Terre, faculté des sciences, université de Yaoundé-1, BP 812, Yaoundé, Cameroun, (3) Department of Geology, University of Kansas, Lawrence, Kansas 66045, USA, (4) Centre de Recherches Pétrographiques et Géochimiques, B.P. 20, 54501 Vandoeuvre les Nancy, Cedex, France, (5) Département des Sciences de la Terre, Faculté des Sciences, Université de Ngaoundéré, B.P. 454 Ngaoundéré, Cameroun, (6) Department of Geological Sciences, Snee Hall Cornell University, Ithaca, NY 14850 USA, sftoteu@yahoo.fr

The southern part of the Central African Fold Belt (CAFB) in Cameroon is a southward regional-scale nappe staking domain (the Yaoundé Domain). It comprises the Neoproterozoic Yaoundé Group thrusting onto the Congo craton and the poorly known Bafia Group, which is assumed to be a basement (Paleoproterozoic) tectonic slice over-thrusting the Yaoundé Group to the north. New field observations, U-Pb on zircon and Sm-Nd on whole rock and garnet data presented in this paper allow a better understanding of the Bafia Group in the context of the CAFB. The Bafia Group is a Neoproterozoic metasedimentary sequence comparable to the other metasedimentary sequences on the belt north of the Congo craton (Poli, Lom and Yaoundé). In addition to the Paleoproterozoic to Archean source, the Bafia Group displays detrital zircons inherited from 1600 Ma granitoids. Our data also led us to discussing the source provenance of the protolith for gneisses of the Bafia Group and its metamorphic evolution relative to that of Yaoundé.