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COSMOGEOLOGICAL CATASTROPHIC PLATE TECTONICS: A GLOBAL FLOOD MODEL OF EARTH HISTORY

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COSMOGEOLOGICAL CATASTROPHIC PLATE TECTONICS: A GLOBAL FLOOD MODEL OF EARTH HISTORY

-(COSMOGEOLOGICAL EXPLANATION BY K. MARGIANI)

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KEYWORDS: Catastrophe, Flood model, plate tectonics, subduction, thermal runaway, convection, spreading, Fountains of the Great Deep, Windows of Heaven, volcanoes, earthquakes, sediments, precipitites, magnetic reversals, isostasy, climate, Ice Age

⇨EB⇨geo-transfer – rapid movement of the outer nucleus masses into asthenosphere.

ABSTRACT

In 1859 Antonio Snider proposed that rapid, horizontal divergence of crustal plates occurred during Noah's Flood (Rapid global drift and oscillation of all platforms was formed by slowly⇨EB⇨geo-transfer. It's conclusive evidence about penetration of outer nucleus masses into asthenospere). Modern plate tectonics theory is now conflated with assumptions of uniformity of rate and ideas of continental 'drift'. Catastrophic plate tectonics theories, such as Snider proposed more than a century ago, appear capable of explaining a wide variety of data - including Biblical and geologic data which the slow

tectonics theories are incapable of explaining **(Of course slow tectonics theories will never explain that).** We would like to propose a catastrophic plate tectonics theory as a framework for earth history. **(Of course but catastrophes have different strength, especially to the global extinction boundaries. Scale of global extinction is closely connected to the velocity of⇨EB⇨geo-transfer)**

Geophysically, we begin with a pre-Flood Earth differentiated into core, mantle, and crust, with the crust horizontally differentiated into sialic craton and mafic ocean floor. The Flood was initiated as slabs of oceanic floor broke loose and subducted along thousands of kilometers of pre-Flood continental margins **(within a rapid⇨EB⇨geo-transfers only and creates global extinction boundaries).** Deformation of the mantle by **(accumulation pressure forces into outer nucleus by means of cooling to the mantle/core boundary)** these slabs raised the temperature and lowered the viscosity of the mantle in the vicinity of the slabs **(platforms melting creates temperature decreasing into asthenospere).** A resulting thermal runaway **(periodic slowly penetration of outer nucleus masses into asthenosphere formed by cooling to the mantle/core boundary which is reason defect of volume and accumulation of pressure forces in the outer nucleus)** the slabs **(outflow, penetration)** through the mantle led to meters-per-second mantle **(asthenosphere)** convection **(and global oscillation all platforms).** Cool oceanic crust which descended to the mantle boundary induced rapid reversals of the earth's magnetic field **(outflow from core (outer nucleus) changes tilt and offset of the dipole as well).** Large **(slowly)** plumes originating near the core/mantle **(E geo-sphere)** boundary expressed themselves at the surface as fissure eruptions and flood basalts **(explosive volcanism and slowly outflow from boundaries of platforms especially along the mid-ocean ridges).** Flow induced in the mantle also produced rapid **(drift and)** extension along linear belts throughout the sea floor and rapid horizontal **(drift and slowly)** displacement of continents. Upwelling magma jettisoned steam **(through platform boundaries of oceans)** into the atmosphere causing intense global rain. Rapid emplacement of isostatically lighter mantle material raised the level of the ocean floor, displacing ocean water onto the continents. When virtually all **(only small part across mid-ocean ridges mainly and along subduction zones)** the pre-Flood oceanic floor had been replaced with new, less-dense, less-subductable, oceanic crust, **(described an event within a rapid⇨EB⇨geo-transfer only)** catastrophic plate motion stopped **(in few days a slowly⇨EB⇨geo-transfer and global oscillation of all platforms are ceased).** Subsequent cooling **(of intrusion masses within fissures)** increased the density **(and global strenuously between platforms)** of the new ocean floor**,** producing deeper ocean basins and a reservoir **(new global isostatic balance and new global wave deformations between platforms create new continental outlines and coastal zones)** for post-Flood oceans. **(Global rapid drift fully changes isostatic balance of the platforms as well as coastal zones and continental outlines, etc.).**

Sedimentologically, we begin with a substantial reservoir of carbonate and clastic sediment in the pre-Flood ocean. During the Flood hot brines associated with new ocean floor **(within a rapid⇨EB⇨geo-transfer)** added precipitites to that sediment reservoir, and warming ocean waters and degassing magmas added carbonates - especially high magnesium carbonates. Also during the Flood, rapid plate tectonics moved pre-Flood sediments toward the continents **(within a rapid⇨EB⇨geo-transfer).** As ocean plates subducted near a continental margin its bending caused upwarping of sea floor **(new global strenuously between platforms, new global isostatic balance and new global wave deformations between platforms),** and its drag caused uplift and down-warping of continental crust, facilitating the placement of sediment onto the continental margin. Once there, earthquake-induced sea waves with ocean-to-land movement redistributed **(By new global isostatic balance)** sediment toward continental interiors. Resulting sedimentary units tend to be thick, uniform, of unknown provenance, and extend over regional, inter-regional, and even continental areas.

After the Flood, the earth experienced a substantial period of isostatic readjustment **(changing of continental outlines as well as islands),** where local to regional catastrophes with intense earthquake and volcanic activity were common **(After formation new global strenuously between platforms).** Post-Flood sedimentation continued to be rapid but was dominantly basinal on the continents. Left-over heat in the

new oceans **(after slowly⇨EB⇨geo-transfers and boiling rapid⇨EB⇨geo-transfers)** produced a significantly warmer climate just after the Flood. In the following centuries, as the earth cooled, floral and faunal changes tracked the changing climate zonation. The warmer oceans caused continental transport of moisture that led to the advance of continental glaciers and ultimately to the formation of polar ice caps. **(It means renewing of northern polar ice cap and increasing of southern ice cap again. Global environmental changing after a slowly⇨EB⇨geo-transfer creates only slowly decreasing of southern ice cap. It can melt fully within the extinction boundaries only, after parid⇨EB⇨geo-transfers).**

Early in the history of geology, it was common to appeal to the flood described in Scripture to explain the origin of most or all rocks and fossils (e.g. [100,14,126,116]). In such theories Noah's flood was typically recognized as a catastrophic event of global proportions. The earth's crust was typically pictured as dynamic and capable of rapid vertical and horizontal motions on local, regional, and global scales. However, especially with the influential works of Hutton [43,44] and then Lyell [49], Noah's flood began to play an increasingly less important role in historical geology during the nineteenth century. Theories of gradualism increased in popularity as theories of catastrophism waned. Ideas of past catastrophic geology were replaced with ideas of constancy of present gradual physical processes. Ideas of global-scale dynamics were replaced with ideas of local erosion, deposition, extrusion, and intrusion. Ideas of rapid crustal dynamics were replaced by ideas of crustal fixity - with only imperceptibly slow vertical subsidence and uplift being possible. So complete was the success of gradualism in geology that ideas of flood geology were nowhere to be found among the English-speaking scientists of the world by 1859 [65), or rarely found at best [63].

One of the last holdouts for flood geology was a little-known work published by Antonio Snider-Pellegrini [97] - ironically enough the same year Darwin published the Origin of Species. Intrigued by the reasonably good fit between land masses on either side of the Atlantic Ocean, Snider proposed that the earth's crust was composed of rigid plates which had moved horizontally with respect to one another. Snider may have been the first to propose some of the main elements of modern plate tectonics theory. Snider also proposed that the horizontal divergence had been rapid **(during rapid⇨EB⇨geo-transfers only)** and had occurred during Noah's Flood **(connected to slowly⇨EB⇨geo-transfer only).** It appears, then, that the first elaboration of plate tectonics theory was presented in the context of catastrophic flood geology. It also seems that a substantial amount of the twentieth century opposition to plate tectonics was due to the fact that geologists were, by then, firmly predisposed to believe that the earth's crust was horizontally fixed. The catastrophism school of geology was the first to propose plate tectonics; the gradualist school was the first major opponent to plate tectonics. However, by the time plate tectonics was finally accepted in the United States in the late 1960s, gradualism had become a part of plate tectonics theory as well. Rather than Snider's rapid horizontal motion **(during rapid⇨EB⇨geo-transfers only)** on the scale of weeks or months, modern geology accepted a plate tectonics theory with horizontal motion on the scale of tens to hundreds of millions of years.

Because of the enormous explanatory and predictive success of the plate tectonics model (reviewed in [122,124]), we feel that at least some portion of plate tectonics theory should be incorporated into the creation model **(of course).** It appears that taking the conventional plate tectonics model and increasing the rate of plate motion neither deprives plate tectonics theory of its explanatory and predictive success, nor does it seem to contradict any passages of Scripture. Therefore, following the example of Antonio Snider we would like to propose a model of geology which is centered about the idea of rapid, horizontal divergence of rigid crustal plates (i.e. rapid plate tectonics **(during rapid⇨EB⇨geo-transfers only)** during Noah's flood **(was formed by slowly⇨EB⇨geo-transfer only).** We feel that this model is not only capable of the explanatory and predictive success of conventional plate tectonics, but is also capable of clarifying a number of Scriptural claims and explaining some physical data unexplained by conventional

plate tectonics theory. **(Capable of the explanatory and predictive success of conventional plate tectonics is the cosmogeological theory).**

It is important to note, however, that our model is still in its formative stages, and is thus incomplete. What is presented here is a basic framework upon which more theory can be built **(e.g. the cosmogeological theory).** We anticipate that a substantial amount of work is still needed to explain all the salient features of this planet's rocks and fossils. Additionally, although the authors of this paper have all had some association with the Institute for Creation Research (ICR), the model presented in this paper is a composite perspective of the authors and not necessarily that of the ICR.

PRE-FLOOD GEOLOGY

Any flood model must begin by speculating on the nature of the pre-Flood world. Virtually every flood event and product is in some way or another affected by characteristics of the pre-Flood world. A partial list of Flood events determined at least in part by pre-Flood conditions would include: global dynamics of the crust (by the pre-Flood structure and nature of the earth's interior); magnetic field dynamics (by the pre-Flood nature of the magnetic field); tectonic activity and associated earthquakes (by the pre-Flood structure and dynamics of the crust); volcanic activity and emplaced igneous rocks (by the pre-Flood nature of the earth's interior); formation of clastic sediments (by the pre-Flood sediments available for redeposition and rocks available for erosion); formation of chemical sediments (by the pre-Flood ocean chemistry); formation of fossils (by the nature of the pre-Flood biota); distribution of sediments and fossils (by the pre-Flood climate and biogeography); and the dynamics of the inundation itself (by pre-Flood topography). The more that is determined about the nature of the pre-Flood world, the more accurate and specific our flood models can be **(and we have to know that different velocities of ⇨EB⇨geo-transfers closely connected to the different geo-catastrophes and different global environmental changes and extinctions as well).** Our initial inferences about the pre-Flood world include the following.

Pre-Flood/Flood Boundary

We agree with many previous theorists in flood geology that the pre-Flood/Flood boundary should stratigraphically lie at least as low as the Precambrian/Cambrian boundary **(550mya was one of the rapid⇨EB⇨geo-transfer only)** (e.g. [100, 117]). Currently there is discussion about how close [120,5] or far [94] below the Cambrian rocks this boundary should be located **(The biblical flood was formed by last slowly⇨EB⇨geo-transfer in the epoch of the Gilgamesh).** For our purposes here, it is provisionally claimed that at least many of the Archaean sediments are pre-Flood in age.

Pre-Flood Earth Structure

We believe that the pre-Flood earth was differentiated into a core, mantle, and crust; very much as it is today **(Permanent geo-evolution (cooling) and thickening of inner solid geo-spheres creates periodic ⇨EB⇨geo-transfers. At the Precambrian/Cambrian boundary solid geo-spheres were much thiner and liquid geo-spheres much thicker).** We conclude this for two major reasons. The first is that under any known natural conditions, core/mantle differentiation would destroy all evidence of life on earth completely **(during rapid⇨EB⇨geo-transfers only).** The current earth has a core/mantle/crust division according to the successively lower density of its components. If this differentiation had occurred by any natural means (rapid interaction, hit and disequilibrium between the inner geo-forces), the gravitational potential energy released by **(accumulated pressure forces in the core and rapid outflow much fiery liquid masses from core into asthenosphere. It means rapid outflow heavier elements and heavier admixtures)** the heavier elements relocating to the earth's interior would produce enough heat to melt the earth's **(subducted)** crust and vaporize the earth's oceans. **(It means temperature decreasing in the asthenosphere to the pre-flood level).** If differentiation of the earth's elements did occur with its associated natural release of energy, it is reasoned that it most certainly occurred before the creation of organisms (at the latest Day 3 of the creation week) **(periodic⇨EB⇨geo-transfers connected to the**

periodic creation and extinctions as well). Secondly, even though such a differentiation could have been performed by God without the "natural" release of gravitational potential energy, the already-differentiated earth's interior also provides a natural driving mechanism for the rapid tectonics model **(during rapid⇨EB⇨geo-transfers only)** here described.

The earth's mantle appears to have been less viscous than it seems to be at present **(Asthenosphere was much thicker and C and D geo-sphere much thiner)[**6,7,8]. This is to allow for the thermal runaway **(rapid or slowly**) instability which we believe produced the rapid plate tectonic motion we are proposing [7] **(rapid plate tectonic motion was during rapid⇨EB⇨geo-transfer only. Rapid drift and global oscillation of all platforms during slowly⇨EB⇨geo-transfers connected to the explosive volcanism and outflows through fissures).**

With regard to the earth's crust, we believe that there was a distinct horizontal differentiation between oceanic and continental crust **(overridden oceanic platforms on the one another and on the mainland as well is reason of differentiations between oceanic and continental crust),** very much as there is today. First, we believe that before the Flood began, there was stable, sialic, cratonic crust. We have three major reasons for this conclusion: 1) Much Archaean sialic material exists which probably is below the pre-Flood/Flood boundary. This would indicate that sialic material was available in pre-Flood times; 2) The existence of low-density, low temperature "keels" beneath existing cratons [45] implies that the cratons have persisted more or less in their present form since their differentiation. It also argues that little or no mantle convection has disturbed the upper mantle beneath the cratons; and 3) If the pre-Flood cratons were sialic and the pre-Flood ocean crust was mafic, then buoyancy forces would provide a natural means of supporting craton material above sea level **(pre-Flood ocean craton material above sea level uplifted after overridden events during rapid⇨EB⇨geo-transfers only)** -- thus producing dry land on the continents.

Second, we believe that the pre-Flood ocean crust was mafic -- most probably basaltic **(Upper layers mainly, at the crust/asthenosphere boundaries are granite-forming layers. Into the modern mainland, basaltic and granite layers are destroyed and mixed by huge geo-forces of rapid⇨EB⇨geo-transfers).** Once again three reasons exist for this inference: 1) Pre-Flood basaltic ocean crust is suggested by ophiolites (containing pillow basalts and presumed ocean sediments) which are thought to represent pieces of ocean floor and obducted **(partially overridden on the continents and partially subducted under continents)** onto the continents early in the Flood **(during rapid⇨EB⇨geo-transfers only)** ; 2) If, as claimed above, the pre-Flood craton was sialic**,(was buoyancy on the asthenosphere ocean as well as now)** then buoyancy forces would make a mafic pre-Flood ocean crust into a natural basin for ocean water. This would prevent ocean water from overrunning the continents **(within stabile isostatic conditions only);** and 3) If as claimed above, the continents were sialic, mafic material would be necessary to drive the subduction required in our flood model **(subductions and obductions are closely connected to the huge forces of rapid⇨EB⇨geo-transfers. it creates disequilibrium between huge inner geo-forces by asteroid impact. We have a lot of conclusive evidences about obduction events: huge limestone layers on a continent, a lot of karstic caves, fossils formed by catastrophes, etc.).**

Pre-Flood Sediments

We believe that there was a significant thickness of all types of sediments **(especially after a rapid ⇨EB⇨ geo-transfer)** already available on the earth by the time of the Flood . We have three reasons for this position: 1) biologically optimum terrestrial and marine environments would require that at least a small amount of sediment of each type had been created. 2) Archaean (probable pre-Flood) and Proterozoic sediments contain substantial quantities of all types of sediments; and 3) It may not be possible to derive all the Flood sediments from igneous and/or metamorphic precursors by physical and chemical processes in the course of a single, year-long Flood **(only after a lot of⇨EB⇨geo-transfers).** We believe that substantial quantities of very fine detrital carbonate sediment existed in the pre-Flood

oceans. This is deduced primarily from the fact that not enough bicarbonate can have been dissolved in the pre-Flood ocean (and/or provided by outgassing during the Flood -- see below) to have produced the Flood carbonates **(Now is pre-flood time again and we can compare…).**

Such quantities of carbonate as we believe to have existed in the pre-Flood ocean would mean that there was a substantial buffer in the pre-Flood ocean -- perhaps contributing to very stable pre-Flood ocean chemistry **(Now is pre-flood time again and we can compare…).** The existence of large quantities of mature or nearly mature pre-Flood quartz sands might explain the otherwise somewhat mysterious clean, mature nature of early Paleozoic sands. **(From beginning to the end the Paleozoic epoch contains approximately nine rapid ⇨EB⇨ geo-transfers and global extinction events and a lot of slowly ⇨EB⇨ geo-transfers and local-basinal extinction events).**

FLOOD DYNAMICS

Initiation

There has been considerable discussion -- both reasonable and fanciful -- about what event might have initiated the Flood **(It's already decoded by cosmogeological theory, of course a⇨EB⇨geo-transfer only).** Considerations range from a) the direct hand of God [56-62,6-7]; b) the impact or near-miss of an astronomical objector objects such as asteroids [102], meteorites [74], a comet [116,75], a comet or Venus[11], Venus and Mars [109], Mars [76], Mars, Ceres and Jupiter [118], another moon of earth [9], and a star [10]; c) some purely terrestrial event or events, such as fracturing of the earth's crust due to drying [14] or radioactive heat buildup [36], rapid tilting of the earth due to gyro turbulence [71] or ice sheet buildup [54], and natural collapse of rings of ice [114,103]; or d) various combinations of these ideas. We feel that the Flood was initiated as slabs of oceanic crust broke loose and subducted along thousands of kilometers of pre-Flood continental margins **(during a rapid⇨EB⇨geo-transfer only. It creates partially obduction of oceanic crust's loose broke slabs on the mainland).** We are, however, not ready at this time to speculate on what event or events might have initiated that subduction **(asteroid impact as a balance detonator - hydraulic equilibrium between inner geo-forces around solid layers of mantle).** We feel that considerable research is still needed to evaluate potential mechanisms in the light of how well they can produce global subduction **(and obduction, formation mountain chains and new thick platforms).**

Subduction

At the very beginning of plate motion, **(4.1 billion years ago began new era "late heavy bombardment", era of large asteroids impacts and rapid⇨EB⇨geo-transfers, after explosion of the 5th planet's "Titanic")** subducting slabs locally heated the mantle by deformation **(creates melting cold masses of a crust and cooling into asthenosphere only),** lowering the viscosity of the mantle in the vicinity of the slabs. The lowered viscosity then allowed an increase in subduction rate, which in turn heated up the surrounding mantle even more **(Impact of an asteroid is balance detonator, between inner geo-forces).** We believe that this led to a thermal runaway instability which allowed for meters-per-second subduction, as postulated and modeled by Baumgardner [6,7] **(subducting velocity is connected to the ⇨EB⇨ geo-transfer velocity).** It is probable that this subduction occurred along thousands of kilometers of continental margin. The bending of the ocean plate beneath the continent would have produced an abrupt topographic low paralleling the continental margin, similar to the ocean trenches at the eastern, northern, and western margins of the Pacific Ocean.

Because all current ocean lithosphere seems to date from Flood or post-Flood times [88], we feel that essentially all pre-Flood ocean lithosphere was subducted in the course of the Flood **(partially subducted after rapid⇨EB⇨geo-transfers only).** Gravitational potential energy released by the subduction of this lithosphere is on the order of 10^{28} J [6]. This alone probably provided the energy necessary to drive Flood dynamics **(Only cooling to the mantle/core boundary creates defect of volume, accumulation of pressure forces within liquid outer nucleus and⇨EB⇨geo-transfers. Some scientists think that each layer of**

mantle had same thickness always. In fact, thickness of solid layer is increasing for 5 billion years, before finish of (cooling) geo-evolution. When all geo-spheres are in the solid conditions, geo-evolution is already finished by this time and impossible tectonic activity).

The continents attached to ocean slabs would have been pulled toward subduction zones **(Simultaneously rapid movement thick platforms creates global destroy of ocean slabs and a lot of overridden (obduction) events).** This would produce rapid horizontal displacement of continents -- in many cases relative motion of meters per second. Collisions of continents at subduction zones are the likely mechanism **(only submerging and melting of thin lithosphere tiles into asthenosphere).** For the creation of mountain fold-and-thrust-belts, such as the Appalachians, Himalayas, Caspians, and Alps (Are formed after rapid overridden and overfolding ocean slabs on mainland **(during a rapid⇨EB⇨geo-transfer and)** rapid deformation, burial, and subsequent erosion of mountains possible in the Flood model **(of a rapid ⇨EB⇨ geo-transfer),** might provide the only adequate explanation for the existence of high- pressure, low-temperature minerals such as coesite (e.g. [92, 17, 113, 37, 91]) in mountain cores.

Mantle-Wide Flow

As Baumgardner [6,7] assumed in order to facilitate his modeling, rapid subduction is likely to have initiated large-scale flow throughout the entire mantle of the earth **(after rapid⇨EB⇨geo-transfers).** Seismic tomography studies (e.g. [28]; and as reviewed by [29]) seem to confirm that this in fact did occur in the history of the earth. In such studies velocity anomalies (interpreted as cooler temperature zones) is lied along theorized paths of past subduction. These anomalies are found deep within the earth's mantle -- well below the phase transition zones thought by some to be barriers to mantle- wide subduction. In fact, the velocity anomalies seem to imply that not only did flow involve the entire depth of the mantle, but that ocean lithosphere may have dropped all the way to the core/mantle boundary **(ocean lithosphere tiles is melting into astenosphere and can't reach the core. Rapid subduction creates rapid melting and cooling into asthenosphere by means of penetration enormous and most fiery masses from outer nucleus into Asthenosphere Ocean after a rapid⇨EB⇨geo-transfer. Overfolding of destroyed thin lithosphere tiles and overridden on the mainland and mountain chains create huge strength of inner geo-forces and rapid⇨EB⇨geo-transfer).**

One important consequence of mantle-wide flow **(wide outflow from outer nucleus)** would have been the transportation of cooler mantle material to the core/mantle boundary **(each flood is formed by slowly penetration or rapid, wide ejection of most fiery core masses into asthenosphere).** This would have had the effect of cooling the outer core **(cooling within outer core (nucleus) creates defect of volume and accumulation of huge pressure forces and necessary periodic decreasing of accumulated pressure and defect of volume for survival of space-body),** which in turn led to strong core convection. This convection provided the conditions necessary for Humphreys' [40,42] model of rapid geomagnetic reversals in the core. As the low electrical conductivity oceanic plates subducted, they would be expected to have split up the lower mantle's high conductivity **(cosmogeological⇨EB⇨geo-transfer is decoded secret about lower mantle's rapid and slowly conductivity).** This in turn would have lessened the mantle's attenuation of core reversals and allowed the rapid magnetic field reversals to have been expressed on the surface. Humphreys' [40,42] model **(cosmogeological model)** not only explains magnetic reversal evidence (as reviewed in [41]) in a young-age creation time scale, but uniquely explains the low intensity of paleomagnetic and archaeomagnetic data, the erratic frequency of paleomagnetic reversals through the Phanerozoic, and, most impressively, the locally patchy distribution of sea-floor paleomagnetic anomalies [41]. It also predicted and uniquely explains the rapid reversals found imprinted in lava flows of the Northwest [21, 22, 2, 15]. **(Magma hardening captured magnetic reversal - G nucleus independent rotation within core. Of course each⇨EB⇨geo-transfer is conclusive evidence of magnetic reversal and G nucleus rotation speed is connected to the velocity of⇨EB⇨geo-transfer).**

Spreading

As ocean lithosphere subducted it would have produced rapid extension along linear belts on the ocean floor tens of thousands of kilometers long **(during peaceful (dormant) period subduction zones and gradual displacement all platforms are formed by global penetration liquid masses of asthenisphere within platforms boundaries. Global hardening creates global defect of volume into huge fissures and accumulated pressure forces create gradual displacement all platforms).** At these spreading centers upwelling **(penetrating)** mantle material would have been allowed to rise to the surface. **(During slowly ⇨EB⇨ geo-transfer global oscillation all platforms and rapid penetration of)** the new, molten mantle material would have degassed its volatiles [118] and vaporized ocean water [6,7] to produce a linear geyser of superheated gases along the whole length of spreading centers. This geyser activity, which would have jettisoned gases well into the atmosphere, is, we believe, what Scripture refers to as the "fountains of the great deep" (Genesis 7:11; 8:2). **(Explosive volcanism is closely connected to the global oscillation).** As evidenced by volatiles emitted by Mount Kilauea in Hawaii [33], the gases released would be (in order of abundance) water, carbon dioxide, sulfur dioxide, hydrogen sulfide, hydrogen fluoride, hydrogen, carbon monoxide, nitrogen, argon, and oxygen. As the gases in the upper atmosphere drifted away from the spreading centers they would have had the opportunity to cool by radiation into space. As it cooled, the water -- both that vaporized from ocean water and that released from magma -- would have condensed and fallen as an intense global rain. It is this geyser-produced rain which we believe is primarily responsible for the rain from the "windows of heaven" (Genesis 7:11; 8:2) which remained a source of water for up to 150 days of the Flood (Genesis 7:24-8:2). **(This is conclusive evidence of the slowly ⇨EB⇨ geo-transfer and global oscillation of all platforms).**

The rapid emplacement of isostatically lighter mantle material **(global oscillation of all platforms)** raised the level of the ocean floor along the spreading centers **(especially in the Pacific Ocean).** This produced **(global and slowly linear outflow along)** a linear chain of mountains called the mid-ocean ridge (MOR) system. The **(global oscillation and)** new warmer and more buoyant ocean floor displaced ocean water onto the continents to produce the inundation itself. **(The inundations during slowly⇨EB⇨geo-transfer especially dangerous were to the coasts of Pacific Ocean).**

Continental Modification

The (extinction) events of the Flood **(rapid⇨EB⇨geo-transfer)** would have made substantial modifications to the thickness of the pre-Flood continental crust. This would have been effected through the redistribution of sediments **(global destroy of thin ocean slabs)**, the **(rapidly)** moving of ductile lower continental crust by subducting lithosphere, **(obducting on the mainland and overfolding),** addition of molten material to the underside of the continental lithosphere (under-plating), stretching (e.g. due to spreading), and compression (e.g. due to **(rapidly)** continental collision). These rapid changes in crustal thickness would produce isostatic disequilibrium. **(After subducting and obducting events within extinction boundaries are formed new thick platforms and large-scale isostatic disequilibrium especially for old continental platforms).** This would subsequently lead to large-scale isostatic adjustments with their associated earthquakes, frictional heating, and deformation **(mostly an extinction boundary changes continental outlines and creates new continental platforms).** Since many of those tectonic events would have involved vertical rock motions, Tyler's [101] tectonically-controlled rock cycle might prove to be a useful tool in understanding late Flood and post-Flood tectonics **(Before rapid⇨EB⇨geo-transfer and after rapid⇨EB⇨geo-transfer).**

Atmosphere

The magma at spreading centers degassed, among other things, substantial quantities of argon and helium into the earth's atmosphere. Both of these elements are produced and accumulated due to radioactive decay **(within the core mainly).** However, the current quantity of helium in the atmosphere is less than that which would be expected by current rates of radioactive decay production over a four to five billion years of earth history [52, 24, 25, 104-106], so perhaps what is currently found in the

atmosphere is due to degassing of mantle material during the **(a)** Flood. The same may also be found to be true about argon (see, e.g., [31]). **(Part of these elements are captured into solar wind)**

Flood Waters

Several sources have been suggested for the water of the Flood. Some creationists (e.g. [117, 26]) have proposed that the "waters above the firmament" **(it means almost endless heavy rains for centuries. Warm oceans produced huge evaporating and heavy rains for few centuries)** in the form of upper atmosphere water canopy provided much of the rain of the Flood. However, [84, 85, 112] argue that if the water was held in place by forces and laws of physics with which we are currently familiar, forty **(it means a lot of)** feet of water is not possible **(It's quite possible to the coastal zones of seas and oceans to the delta of a river during almost endless heavy rains for few centuries)** in the canopy Perhaps, they argue, the canopy could have held a maximum of only a few feet of water. This is insufficient water to contribute significantly to even forty **(it means a lot of)** days of rain **(periodic almost endless heavy rains),** let alone a mountain-covering global flood **(It's quite possible to the coastal zones of seas and oceans to the delta of a river during almost endless heavy rains for few centuries).** A second source suggested by [118, 6, 7] is condensing water from spreading center geysers **(it's wrong, only very warm oceans could produce almost endless heavy rains for few centuries).** This should **(not)** provide adequate water to explain up to 150 days of open "windows of heaven". Another substantial source of water suggested by this model is displaced ocean water (6, 7]. Rapid emplacement **(could be produced by rapid⇨EB⇨geo-transfer only)** of isostatically lighter mantle material at the spreading centers would raise the ocean bottom **(connected to the global oscillation all platforms during slowly⇨EB⇨geo-transfer only),** displacing ocean water onto the continents. Baumgardner [7] estimates a rise of sea level of more than one kilometer from this mechanism alone (rise of sea level of more than 800m is discovered in the Andes).

Cooling of new ocean lithosphere at the spreading centers would be expected to heat the ocean waters throughout the Flood **(during slowly⇨EB⇨geo-transfer along MORs linear outflows).** This heating seems to be confirmed by a gradual increase in oxygen 18/oxygen 16 ratios from the pre-Flood/Flood boundary through the Cretaceous (e.g. [108]). **(After the K/T event all water species were alive boiled into seas and oceans and the Earth has poisoned and died seas and oceans for million years. Such event produced boiling oceans)**

Sedimentary Production (by slowly⇨EB⇨geo-transfer)

Precipitates - sediments precipitated directly from supersaturated brines -- would have been produced in association with horizontal divergence of ocean floor rocks **(simultaneously global oscillation all platforms).** Rode [82] and Sozansky [98] have noted rock salt and anhydrite deposits in association with active sea-floor tectonics and volcanism **(during global osculation of slowly⇨EB⇨geo-transfer)** and have proposed catastrophist models for their formation. Besides rock salt and anhydrite, hot-rock/ocean-water interactions could also explain many bedded chert deposits and fine-grained lime-stones.

Contributions to Flood carbonates probably came from at least four sources: a) carbon dioxide produced by degassing spreading center magmas **(by global oscillation of all platforms);** b) dissolved pre-Flood bicarbonate precipitated as ocean temperatures rose during the Flood (given that carbonate dissolution rates are inversely related to temperature); c) eroded and redeposited pre-Flood carbonates (a dominant pre-Flood sediment); and d) pulverized and redeposited pre-Flood shell debris. Precipitation of carbonate may explain the origin of micrite [32], so ubiquitous in Flood sediments, but of an otherwise unknown origin [78]. Until pre-Flood ocean magnesium was depleted by carbonate precipitation, high-magnesium carbonates would be expected to be frequent products of early Flood activity **(before global oscillation of all platforms)** (see [16] for interesting data on this subject).

Note: Sedimentary Production during rapid⇨EB⇨geo-transfer is much large-scaled and connected to the velocity of⇨EB⇨geo-transfer K.M.).

Sedimentary Transport

As Morton [61] points out, most Flood sediments are found on the continents and continental margins and not on the ocean floor where one might expect sediments to have ended up **(The ocean platforms have almost fully renewing tendency within of a rapid⇨EB⇨geo-transfer and permanently renewing tendency (gradualism) within of a slowly⇨EB⇨geo-transfer. Subducting and melting creates cooling of asthenosphere and increasing granite forming layers (XA geosphere) under crust).** Our model provides a number of mechanisms for the transportation of ocean sediments onto the continents where they are primarily found today. First, subducting plates would transport sediments toward the subduction zones and thus mostly towards the continents in a conveyor-belt fashion **(within dormant periods).** Second, as the ocean plates were forced to quickly bend into the earth's interior **(into asthenosphere within a lot of rapid⇨EB⇨geo-transfers)** they would warp upward outboard of the trench. This would raise the deep sea sediments above their typical depth, which in turn reduces the amount of work required to move sediments from the oceans onto the continents. Third, rapid plate subduction **(within a lot of rapid ⇨EB⇨geo-transfers)** would warp the continental plate margin downward **(fully decay of isostatic balance of all platforms within of a rapid⇨EB⇨geo-transfer).** This again would reduce the amount of energy needed to move sediments onto the continent from the ocean floor **(only huge inner geo-forces produced overridden thin platforms on the thick one, within of a rapid⇨EB⇨geo-transfer)**. Fourth, as more and more of the cold pre-Flood ocean lithosphere was replaced with hotter rock from below **(produced within a lot of slowly⇨EB⇨geo-transfers, after linear outflow along MOR),** the ocean bottom is gradually elevated **(along MOR within a lot of slowly⇨EB⇨geo-transfers and rapidly overridden on the thick continental platform, within rapid⇨EB⇨geo-transfers).** This again reduces the work required to move sediments from the oceans to the continents. Fifth, as ocean lithosphere is subducted, ocean sediments would be scraped off, allowing sediments to be accreted to and/or redeposited on the continent. Sixth, wave (e.g. tsunami) refraction on the continental shelf would tend to transport sediments shoreward. Seventh, it is possible that some amount of tidal resonance may have been achieved [18-20]. The resulting east-to-west-dominated currents would tend to transport sediments accumulated on eastern continental margins into the continental interiors. Resulting sedimentary units have abundant evidence of catastrophic deposition [1], and tend to be thick, uniform, of unknown provenance, and extending over regional, inter-regional, and even continental areas [3]**.(Connected to the a lot of ⇨EB⇨ geo-transfers and its velocities, subductions, obductions and overfoldings).**

Volcanic Activity

The **(explosive)** volcanism associated with rapid **(global oscillation all platforms)** tectonics would have been of unprecedented magnitude and worldwide extent, but concentrated **(fissure outflows)** in particular zones and sites. At spreading centers magma would rise to fill in between plates separating **(and closing by global oscillation)** at meters per second, producing a violent **(explosive)** volcanic source tens of thousands of kilometers in length[7] **(along MORs mainly within a lot of slowly⇨EB⇨geo-transfers)** Based upon 2-dimensional experimental simulation [38, 81] and 3-dimensional numerical simulation, subduction-induced mantle flow would generate mantle plumes whose mushroom heads would rise to and erupt upon the earth's surface**. (Global oscillation of all platforms creates activation dormant volcanoes and formation new ones and fissure outflows).** These plumes would be expected to produce extensive flood basalts through fissure eruptions, such as perhaps the plateau basalts of South Africa, the Deccan Traps of India, the Siberian flood basalts [80], and the Karmutsen Basalt of Alaska/Canada [73]. Correlations between plume formation and flood basalts have already been claimed (e.g. [115]). At the same time, the heating and melting of subducted (Small part of the crust and) sediments should have produced explosive sialic volcanism continent-ward of the subduction zone **(and other dormant places)** (such as is seen in the Andes Mountains of South America, the Cascade Mountains of the U.S., and the Aleutian, Japanese, Indonesian, and New Zealand Islands of the Pacific).

Earthquake Activity

The rapid bending of elastic lithosphere and rapid inter-plate shear of plates at subduction zones as well as abrupt phase transitions as subducting plates are rapidly moved downward would be expected to produce frequent, high- intensity earthquakes at the subduction zones **(rapid bending, inter-plate shear of plates and downward at subduction zones is reason of the global rapid movement of all platforms within a rapid⇨EB⇨geo-transfer. Hitting between platforms and slabs produces a lot of strongest oscillations and magma outflows through fissures. Everything is large-scaled in comparison slowly ⇨EB⇨geo-transfers).** There is also earthquake activity associated with explosive volcanism, isostatic adjustment, continental collision, etc. This earthquake activity would facilitate thrust- and detachment-faulting by providing a) energy to aid in breaking up initially coherent rock blocks; b) an acceleration to aid in the thrusting of rock blocks; and c) vibration which reduces the frictional force resisting the motion and thrusting of rock blocks. **(Within rapid⇨EB⇨geo-transfers everything is much large-scaled in comparison to slowly⇨EB⇨geo-transfers).**

Termination

When virtually all the pre-Flood oceanic floor had been replaced **(subducted, obducted and destroyed (multi-stage separation)** with new, less-dense, less-subductable rock, rapid plate motion ceased **(within a rapid⇨EB⇨geo-transfer only).** The lack of new, hot, mantle material terminated spreading-center-associated geyser activity, so the global rain ceased **(Warm climatic conditions was produced by hot and boiled oceans for million years. It means periodic global heavy rains for million years).** This is very possibly the 150-day point in the Genesis chronology when it appears that the "fountains of the great deep were stopped and the windows of the heaven were closed" (Genesis 8:2) **(within a slowly ⇨EB⇨geo-transfer only).**

After the rapid horizontal motion stopped **(after a rapid⇨EB⇨geo-transfer),** cooling increased the density of the new ocean floor producing gradually deepening **(wave deformation)** oceans [7] -- eventually producing our current ocean basins **(it produced after K/T event mainly and slowly changed coordinates by drifting for 65.5 million years).** As the waters receded (the "Great Regression") from off of the land the most superficial -- and least lithified -- continental deposits were eroded off the continents. This would leave an unconformity on the continent not reflected in ocean stratigraphy. The absence of these most superficial continental deposits may explain the absence of human as well as most mammal and angiosperm fossils in Flood sediments **(a slowly⇨EB⇨geo-transfer is not connected to the global extinction)**[123]. Sheet erosion from receding Flood waters would be expected to have planed off a substantial percentage of the earth's surface. Such planar erosion features as the Canadian Shield and the Kaibab and Coconino plateaus might well be better explained by this than by any conventional erosional processes.

POST-FLOOD DYNAMICS

Flood/Post-Flood Boundary

The definition of the Flood/post-Flood boundary in the geologic column is a subject of considerable dispute among creationists. Estimates range from the Carboniferous [86] to the Pleistocene [79,117]. For our purposes here we would like to define the Flood/post-Flood boundary at the termination of global-scale erosion and sedimentation. Based upon a qualitative assessment of geologic maps worldwide, lithotypes change from worldwide or continental in character in the Mesozoic to local or regional in the Tertiary **(Modern isostatic balance was formed after K/T boundary mainly, but continental and islands' outlines were changing every 10,000÷12,000 years).** Therefore, we tentatively place the Flood/post-Flood boundary at approximately the Cretaceous/Tertiary (K/T) boundary. We believe further studies in stratigraphy, paleontology, paleomagnetism, and geochemistry should allow for a more precise definition of this boundary. **(Future investigators have to know about a lot of Flood/Post-Flood Boundaries).**

Post-Flood Geology

After the global effects of the Flood ended, the earth continued to experience several hundred years of residual catastrophism [7] **(after slowly⇨EB⇨geo-transfer and after rapid⇨EB⇨geo-transfer for million years).** A cooling lithosphere is likely to have produced a pattern of decreasing incidence [68] and intensity of volcanism (such as appears to be evidenced in Cenozoic sialic volcanism in the Western United States [77])**(During Cenozoic happened approximately 6000 slowly⇨EB⇨geo-transfer).** The large changes in crustal thicknesses produced during the Flood left the earth in isostatic disequilibrium. Isostatic readjustments with their associated intense mountain uplift **(and o the new global wave deformation of all platforms and readjustment of continental outlines 6000 times).** Earthquake and volcanic activity would have occurred for hundreds of years after the global affects of the Flood ended (e.g. [83]) **(after slowly⇨EB⇨geo-transfers).** In fact, considering the current nature of the mantle, there has not been sufficient time since the end of the Flood for complete isostatic equilibrium to be attained **(after a lot of penetration from outer nucleus into astenosphere every 10,000÷12,000 years).** As a result, current geologic activity can be seen as continued isostatic readjustments to Flood events **(after biblical slowly⇨EB⇨ geo-transfer).** Modern earthquake and volcanic activity is in some sense relict Flood dynamics **(Modern tectonic activity is connected to the cooling into asthenosphere and volcanic activities, tsunamis and crust-quakes are small samples only before future slowly⇨EB⇨geo-transfer).**

Because of the frequency and intensity of residual catastrophism (periodic readjustment by increscent strength of cosmogeological forces) after the Flood, post-Flood sedimentary processes were predominantly rapid. The local nature of such catastrophism, on the other hand, restricted sedimentation to local areas, explaining the basinal nature of most Cenozoic sedimentation **(Cenozoic sedimentation connected to the periodic a lot of slowly⇨EB⇨geo-transfers every 10,000÷12,000 years. Each event creates different destruction and sedimentation within the different basin).**

Post-Flood Climate

By the time Flood waters had settled into the post-Flood **(after biblical flood caused by last slowly ⇨EB⇨geo-transfers)** basins, they had accumulated **(after outflow along enormous fissures within oceans)** enough heat to leave the oceans as much as 20 or more degrees centigrade warmer than today's oceans (Figure 1). These warmer oceans might be expected to produce a warmer climate on earth in the immediate post-Flood times than is experienced on earth now [68]. More specifically, a rather uniform warm climate would be expected along continental margins [66-68], permitting wider latitudinal range for temperature-limited organisms [68] -- e.g. mammoths (e.g. [87]), frozen forests (e.g. [30]), and trees [121]. This avenue in turn may have facilitated post-Flood dispersion of animals [68, 125]. Also expected along continental margins would be a rather high climatic gradient running from the ocean toward the continental interior [66,68]. This might explain why some Cenozoic communities near the coasts include organisms from a wider range of climatic zones than we would expect to see today -- for example, communities in the Pleistocene [35,68] and the Gingko Petrified Forest in Oregon [23]. **(6000 periodic global environmental changes had great influence on biota and connected to the periodical local or Basinal extinctions).**

Oard [66-68] suggested that within the first millennium following the Flood, the oceans (and earth) would have cooled as large amounts of water were evaporated off of the oceans and dropped over the cooler continental interiors **(and it's the truth).** Although Oard's model needs substantial modification (e.g. to include all the Cenozoic), quantification, and testing, we feel that it is likely to prove to have considerable explanatory and predictive power. The predicted cooling [66,68] seems to be confirmed by oxygen isotope ratios in Cenozoic foraminifera of polar bottom [90,46,108] (Figure 1), polar surface, and tropical bottom waters, and may contribute to increased vertebrate body size (Cope's Law: [99]) throughout the Cenozoic. **(Vertebrate mammals were exploded within the ecological niches lost by dinosaurs. They were small and shrew-like throughout the Mesozoic (during ~183my) but rapidly developed following the K/T extinction boundary).**

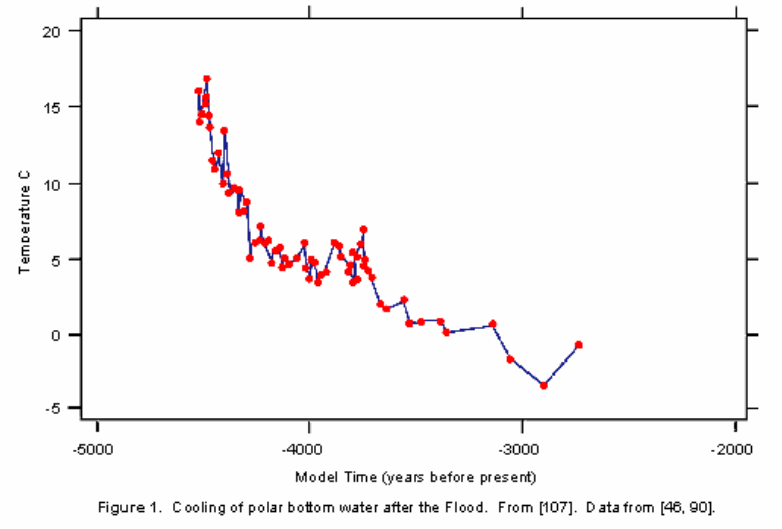


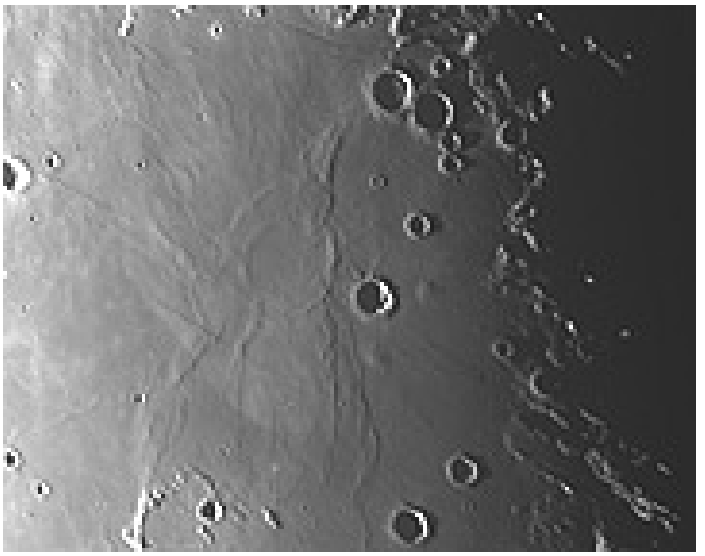
Figure 1. Cooling of polar bottom water after the Flood. From [107]. Data from [46, 90].

[68] Suggests that the higher rates of precipitation may provide a unique explanation for a well-watered Sahara of the past (post-flood conclusive evidence of heavy rains for a long time is ancient rapid erosion on the Spinks) [53,47,72], rapid erosion of caves, and the creation and/or maintenance of large interior continental lakes of the Cenozoic. Examples of the latter include Quaternary pluvial lakes [93,68], Lakes Hopi and Canyon-lands, which may have catastrophically drained to produce Grand Canyon [13,4,70], and the extensive lake which produced the (early) Eocene Green River deposits (after Paleocene/Eocene boundary formed by small asteroid impact end rapid⇨EB⇨geo-transfer). We would expect floral and faunal communities to have tracked the (periodic) cooling of the oceans and the corresponding cooling and drying of the continents. Such a tracking seems to explain the trend in Cenozoic plant communities to run from woodland to grassland and the corresponding trend in Cenozoic herbivores to change from browsers to grazers.

According to Oard's [67,68] model, by about five centuries after the Flood, the cooling oceans had led to the advance of continental glaciers and the formation of polar ice caps (see also [107]). Oard [68] suggests that rapid melting of the continental ice sheets (in less than a century) explains the under-fitness of many modern rivers [27] and contributed to the mega-faunal extinctions of the Pleistocene [12,51,48] (In the late Pleistocene mega-faunal extinctions are closely connected to the development of ancient humans). It may also have contributed to the production of otherwise enigmatic Pleistocene peneplains. (During Pleistocene happened a lot of slowly⇨EB⇨geo-transfers and was main reason of partially extinctions. Periodic global flood and post-flood environmental changes closely connected to the partially extinctions within Pleistocene).

Outflow through fissures and crossed fissures during slowly⇨EB⇨geo-transfer

Small⇨EB⇨geo-transfer and global oscillation creates larger fissures through thinner borders of platforms. Thinner borders on the Earth are along mid-ocean ridges. Global oscillation during slowly ⇨EB⇨geo-transfer creates outflows through fissures, along main thinnest boundaries. It means that happened through mid-ocean ridges. The main question is that when it will happen again???



Multi-stage fissure-outflow through a lot of crossed fissures during slowly⇨EB⇨geo-transfers.

On the moon thinnest crust was formed within asteroid impact basins. During slowly⇨EB⇨geo-transfers penetrated magma produced fissures through thinnest crust. Magma outflow was through fissures of thinner crust, within larger impact basins mainly. The images show us multi-stage separation of thinnest crust-tiles and multi-stage outflow through a lot of crossed fissures. Of course smaller space-body had not so strong inner geo-forces and accumulated pressure forces. The images are conclusive evidence about cosmogeological increscent forces and a lot of periodic slowly⇨EB⇨geo-transfers on the Moon. We can find a lot of more new fissures without outflow on the Moon as well as on the other moons' surface. They are formed to the finish of geo-evolution by most warm inner geo-spheres during cooling.)

CONCLUSION

We believe that rapid tectonics provides a successful and indicative framework for young-age creation modeling of earth history. We feel that this model uniquely incorporates a wide variety of creationist and non-creationist thinking. It explains evidence from a wide spectrum of earth science fields -- including evidence not heretofore well explained by any other earth history models.

Predictions

This model, like many Flood models, predicts the following: a) a consistent, worldwide, initiation event in the geologic column; b) most body fossils assigned to Flood deposits were deposited allochthonously (including coal, forests, and reefs); c) most ichnofossils assigned to Flood deposits are grazing, moving, or escape evidences, and not long-term living traces; and d) sediments assigned to the Flood were deposited subaqueously without long-term unconformities between them. Since Flood models are usually tied to young-earth creationism, they also claim that it is possible on a short time scale to explain a) the cooling of plutons and ocean plate material; b) regional metamorphism (see, e.g. [95,96]); c) canyon and cave erosion; d) sediment production and accumulation (including speleothems and precipitites); e) organismal accumulation and fossilization (including coal, fossil forests, and reefs); (f) fine sedimentary lamination (including varves); and g) radiometric data. (Most body fossils assigned to Flood deposits were deposited within a lot of periodic flood of different strength)

This particular model also predicts a) a lower earth viscosity in pre-Flood times; b) degassing-associated subaqueous (main platforms' boundaries) precipitate production during the Flood; c) (possibly) east-to-west dominated current deposition during the Flood; d) (possibly) degassing-produced atmosphere argon and helium levels; e) a decrease in magnitude and frequency of geologic activity after

the Flood; f) flood basalts that correlate with mantle plume events; g) a sedimentary unconformity at the **(a lot of)** Flood/post-Flood boundary on the continents not reflected in ocean sediments; h) current geologic activity is the result of relict, isostatic dynamics, not primary earth dynamics; and i) a single ice age composed of a single ice advance. **(Current geologic activity is the result of cooling to the crust/asthenosphere boundary within granite-forming layer and produced defect of volume by geo-evolution)**

Future Research

The Flood model presented here suggests a substantial number of research projects for young-earth creationists. Besides the further elaboration and quantification of the model, the predictions listed above need to be examined. Most significantly, we still need to solve the heat problem [119,6] and the radiometric dating problem [6]. As creationists we could also use the services of a geochemist to develop a model for the origin of carbonates and precipitites during the Flood. It is also important that we re-evaluate the evidence for multiple ice ages (as begun by [39,67]) and multiple ice advances (as begun by [68,69,55]).

In addition to testing claims of the model, there are a number of other studies which could help us expand and refine the model. Successful studies on the nature of the pre-Flood world, for example, are likely to aid us in placing better parameters on our model. Events and factors postulated in the initiation of the Flood also need to be re-examined to determine which are capable of explaining the available data and the beginning of plate subduction. It is also important that we evaluate the role of extraterrestrial bombardment in the history of the earth and Flood, since it was most certainly higher during and immediately after the Flood than it is now [118,34]**(extraterrestrial bombardment in the history of the earth are closely connected to the rapid⇨EB⇨geo-transfers only).** The suggestion that the earth's axial tilt has changed (e.g. [64,89,71]) needs to be examined to determine validity and/or impact on earth history. It is also important that we determine how many Wilson cycles are needed to explain the data of continental motion [50,124]**(Rapid – within rapid⇨EB⇨geo-transfers, global oscillation - within slowly ⇨EB⇨ geo-transfers and drift – within dormant periods, so called Gradualism),** and thus whether more than one phase of runaway subduction is necessary. More than one cycle may be addressed by partial separation and closure during one rapid tectonics event **(within rapid⇨EB⇨geo-transfers),** and/or renewed tectonic motion after cooling of ocean floor **(during dormant period is slowly renewing of ocean floor produced by cooling to the crust/asthenosphere boundary. After cooling to the core/mantle boundary and an asteroid impact)** allowed for further rapid tectonics **(and global extinction event).** Finally, it will also be important to determine more precisely the geologic position of the initiation and termination of the Flood **(last slowly⇨EB⇨geo-transfers)** around the world in order to identify the geologic data relevant to particular questions of interest.

The cosmogeological explanations can help you to understand, how happened that events.
