

Early poststabilization sedimentation and later growth of shields

John J. W. Rogers Mohamed E. Dabbagh

Department of Geology, University of North Carolina. Chapel Hill, North Carolina 27514

William J. Olszewski, Jr.

Henri E. Gaudette Department of Earth Sciences. University of New Hampshire, Durham. New Hampshire 03824

Jeffrey K. Greenberg

Bruce A. Brown Wisconsin Geological and Natural History Survey. Madison. Wisconsin 53706

ABSTRACT

Subsidence and shallow-water sedimentation occurring within a few tens of millions of years after cratonic stabilization of shields can be shown by at least three sedimentary suites: the Wmjjid Formation of southwestern Saudi Arabia; the Roraima Formation of Venezuela and neighboring countries; and the Baraboo interval of Wisconsin and nearby states. This subsidence indicates that complete attainment of present crustal thickness of the shield areas did not occur at the time of crustal stabilization. Intrmt crustal growth and uplift were passive processes extending, perhaps, for several hundred million years after stabilization.