

# Feasibility Testing of the Proposed Unified Global Expansion and Contraction Cycle Hypothesis Using Spherical Volumetric Calculations for a Simplified Earth Model with an Inner Core of Plasma

Ronald E. Young<sup>1</sup> and Erik W. Young<sup>2</sup>

<sup>1</sup>Consulting Geologist, The Woodlands, Texas

<sup>2</sup>University of Illinois, Champaign, Illinois

Unique and direct evidence of processes creating fluvial meander-pattern channels and tidal estuary-pattern channels are visible on GLORIA computed images from the northeastern Gulf of Mexico, the type locality for the proposed Global Expansion and Contraction Cycle Hypothesis. If these indirect images are valid representations of reality, then pre-depositional lowering of the Gulf of Mexico by more than 3,000 meters (9,843 feet) is required.

The proposed Global Thermonuclear Fusion Event Hypothesis states that within the core of a globe, such as the Sun or Earth, there have been multiple, variable intensity, thermonuclear fusion events involving at least the light elements, hydrogen through lithium. Some indirect, direct, and unique evidences of these events are, respectively, as follows: paleomagnetic reversals, hotspot heat vents, and natural deuterium and tritium.

Combining the above fusion and cycle hypotheses produces a cause-and-effect, unified hypothesis which can then be tested and reconciled with the plethora of observed facts of multiple, worldwide, primarily non-glacial, multi-kilometer, eustatic cycles.

The unified hypothesis requirement of cycles of creation and destruction of accommodation space for worldwide storage of ocean water is tested for feasibility using a simplified earth model constrained as follows: solid through plasma phases of matter; asymptotic and symmetrical deformation behavior; cyclically variable pressure and flow of heat energy; non-convective mantle; initial constant-volume mantle; later partial basal melting of the mantle; the thickness of each successive mantle and crust layer is reduced by half, and a time constant compatible with very rapid melting rate of continental ice.