

# Noah's Flood – The Bible, the Science & the Controversy

By Jane Albright, P.E.

## Part 1 – The Bible and the Vapor Canopy Theory

### Introduction

*In the six hundredth year of Noah's life, in the second month, the seventeenth day of the month, on that day all the fountains of the great deep were broken up, and the windows of heaven were opened.*

(Genesis 7:11 NKJV)

With this astonishing economy of words, Moses records the beginning of our earth's worst geologic disaster to date, carefully noting its specific year, month, and day in history. While many deny the literal interpretation of the Genesis flood narrative, there is nothing in this passage to indicate that it is anything except a factual, historical account of a worldwide flood to which Jesus Himself and the New Testament writers referred.<sup>1</sup>

But if a global flood actually occurred as described in the Bible, where did all that water come from and where did it go? What *were* the fountains of the great deep? What could have generated 40 days and nights of torrential rainfall all over the world? How could there possibly have been enough water to cover all the mountains as the Bible states?

These are some of the challenging questions that Christians must address if we say we believe the biblical account, but too few are equipped to do so. Instead, some Christians accept the unbiblical "local flood" idea. However, the Bible and logic quickly leads us to dismiss this option. For example, wouldn't people simply flee local flood waters? And what about people and animals that lived outside the flood region? They would not have perished, whereas Scripture clearly states that *all* humans and air-breathing animals perished except those on the ark.

Other Christians simply ignore the hard questions altogether. One reason is that several centuries of scientific work based on the assumption that the global flood is a religious myth has produced false ideas that are now firmly embedded in our educational institutions, the media and, sadly, many churches. As a result, our college students are often ill-prepared to defend against their professors' relentless attacks on the Bible's credibility. Tragically, many then abandon their confidence in the Bible and even their faith in Jesus, choosing to instead adopt the religion of atheistic secular humanism and *its* god, evolution.

But what does Noah's flood have to do with evolution? Everything! The global flood is the *key* event in the creation-evolution debate. If the layers of fossils, averaging about a mile deep on the continents, are a consequence of a flood, then they are *not* the product of millions of years of evolution! Secular scientists agree with creation scientists that without millions of years, evolution is without merit.

However, there is *abundant* evidence – biblical, scientific, and anthropological – of a global flood in ancient times. In fact, anthropologists have documented more than 230 flood legends from all over the world, most remarkably similar to the Genesis account and thus supporting its historical accuracy.

---

<sup>1</sup> Matthew 24:37-38, Luke 17:26-27, Hebrews 11:7, 1 Peter 3:20, 2 Peter 2:5.

More than 50 years ago, the evidence prompted a theology professor, Dr. John C. Whitcomb, and a Virginia Tech mechanical engineering hydraulics professor, Henry M. Morris, to propose a scientific flood explanation in their 1961 landmark publication, *The Genesis Flood*. Many believe that this book was responsible for launching the modern-day creation science movement. In 1970, Morris founded the Institute for Creation Research (ICR), which has become one of the world's leading creation research groups.

Today, literally hundreds of individuals, groups, and organizations around the world are dedicated to researching and communicating scientific evidence for creation and the global flood. Founded in 1963, the Creation Research Society (CRS) is the longest-standing creationist organization in the US. In addition to ICR and CRS, the largest and most well-known creationist organizations are: Creation Ministries International of Australia (CMI, formerly Answers in Genesis (AiG) and then AiG-Australia) and Answers in Genesis (AiG, formerly AiG-US). Smaller but also well-known is the Center for Scientific Creation (CSC).

As stated, there is abundant evidence for a worldwide flood in the past. How that evidence is interpreted and ideas about the water's "where from" and "where to" are topics of much debate – even acrimony, unfortunately – among creationist researchers today.

In this four-part series of articles, I will briefly describe three of today's well-known flood theories – the Vapor Canopy Theory (VCT), the Hydroplate Theory (HPT), and the Catastrophic Plate Tectonics (CPT) Theory – and compare them with scientific evidence and our ultimate authority, the Bible. While there are other flood explanations, these three are the most well-known at this time. I will conclude this series by examining issues that I believe are hindering our progress in the critical area of flood research. These issues include a longstanding controversy within the creation science community that was exposed in a recent video production from a well-respected creationist apologetics organization.<sup>2</sup>

The information in these articles was derived in part from interviews and correspondence with 17 individuals, including representatives from the five major creation ministries mentioned above and other creationist researchers and leaders. (Another 16 declined to be interviewed.)

## The Bible

The flood narrative is found in Genesis Chapters 6 through 8, which is the longest passage in the Bible devoted to a single event. In Genesis 6, we read of God's great sorrow over the wickedness of man and His resolve to "*blot out man whom I have created from the face of the land, from man to animals to creeping things and to birds of the sky; for I am sorry that I have made them*" (Genesis 6:7). We also see God's gracious salvation of righteous Noah, Noah's family, and the animal race by means of an ark, a type of Christ Who is *our* salvation. Genesis 7 and 8 describe the flood's duration and extent.

These chapters and other Scriptures provide intriguing clues about the source of the flood waters, the geologic impact of the flood, and the scientific processes at work during this cataclysm. They include:

- On Day 3 of Creation Week, the earth (its crust) rose out of the water – God "raqa'd" the earth above the waters. (Genesis 1:9-10; 2 Peter 3:3-6)<sup>3</sup>
- A large volume of subterranean water existed in the ancient past (Psalm 24:2, 33:7, 104:3, 136:6; 2 Peter 3:5)

---

<sup>2</sup> *The Global Flood and the Hydroplate Theory*. Real Science Radio ([rsr.org](http://rsr.org)), 2014. DVD/Blue-Ray.

<sup>3</sup> The King James Version conveys this idea of land rising out of water: "...the earth standing out of the water..."

- These subterranean waters (all the fountains of the great deep) “burst open” on a single day, and the floodgates of the sky were opened.<sup>4</sup> (Genesis 7:11, 12; Job 38:8-11; Psalm 18:15; Proverbs 3:20)
- Heavy rain fell upon the earth for forty days and forty nights. (Genesis 7:12)<sup>5</sup>
- For 150 days, the flood waters rose to lift the ark and cover “*all the high mountains everywhere under the heavens*” by 15 cubits (about 22 feet)<sup>6</sup> (Genesis 7:17-20, 24)
- On Day 150, God “*caused a wind to pass over the earth*” and “*the fountains of the deep and the floodgates of the sky were closed, and the rain from the sky was restrained; and the water receded steadily from the earth.*” (Genesis 8:1-2)
- Another 220 days (based upon a 30-day month) passed before the earth was sufficiently dry and safe. Only then did God command Noah, his family, and the animals to leave the Ark.<sup>7</sup> (Genesis 8:14-17)

Creationists who, like myself, affirm the literal, historical interpretation of the biblical creation and flood accounts must insist that any proposed scientific description of Noah’s flood be consistent with these and other flood passages in the Bible.

## The Vapor Canopy Theory

Ask any evangelical pastor or church-goer older than 40 or so about scientific theories for Noah’s flood, and there is a good chance he or she will mention the Vapor Canopy Theory (VCT). With the 1961 publication of *The Genesis Flood*, VCT quickly became the accepted flood explanation among those who believe the Bible.

The VCT was actually first proposed in 1874 by Quaker school teacher Isaac Newton Vail (1840–1912). The original theory proposed that ring-like canopies of water vapor formed in the atmosphere above the earth millions of years ago as the earth evolved from a molten state. Vail hypothesized that these canopies “collapsed” catastrophically upon the earth, one-by-one, producing torrential rainfall and creating the fossil record. Supposedly, the Genesis flood was the result of the last collapse. Vail supported his case primarily with ancient flood accounts, including Babylonian mythology and the Bible, which he also considered mythical.

The idea of an atmospheric vapor canopy as a source for the biblical floodwaters weaves through the later writings of Seventh-day Adventist George McCready Price (1870–1963), Jehovah Witness forerunner Charles Taze Russell (1852–1916), Jehovah Witness Joseph Franklin Rutherford (1869–1942), and physicist and Seventh-day Adventist Robert W. Woods (1868–1955).

*The Genesis Flood* and later publications by Morris proposed that the VCT was a scientific explanation not only for the flood waters but also the apparent warmer climate, lush environment, and longer lifespans of the pre-flood earth. Despite increasing awareness of VCT’s many scientific problems, it remained the prominent explanation for Noah’s flood for many decades, in part out of deference to the legacy of Henry Morris. Many Christians *still* think that the VCT is an accepted explanation for the flood.

Today, however, most creation scientists will tell you that the VCT fell out of favor in the creation science community years ago for both biblical and scientific reasons. Biblically, while VCT speaks to the rainfall (*windows of heaven*), it is silent on the preceding causal “*bursting forth*” of the “*fountains of the great deep*” (Genesis 7:11 and 8:2). And while VCT adherents maintain that Hebrew word *raqia*, which is translated the

---

<sup>4</sup> The Hebrew word for “burst open” conveys the idea of a violent and complete splitting, sometimes of the earth’s crust. It is also used to describe breaking an egg shell by internal pressure as a baby bird exits.

<sup>5</sup> The Hebrew word here for “heavy” rain is transliterated as “geshem,” which means *violent* rain. In Ezekiel 13:11–13, geshem rain, wind, and hail destroyed mortared walls.

<sup>6</sup> A cubit is usually considered to be 18 inches; some estimate 21 inches. Thus the water level was at least 22 feet above the top of the mountains.

<sup>7</sup> For a helpful timeline of the flood, see Answers-in-Genesis’ article: “Biblical Overview of the Flood Timeline,” online at: [answersingenesis.org/bible-timeline/biblical-overview-of-the-flood-timeline/](http://answersingenesis.org/bible-timeline/biblical-overview-of-the-flood-timeline/).

“expanse” or “firmament” in Genesis 1:6-8, is a description of the canopy, others disagree. Even VCT defender Joseph Dillow states, “*We readily admit that Genesis does not teach the existence of a pre-Flood vapor canopy.*”<sup>8</sup> And in 2013, Dr. John Morris, son of Henry Morris and then ICR’s president, said, “*I still kind of hold to it... the geologic evidence doesn’t support it... the Scripture doesn’t say it... I guess I’m not a real advocate... although I’d like for it to be true.*”<sup>9</sup>

Scientific objections to VCT are numerous, but we will touch on only three. First, *all* canopy theories – and some other flood theories as well – have what is referred to as a “heat problem.” You have probably observed that it takes a long time over high heat to boil a pot of water. This is because liquid water must absorb a lot of energy to turn into steam (water vapor). When you condense steam to re-form liquid water, this same amount of energy is released to the environment and raises its temperature. Simple calculations show that the condensation of a vapor canopy of sufficient size to produce the rainfall described in Genesis would quickly cook the earth and everything on it!

Second, there is the “greenhouse problem.” Today, we hear much about greenhouse gases, such as carbon dioxide, and their effect on Earth’s climate. All atmospheric gases, to varying degrees, act like glass in a greenhouse (or the closed windows in your automobile). Sunlight can pass through the glass more readily than heat can radiate out, so the interior temperature rises. Many are not aware that atmospheric water vapor is Earth’s most abundant and significant greenhouse gas.<sup>10</sup> A vapor canopy as proposed by VCT would render the earth’s surface far too hot to be habitable for humans and animals.

Finally, any substantial canopy of water vapor above the earth would keep its inhabitants from seeing celestial bodies, which God gave to separate day and night and for “*signs and for seasons and for days and years*” (Genesis 1:14-18). A vapor canopy would reflect, absorb, or scatter most light trying to pass through it.

Not surprisingly, Morris’ ICR was the strongest advocate of the Vapor Canopy Theory for many decades. However, in 1998, ICR admitted in an *Acts & Facts* newsletter article that a canopy producing only three feet of rain would result in sufficient heat to destroy all life on the earth.<sup>11</sup> In 2003, Dr. Larry Vardiman, formerly Senior Research Scientist at the ICR (now retired) concluded from one study that surface temperatures under a vapor canopy would be livable only if the canopy held very little water or the sun’s output was untenably low. While studies show that the solar constant does vary slightly over various cycles (by less than half of one percent), there is no reason to suppose that such a drastically “dimmed” sun governed the earth’s skies in the past.

Despite its association with Henry Morris, widely and rightly respected as the founder of the modern-day creation science movement, it is time to give the VCT a decent but very public burial. In the words of one creation scientist with whom I spoke, “*Yes, we probably should do more to advertise the death of the Vapor Canopy Theory. If Henry Morris were alive today, I believe he would look at the facts and say it’s time to abandon this and move on!*” (A recent, short Q&A article in the April 2016 *Acts & Facts* newsletter may perhaps be a response to this sentiment.<sup>12</sup> Unfortunately, hundreds of thousands of people who think the VCT explains the flood will not read that article.)

---

<sup>8</sup> Dillow, Joseph C. *The Waters Above: Earth’s Pre-Flood Vapor Canopy*. Chicago, IL: Moody Press, 1981, 222.

<sup>9</sup> Dr. John Morris, then President of ICR, speaking at the Rocky Mountain Creation Fellowship, September 2013.

<sup>10</sup> Hansen, Kathryn. “Water Vapor Confirmed as Major Player in Climate Change.” NASA News and Features. [http://www.nasa.gov/topics/earth/features/vapor\\_warming.html](http://www.nasa.gov/topics/earth/features/vapor_warming.html).

<sup>11</sup> “Numerical Climate Modeling at ICR.” *Acts & Facts*, April 1998, 2.

<sup>12</sup> Brian Thomas, M.S. 2016. “What Were the ‘Waters Above the Firmament?’” *Acts & Facts*. 45 (5). Online at: <http://www.icr.org/article/9296>

## Summary

Here, we have looked at a few key flood passages from the Bible and briefly discussed the VCT, explaining why it is no longer accepted as a viable flood explanation. Part 2 will examine the HPT and Part 3, the CPT theory. Part 4 will discuss the controversy surrounding these theories and discuss ways that we, as a community of Bible-believing, young-earth creationists, can work to restore mutual trust and cooperation – for our Lord’s purposes and to His glory alone.

# Noah's Flood – The Bible, the Science, & the Controversy

By Jane Albright, P.E.

## Part 2 – The Hydroplate Theory

### Recap

In this series, we are looking at three of today's well-known scientific theories for the global flood – the Vapor Canopy Theory (VCT), the Hydroplate Theory (HPT), and the Catastrophic Plate Tectonics Theory (CPT) – and comparing them with scientific evidence and the Bible. Part 1 summarized some of the key flood passages in the Bible and briefly discussed the VCT, including reasons why almost all creation scientists no longer view it as a viable flood explanation. Here in Part 2, we will examine one prominent explanation for the global flood, the Hydroplate Theory (HPT).

A heartfelt thanks to HPT author Dr. Brown for his patience in answering my many questions as I prepared this article and for reviewing the pre-publication draft of this article.

### Dr. Walt Brown

The HPT for the global flood is the work of Dr. Walt Brown, currently Director of the Center for Scientific Creation. Dr. Brown is a retired Air Force Colonel and former Director of Benét Laboratories, associate professor at the U.S. Air Force Academy, and Chief of Science and Technology Studies at the Air War College. He began his 21-year military career in the Army and is a West Point graduate, former Army Ranger and paratrooper, and Vietnam veteran. During two and a half of his Army years, he earned his Ph.D. in mechanical engineering from the Massachusetts Institute of Technology (MIT), which he attended as a National Science Foundation Fellow.<sup>1</sup>

Though a Christian from youth, Brown believed in evolution until about 1970 when a series of events convinced him of the scientific validity of biblical creation and the global flood. Since his 1980 retirement from the Air Force, Brown has worked full-time in research, writing, and teaching on origins. *“I tried to understand such questions as: Where did the water that covered all the pre-Flood mountains come from? Where did the water go after the Flood? What would a global Flood do to the earth? Can we see scientific evidences that point to a global flood? What does the Bible say about these questions? The pieces began to fall into place when I realized: (1) there had been a global flood and the Bible briefly and very accurately describes it; (2) the water and “all the fountains of the great deep” came from under the crust; and (3) the Mid-Atlantic Ridge was the geometric key.”*

The information and graphics in this article are from Brown's book, *In the Beginning: Compelling Evidence for Creation and the Flood*, which summarizes the scientific case for creation and the flood in Part I and presents the Hydroplate Theory explanation for the Flood in Part II. Currently in its 8<sup>th</sup> print edition, Brown's website, contains the most recent draft of the next (9<sup>th</sup>) edition at [creationscience.com/onlinebook](http://creationscience.com/onlinebook).

---

<sup>1</sup> Brown's story is included in the book, *Christian Men of Science: Eleven Men Who Changed the World*, by George Mulfinger and Julia Mulfinger-Orozco.



Due to space limitations, this article necessarily omits most details about the mechanisms and evidence that explain and support the HPT. For the full explanation, refer to Part II of *In the Beginning*. Written to be understood by the lay reader, it also provides hundreds of technical notes and references for engineers and scientists. Additionally, a series of animated videos created by engineer Bryan Nickel will be of great help to those seeking a deeper understanding of the HPT: [https://www.youtube.com/c/BryanNickel\\_Hydroplate](https://www.youtube.com/c/BryanNickel_Hydroplate).

## Where Did the Water Come From?

Scripture and the physical evidence convinced Brown that an underground storehouse of water formed at Creation had been the source of the “fountains of the great deep” and the flood’s torrential rain.<sup>2</sup> The main assumption of the HPT is that the flood waters came from a globe-encircling subterranean chamber—at least one mile thick—about 60 miles below Earth’s pre-flood surface.

The water in the subterranean chamber was fixed and tightly sealed by the tremendous compression within the overlying granite rock. At the instant of its creation, the granite shell was spread out above the waters just as the Bible describes in Psalm 24:2, Psalm 136:6, and elsewhere. Immediately thereafter, the heavier portions of the crust began to settle onto the floor of the subterranean water chamber in thousands of places. The places where the sagging chamber ceiling pressed against the chamber floor are the “pillars,” to which Scripture refers in several places. This settling, in turn, lifted the lighter portions of the crust out of the surface waters on Days 2 and 3 as Genesis 1:9-10 and 2 Peter 3:5b (KJV) say, thus forming the pre-flood mountains, which were smaller than those of today.

Brown states, *“This is a common method used in science: State initial assumptions and then examine the consequences based on the laws of physics. With this one starting assumption [an underground storehouse of water] and the application of the laws of physics, one can reach hundreds of conclusions that are consistent with observations today—observations that are otherwise scientifically puzzling.”*

The HPT encompasses the mechanism by which the earth’s crust ruptured to initiate the flood event and the follow-on chain of events that resulted in a drastically changed Earth and solar system. Unlike the VCT and CPT, the HPT also explains the “fountains of the great deep.” As Henry Morris explained in *The Genesis Record*, understanding—and explaining—the “fountains of the great deep” is critical for any flood explanation:

*“The Bible specifically attributes the Flood to the bursting of the fountains of the great deep and the pouring down of torrential rains from heaven. These two phenomena are sufficient in themselves ....to explain the Flood and all its effects without the necessity of resorting either to supernatural creative miracles or to providentially ordered extraterrestrial interferences of speculative nature. The breaking up (literally ‘cleaving open’) of the fountains of the great deep is mentioned first and so evidently was the initial action which triggered the rest. These conduits somehow all developed uncontrollable fractures on the same day. For such a remarkable worldwide phenomenon, there must have been a worldwide cause. The most likely cause would seem to have been a rapid buildup and surge of intense pressure throughout the underground system, and this in turn would presumably require a rapid rise in temperature throughout the system.”<sup>3</sup>*

---

<sup>2</sup> “In the Beginning: Compelling Evidence for Creation and the Flood - Is the Hydroplate Theory Consistent with the Bible?” <http://www.creationscience.com/onlinebook/FAQ218.html#wp9498683>.

<sup>3</sup> Morris, Henry M. *The Genesis Record*, San Diego, California: Creation-Life Publishers, 1976, 196.

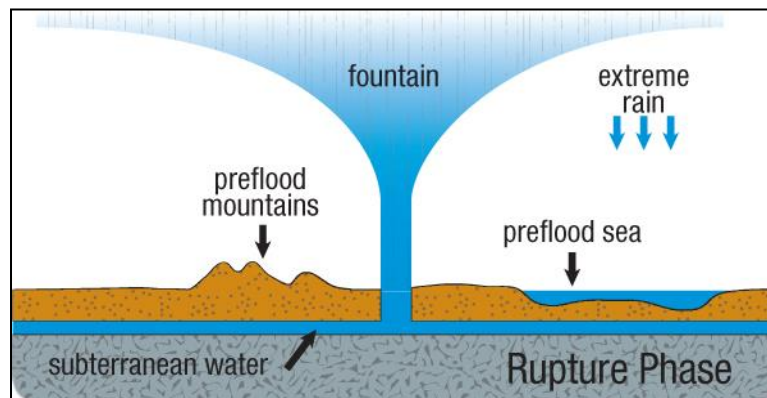
## An HPT Overview

The HPT scenario comprises four phases: the Rupture, Flood, Drift, and Recovery Phases.

**Rupture Phase.** In the pre-flood earth, tidal cycles occurred twice daily in the subterranean water chamber for the same reason tides occur twice daily in our oceans today, with one significant difference. At high tide, the subterranean water lifted the 60-mile thick granite crust about one foot, and at low tide, the pillars were compressed by a like amount. The tremendous heat generated in the pillars by this “tidal pumping” of the massive crust raised the temperature of the subterranean water (and the crust above it). After some time, the water became “supercritical,” an explosively high-energy state reached at very high temperatures and pressures.

According to any one of several possible scenarios, a microscopic crack formed in the stretched granite crust. Stress concentrations at each end of the crack caused it to propagate in both directions at approximately three miles per second, following a great-circle path that wrapped about the earth like the seam of a baseball. After about two hours—and on the opposite side of the earth—one end of the crack ran into the path left by the other end of the crack. Thus the earth’s crust was broken into plates, called “hydroplates” because originally they lay on top of trapped water in the subterranean chamber. (“Hydro” means water.)

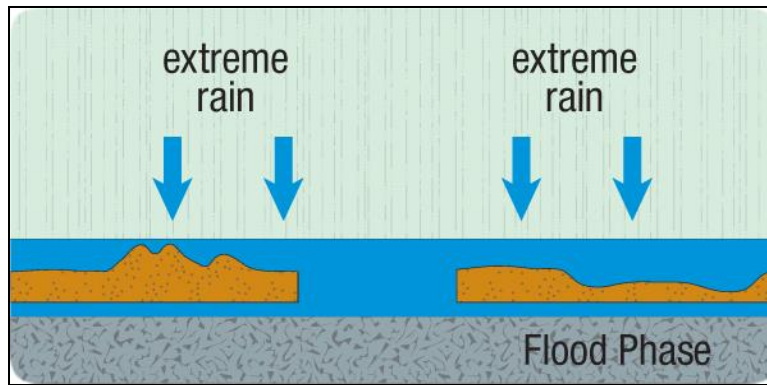
As the 60-mile-deep crack opened up and lengthened during the violent two-hour rupture phase, the explosive, supercritical water jetted supersonically out of the rupture as “the fountains of the great deep” of Genesis 7:11 and 8:2, flooding the earth. (Within one year after the flood began, most of these floodwaters had drained off the now drastically changed topography of the earth and into new, very deep ocean basins, as will be explained below. The floodwaters are there today, making up about half the volume of our oceans.) The most powerful of the jetting waters and rock debris escaped Earth’s gravity, and some of that debris accreted (gravitationally merged by a well-understood mechanism) over time to form our solar system’s comets and asteroids. Some ejected rocks became meteoroids.



The Rupture Phase. (Figure 56 of *In the Beginning*)

**Flood Phase.** Initially, each side of the rupture was as high as the thickness of the pre-flood crust – about 60 miles. However, exposed granite cannot sustain a cliff more than five miles high because the weight of the overlying rock at the base of the cliff exceeds granite’s compressive strength. For this reason, the newly exposed cliffs on either side of the rupture steadily crumbled. Granite blocks and other rubble fell into the escaping fountains and were tumbled, eroded, and rounded. Some of the voluminous sediments thus produced fell through the flood waters, rapidly trapping and burying plants and animals and forming the fossil record. As previously noted however, some debris was jettisoned into space. (Rounded rocks, some 10 feet in diameter, have been found in abundance on comets and asteroids, a discovery that is inexplicable to astronomers.) The crumbling and erosion widened the rupture to about 1400 miles.





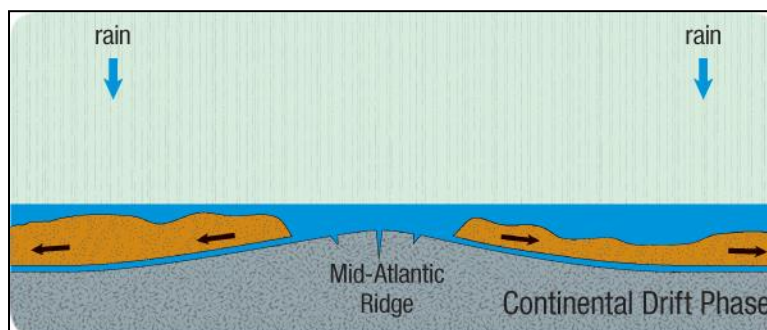
The Flood Phase. (Figure 58 of *In the Beginning*)

As the escaping waters under the plates accelerated horizontally toward the crack, they eroded more and more of the ceiling of the subterranean chamber, reducing the crustal thickness and resulting in the average 30-mile thickness of today's continents. (See the online 9<sup>th</sup> edition of *In the Beginning* for a fuller discussion, including the mechanisms by which some of the more soluble minerals at the base of the initially 60-mile thick crust were dissolved over time by the supercritical water underneath, even before the flood.)

The escaping waters also beveled the edges of the hydroplates into the unique shapes of ocean boundaries worldwide. Today's major mountains had not yet formed, so the floodwaters eventually covered the smaller pre-flood mountains, just as the Bible states. The Flood Phase lasted five months (Genesis 7:24).

**Continental-Drift Phase.** Exposed at the bottom of the initially-60-mile-deep rupture was a narrow portion of the former floor of the subterranean chamber. With the rapid removal of 60 miles of rock and the steady widening of this globe-encircling gash in the earth, the underlying strip of the chamber floor experienced an increasingly unbalanced force that tended to push it up. Eventually, that portion of the floor gave way and suddenly buckled upward, forming the 46,000-mile long Mid-Oceanic Ridge (MOR). Lying mostly beneath the oceans, the MOR is Earth's longest mountain range. It was unknown until technological advancements led to its discovery the early 1960s.

As the MOR rose, the granite hydroplates accelerated downhill, away from the ridge. They stopped moving when the lubricating water beneath was depleted and/or the plates collided with another plate or the rising ridge in the Pacific. As the massive hydroplates slowed and collided, they thickened, lifting the plates above the floodwaters. The colliding plates also crushed and buckled, pushing up today's major mountain ranges, many with fossilized sea life on top. We see evidence today of the crushing and buckling in the tilted and wavy patterns of sedimentary layers in the world's mountain ranges.



The Continental-Drift Phase. (Figure 61 of *In the Beginning*)

The shifting mass, especially the pushing up of the massive Himalayan Mountains, caused the earth to roll the Himalayas 34° to 57° toward the Equator. Before the flood, Alaska and Siberia were at lower latitudes (closer

to the Equator). This explains why we today find the frozen remains of temperate forests and animals, such as mammoths, inside the Arctic Circle.

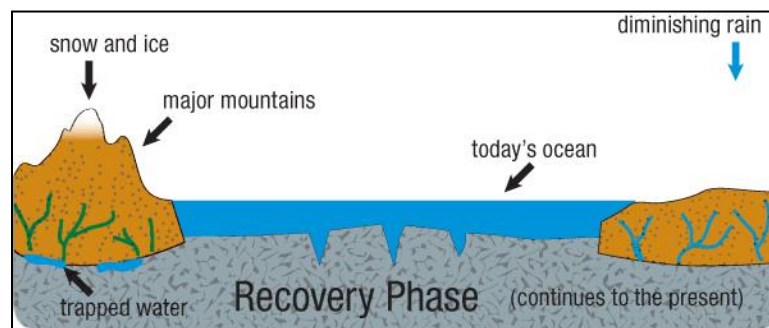
As the Mid-Atlantic Ridge and Atlantic floor rose, material even deeper in the earth had to rise to fill the void. Ultimately, the opposite side of the earth had to subside (sink) and buckle downward (towards the Atlantic), forming deep ocean trenches in what is now the Pacific Ocean. Frictional heating caused by these high-pressure movements initiated runaway melting deep in the earth, producing the earth's inner and outer cores.

When rock melts under the extreme pressures that exist deep in the mantle, it shrinks in volume (by half at the depth of the mantle-outer core interface). The resultant loss of volume led to a rapid collapse and faulting deep below the Pacific Hydroplate. This deep faulting in turn generated massive lava outpourings, paving the ocean floor in the Western Pacific, and raised 70,000 volcanic cones on the Pacific floor, each at least one kilometer (more than one-half mile) high. Surrounding much of the Pacific is the "Ring of Fire." This area contains Earth's greatest concentration of volcanic and earthquake activity, all due to the large scale block-faulting and melting that occurred during this phase.

These cataclysmic hydroplate movements, ending with the compression event that pushed up today's major mountains, occurred in about one hour!

**Recovery Phase.** As the massive hydroplates slowed and collided at the end of the Continental-Drift Phase, they also choked off the subterranean water at its source, and the floodwaters began to drain from newly raised topography to fill depressions in the crust (forming many post-flood lakes) and extremely deep ocean basins.

Because those new ocean basins were about 30 miles deep right after the flood, sea level was much lower than today. Exposed land bridges between the newly formed continents permitted animal and human migration and re-population across the earth for several centuries. Gradually, however, the hydroplates partially sank into the mantle (the floor of the former subterranean chamber), raising sea level and submerging these land bridges.



The Recovery Phase. (Figure 66 of *In the Beginning*)

The earth has now largely "settled down" from the flood cataclysm, but some effects of the global upheaval remain. Earthquakes, volcanic eruptions, and impacts by comets, asteroids, and meteorites, and other current day events are all residual consequences of the global flood.

## HPT Explanations and Predictions

### Observational Evidence

Observational evidence for the HPT includes: the Mid-Atlantic Ridge, physical evidence of massive movement of crustal plates in the earth's past that exposed or produced the present-day basaltic ocean crust; fracture zones

associated with offsets in the mid-ocean ridge system (in two, perpendicular directions); the “young” ocean floor; and linear chains of oceanic volcanoes.

The HPT explains many other features and mysteries of our planet as well, including: the average one-mile-thick layer of sediments that blanket Earth’s continents (but not the ocean floor); the formation and orientation of the major mountain ranges and plateaus; fossils; the ice age and frozen mammoths; coal and limestone; salt domes; deep earthquakes; ocean trenches; the Grand Canyon; and the origin of Earth’s radioactivity, to name just a few. The theory also explains how our current 29.53-day lunar month and 365-day earth-year changed from the 30-day lunar month and 360-day earth-year of ancient times.<sup>4</sup>

One of its most controversial aspects, the HPT postulates that during the cataclysmic “bursting of the great deep,” some water, rocks, dirt, and other debris were ejected sufficiently far into space to escape the influence of Earth’s gravity. This material gravitationally coalesced over time to form our solar system’s comets, asteroids, meteoroids, and tens-of-thousands of orbiting bodies that lie beyond Neptune, referred to as trans-Neptunian objects (TNOs). Today, about 70,000 TNOs have been identified, 1,552 with known orbits. Many are clustered within a vast belt, the Kuiper Belt, which extends from the orbit of Neptune (30 AU from the Sun) to about 50 AU from the Sun.<sup>5</sup> Of special interest to astronomers is a handful of Kuiper Belt Objects (KBOs), whose orbits reach much further from the sun than other KBOs and whose orbits are clustered in an unexpected way.

Because certain orbital characteristics of these “strange” KBOs do not appear to be random, as scientists would expect, some astronomers are now suggesting that there may be a massive, distant, and otherwise undetected planet (“Planet X”) whose gravity has acted too pull these bodies so far from the sun and influenced some aspects of their orbits.<sup>6</sup> However, the strange orbital characteristics of these objects are readily explained by the HPT. That is why Brown now predicts that scientists will never find Planet X, because it does not exist. He states, *“The Scientific American article does not go into many of the orbital features that these astronomers consider ‘decidedly weird,’ but the HPT does. The orbits, which must also be only a few thousand years’ young, are not weird; they are exactly what the laws of physics would produce.”*<sup>7</sup>

Many other of Brown’s published science predictions have been fulfilled by subsequent discoveries as well. *(To my knowledge, no other flood theory author has published a prediction based on his theory.)* HPT predictions include: pooled, salty water under mountain ranges; granitic magma under the Pacific floor; salt and flowing liquid water on Mars; complex organic compounds on comets; water escaping at high rates from inside large asteroids; and one of Saturn’s moons. These predictions have been verified by subsequent scientific investigations, including space probe findings.

## Objections to HPT

### The “Geometry Problem”

One objection to the HPT is sometimes called the “geometry problem.” This criticism originated with CPT author Dr. John Baumgardner approximately 30 years ago. In one article, Baumgardner writes, *“One glaring problem with this idea is the lack of any conceivable mechanism for transforming that almost uniform*

---

<sup>4</sup> See [360dayyear.com](http://360dayyear.com) for an excellent compilation of historical and archeological evidence that documents the use of a 30-day lunar month and 360-day earth-year calendar by ancient civilizations around the world.

<sup>5</sup> One AU (Astronomical Unit) is the distance our earth is from the Sun, about 93 million miles.

<sup>6</sup> Lemonick, Michael D. “The Search for Planet X: Is It Hidden in the Solar System’s Outer Reaches?” *Scientific American*, February 2016, 30-37.

<sup>7</sup> For a detailed HPT explanation for all 70,000 TNOs and the dozen “weird” TNOs that travel out so far, see [creationscience.com/onlinebook/Asteroids4.html](http://creationscience.com/onlinebook/Asteroids4.html). This explanation was first posted in March 2014.

*distribution of continental crust covering the entire earth into the present distribution of continental crust.”*<sup>8</sup> In his article, Baumgardner also maintains that for the 6<sup>th</sup> edition and subsequent editions, Brown changed his initial assumed crustal thickness of 10 km (about 6 miles) to 10 miles and made other adjustments to the theory because of this criticism. He states, “*However, just as the earlier editions had given no hint that there was any problem in accounting for how the initial distribution of crust might be transformed into the one represented by the earth’s continents today, neither do the later editions.*”<sup>9</sup>

Baumgardner’s objection has to do with the mismatch between Brown’s initial assumed thickness of the HPT’s pre-flood global continent (10 km and then 10 miles) and the 30-mile average thickness of today’s continents, which cover about one-third of the earth’s surface. How could a 10-km (or 10-mile) thick crust thicken to 30 miles? (As an analogy, consider a yard stick that folds up to be one-foot long. The HPT maintained for years that this yard stick, fully extended, can fit between walls (the mid-oceanic ridges) that are two feet apart.) Baumgardner correctly pointed out that this was not possible, and to Brown’s critics, this problem was “a fatal flaw” in the HPT.

However, to those who have carefully studied the HPT, understand its scientific basis and biblical consistency, are knowledgeable of the large body of evidence supporting the HPT, and appreciate the HPT’s predictive power, the geometric issue was a problem to solve, not a “fatal flaw” in the theory.

Brown explains in the online 9<sup>th</sup> edition that ten miles was based on an estimate of the volume of rock that would have been removed by the escaping subterranean water to equal today’s sediments, sedimentary rock, comets, and asteroids. (The prior estimate, ten kilometers, considered only sediments. The terrestrial origin of comets and asteroids came later.) He told me, “*I wasn’t going to change one estimate for another without a valid reason or solid evidence.*”

Two recent articles in the science journal *Nature*, provided (unintentionally of course) powerful evidence that TNOs, as well as other asteroids and comets, were formed from water and debris ejected by the fountains of the great deep. The first paper, published in March 2014, identified strange, seemingly impossible, characteristics of the most distant of these some 70,000 small bodies. (These “strange” orbital characteristics have since led scientists to propose the existence of “Planet X,” mentioned above.) Brown had been intrigued by TNOs since their initial discovery in 1992 because some of the same mechanisms that formed comets and asteroids would have spiraled the largest asteroids beyond Neptune after the flood. But there was a problem. Their combined mass was huge: 2% to 4% of Earth’s mass. If the mass launched from Earth also included the mass now in TNOs, the subterranean chamber had to be much deeper than ten miles.

Ten months after the March 2014 paper, *Nature* published another discovery that Brown believes indicates that the depth of the former subterranean chamber was 60 miles below Earth’s surface. If that is correct, then the fountains of the great deep launched much more material into space, enough to account for the mass of all TNOs. Brown remarks, “*I now realize that the global flood was so much more powerful and violent than I could have imagined in 1980.*”

Regarding criticisms about the current shape of the continents and the apparently “missing” crust on the Pacific side of the earth, Brown points out that the online 9th edition of *In the Beginning* contains an expanded

---

<sup>8</sup> “Critique of the Hydroplate Model” by John Baumgardner.

<sup>9</sup> Ibid.

explanation that should help readers better understand this issue regarding what happened during and after the continental-drift phase of the HPT.<sup>10</sup>

Brown explains, “*Perhaps even faster than the Atlantic basin rose, the Pacific was collapsing toward the mantle. I think it may have been even faster because the movement of those enormous blocks of rock caused tremendous melting, and below something called the crossover depth (below which rock shrinks as it melts), the volume of the rock was dramatically reduced. [For Earth, the crossover depth is approximately 220 miles below its surface.] So that runaway sinking of what is today the Pacific explains where and how far the continents slid, and this sinking was perhaps as much of a factor in the continents sliding as was the rising of the Atlantic. The observation is equally consistent with the Atlantic Ocean opening up as hydroplates slid away from the rising Mid-Atlantic Ridge, and the Pacific and Indian Ocean forming as a result of the Pacific plate subsiding. The now-gone Pacific Plate shear block-faulted into the shrinking inner earth, some of which melted into what is now the massive volcanic cones in that area of the Pacific floor. This is our current best understanding without knowing exactly what the crustal pieces looked like before, during, and after the compression event.*”

### The “Energy Problem”

Another aspect of Baumgardner’s criticism relates to the energy required in the movements and changes that the HPT proposes. He writes, “... *Moreover, the forces and energy required to perform such a feat [thickening of the pre-flood hydroplates to the thickness of the present crust] were far from having any obvious source.*” He applied Byerlee’s Law to show sufficient energy was not available.

With the increase in estimated pre-flood crustal thickness to 60 miles, this objection is moot. The momentum and kinetic energy *were* sufficient to crush, melt, bend, and fold some of the 60-mile thick crust and much of the sedimentary layers. We see the results today in sedimentary layers that are sometimes inclined, wavy, buckled, overthrust, and offset instead of evenly distributed in perfectly horizontal layers all over the earth.<sup>11</sup>

Baumgardner also discounts Brown’s explanation for the source of the energy required to launch water and debris beyond the reach of Earth’s gravity. The HPT points to nuclear energy released as a result of the piezoelectric effect of quartz crystals in the granite crust as it “fluttered” during the flood. This well-documented phenomenon is called the “Z-pinch.” Among other objections, Baumgardner claims that such a mechanism would release too much waste heat. (As we will see in Part 3, Baumgardner solves what he admits is CPT’s waste heat problem by invoking extra-biblical miracles.)

Brown wrote to me, “*Baumgardner should reconsider the physics of Z-pinch. Fusing elements lighter than 60 atomic mass units (AMU) generates heat; fusing elements heavier than 60 AMU absorbs heat. That is well accepted, and hundreds of experiments at the Proton-21 Laboratory experimentally demonstrate this. Furthermore, most residual heat was contained in the supercritical water which was (1) expanded (and cooled) by the accelerating fountains of the great deep, or (2) expelled into outer space.*”

### Comets, Asteroids, Meteoroids, and TNOs

As we have already seen, the HPT proposes that comets, asteroids, and TNOs formed over time from water and other matter ejected from Earth when the fountains of the great deep burst forth during the global flood. Ejected rocks became meteoroids. Leading creation astronomer Dr. Danny R. Faulkner has published a paper opposing

---

<sup>10</sup> According to the HPT, the crust over the Pacific not only subsided, but also melted and mixed with the basaltic magma, which flowed out on to the ocean floor. The evidence of this melting of the Pacific plate is documented in the Trench Chapter of *In the Beginning*.

<sup>11</sup> “In the Beginning: Compelling Evidence for Creation and the Flood - Can Overthrusts Occur? Can Strata Fold? Can Mountains Buckle?” at: <http://www.creation-science.com/onlinebook/Liquefaction7.html>.



this claim and stating that the energy required to expel water and debris from Earth and beyond its gravitational influence would destroy the earth's atmosphere.<sup>12</sup>

Brown, whose doctoral research at MIT dealt with the dynamics of heat transfer in a flowing fluid, maintains that Dr. Faulkner's analysis is flawed in several ways and fails to account for the effect of "directed energy." The accumulating body of evidence from probes sent to gather data from space continues to support Brown's assertion that comets, asteroids, and other celestial bodies were formed from water and debris jettisoned into space during the flood.

In fact, astronomers grow more puzzled each year as the evidence continues to mount in contradiction of evolutionary views about the formation of the solar system. Such discoveries, which are readily explained by the HPT, include: complex organic molecules, molecular oxygen, and layers upon layers of rounded boulders up to 10 feet in diameter found on comet 67P; carbon monoxide and towering mountains of water ice on Pluto; and ice and its dissolved salts discovered in the bottom of craters on Ceres, the largest of all known asteroids.

Creationists cite such evidence as pointing to a young earth and, without any other explanation, assert that these objects were created thus *ex nihilo* during Creation Week. Consider, however, that the "very good" creation (Genesis 1:31) would *not* have included bodies that sometimes plummet into Earth's atmosphere as meteorites, comets, and asteroids, causing damage and occasionally injuring or killing people.<sup>13</sup> Further, these bodies can exhibit a wide variety of characteristics including chondrules, Widmanstätten Patterns, and the presence of heavy hydrogen (in comets), which seems to conflict with a "very good" original creation and beg another explanation. These characteristics *are* consistent with the HPT explanation as forming from water and debris ejected from the earth during the flood cataclysm.

## Answering the Critics

Brown responds, "*If people think there are problems with the Hydroplate Theory, they should place them on the table, so we can discuss (or even debate them). That's how problems are solved.*"

Brown offers to address HPT objections within the guidelines of his "Direct (Oral and Written) Referred Exchange."<sup>14</sup> According to Brown, "*The Referred Exchange is for those who want to make their disagreements public — and credible (credible, because they would be engaging with me directly instead of behind my back). It is especially helpful as a way to open the door to the hundreds of people—evolutionists and creationists—who are angry at me and what I am saying. It gives them a fair way to vent their anger, while at the same time forcing them to come to grips with the science and why they are angry. It also gives them a way to "put up" (if they really have a case) and it lets them know that I am willing to debate. The requirements that the exchange be recorded, be available to the public, and the critic at least claim to know what I have written before I try to address their disagreements are necessary, even though some may consider them controlling or harsh.*"

## Conclusion

I have come to believe that some of these flood theory disagreements arise in part from the comprehensive, dynamic, and multi-disciplinary nature of the HPT – the flood was not merely a geological event. The technical

---

<sup>12</sup> Faulkner, Danny R., "An Analysis of the Astronomical Aspects of the Hydroplate Theory," *Creation Research Society Quarterly* 49 (2013): 197-210.

<sup>13</sup> Berger, Eric. "Indian Man Could Be First Recorded Human Fatality Due to a Meteorite." *Ars Technica*. February 7, 2016. <http://arstechnica.com/science/2016/02/indian-man-could-be-first-recorded-human-fatality-due-to-a-meteorite/>.

<sup>14</sup> "In the Beginning: Compelling Evidence for Creation and the Flood - What Is the Direct (Oral and Written) Refereed Exchange?" Accessed February 07, 2016. <http://www.creationscience.com/onlinebook/FAQ428.html#wp7333347/>.



complexities involved can make it difficult to grasp, even for some scientists. In addition, an adequate understanding of the HPT requires studying each piece of the puzzle and then understanding how they all fit together to comprise the full theory.

Further, geologists and engineers take very different approaches to problem solving and each may have difficulty understanding the others' argument. Geologists are excellent observers. They look at the details of Earth's makeup and ask, "What do I *see*?" They then surmise about what might have happened, sometimes without considering the mechanics of their suppositions or all possibilities. As a result, geologists expect HPT to answer in detail questions such as, "*Exactly how much of the Pacific Hydroplate subsided and how deep into the earth did it go?*" or "*How far did the western edge of the American Hydroplate travel before it met resistance and stopped?*" Like all theories, the HPT does not answer *all* possible questions. In contrast, engineers look at the evidence and ask, "How did this *happen*?" They require that any proposed scenario be consistent with the laws of physics.

Brown stated, "*Yes, hundreds of questions are out there—but most are already answered in the book [In the Beginning]. If someone asks them in a phone exchange format, I believe I can easily answer them, or learn where I need to correct or clarify my position, or even show publicly that the critic has not read the HPT. Also, I would then have equal time to put questions to the critic that relate to his or her questions or flood theory.*"

To Brown (and those like myself who support the HPT), the strength of the HPT lies in its harmony with Scripture, its compatibility with the laws of physics, and in its robust ability to explain (and predict) many otherwise mysterious features of Earth and its solar environment.

In Part 3 we will examine the CPT theory, currently embraced by ICR, AiG, and CMI. In Part 4, the final part of this series, we will look at the roots of and possible solutions for resolving an ongoing, 30-year, behind-the-scenes controversy within the creationist community. That controversy has hindered our progress in advancing scientifically viable explanations for the global flood.

# Noah's Flood – The Bible, the Science & the Controversy

By Jane Albright, P.E.

## Part 3 - Catastrophic Plate Tectonics

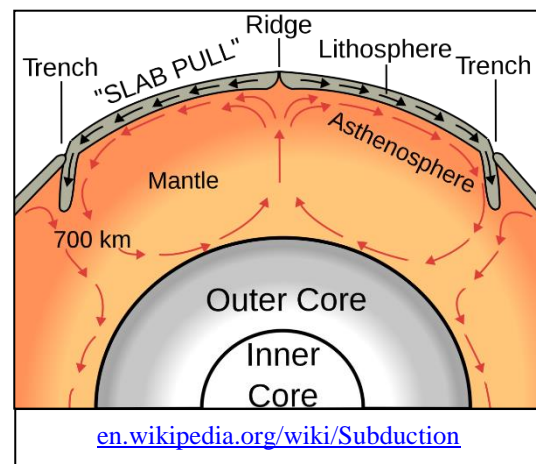
### Recap

In this four-part series of articles, we are looking at three of today's well-known scientific theories for the global flood – the Vapor Canopy Theory (VCT), the Hydroplate Theory (HPT), and the Catastrophic Plate Tectonics (CPT) Theory – and comparing them with scientific evidence and the Bible. Part 1 summarized some of the key flood passages in the Bible and briefly discussed the VCT, including reasons why almost all creation scientists no longer view it as a viable flood explanation. In Part 2, we summarized the Hydroplate Theory (HPT), a flood explanation that is consistent with the biblical record; relies on the application of God's laws of science without invoking extra-biblical miracles to solve scientific problems; and provides powerful explanatory and predictive capability. Here in Part 3, we will briefly examine another currently prominent explanation for the global flood, the Catastrophic Plate Tectonics (CPT) theory.

A heartfelt thanks to Dr. John Baumgardner, CPT's primary author, and ICR geologist and CPT advocate Dr. Tim Clarey for their explanations of the current version of the CPT theory and for reviewing the pre-publication draft of this article.

### Plate Tectonic Theory

Catastrophic Plate Tectonics (CPT) is similar to uniformitarian Plate Tectonics (PT), the dominant theory of today's secular geologists.<sup>1</sup> PT seeks to describe the observed motion of the earth's relatively thin and rigid outer-most surface, referred to as the lithosphere. The lithosphere is viewed as comprising multiple tectonic plates, which move relative to each other atop the underlying rock (the mantle) at about the same rate that your fingernail grows. In school, many of us learned (and some schools still teach) that this movement is in response to conveyor belt-like circulation in the mantle below. Today, however, geologists believe that mantle convection is secondary to "slab pull" (refer to diagram). In other words, the main force responsible for moving the plates is the weight of the slabs that fall downward into the mantle.



As the plates descend, magma (melted rock inside the earth) rises up through faults (cracks in the crust) at the Mid-Ocean Ridge (MOR) and solidifies to form new ocean floor, which then moves horizontally in opposite

---

<sup>1</sup> Uniformitarianism is the belief that the natural processes at work in our world have always occurred in the same way as we observe today. Secular science, including geology, is built on the uniformitarian paradigm. Uniformitarianism originally held that these processes have occurred at the same *rate*, as well in the same *way*. In light of evidence, however, the principle of uniformitarianism now acknowledges that past processes, even if the same as today, may have operated at different rates and with different intensities than those of the present. This revised belief is sometimes referred to as "actualism."

directions away from the ridge. This hypothesized formation of new oceanic lithosphere is called seafloor spreading.

If new ocean lithosphere is being formed and the earth's size stays the same, old ocean lithosphere must dive back into the earth somewhere else, a process referred to as subduction. Paraphrasing one geologist with whom I spoke, "*The ocean floors come and the ocean floors go – this is the bottom line of plate tectonics.*" Most subduction today is said to occur at the Pacific Ocean trenches, generating the earthquakes and volcanic activity associated with the Pacific Ocean's "Ring of Fire."

PT is the currently accepted secular paradigm for geological processes, past and present, and is largely taught as fact in our schools and universities, despite known problems with the theory. A few of these problems are briefly discussed later in this article.<sup>2</sup>

By definition, the uniformitarian framework of plate tectonics denies the occurrence of a past cataclysm such as a global flood, which could have rapidly created prominent features on Earth such as the MOR, ocean trenches, sedimentary layers averaging one mile in thickness on the continents, and the fossil record. Instead, PT maintains that these features are the products of millions and billions of years of tectonic movement.

## CPT Overview

In contrast to uniformitarian plate tectonics, advocates of Catastrophic Plate Tectonics (CPT) maintain that, although the basic processes of secular Plate Tectonic Theory, namely, seafloor spreading and subduction, are valid and can be observed today, these processes have not operated at near present rates over millions and billions of years. Instead, they assert that a vast amount of plate motion occurred during a tectonic upheaval only a few thousands of years ago as part of the Genesis Flood.

Geologist Dr. Steve Austin and five other creation scientists proposed a preliminary model of CPT more than 20 years ago.<sup>3</sup> Their paper built on prior publications of geophysicist Dr. John Baumgardner, who is widely acknowledged as CPT's primary author.

Dr. Baumgardner earned his Ph.D. in Geophysics and Space Physics at the University of California, Los Angeles (UCLA). As part of his thesis project, he created a 3D computer modelling program called *Terra*, to study the convection (circulation) in the mantles of earth-like planets. During his distinguished career at Los Alamos National Laboratory, he applied *Terra* to investigate the physics of catastrophic plate tectonics. In

## WHAT IS THE MID-OCEAN RIDGE?

The globe-encircling Mid-Ocean Ridge (MOR) system is earth's longest chain of mountains, most of which lies in deep oceans.

The MOR wraps around the globe for more than 40,000 miles like the seam of a baseball. The average depth to the crest (top) of the ridge is 8,200 ft, but it rises above sea-level in Iceland and is more than 13,000 deep in the Cayman Trough.

That segment of the MOR that lies approximately midway between the eastern coasts of the US and South America and the western coasts of Europe and Africa is referred to as the Mid-Atlantic Ridge.

---

<sup>2</sup> Known problems with Plate Tectonic Theory (and the data upon which it relies) are documented in secular publications including "New Concepts in Global Tectonics" (1992) by Chatterjee and Hutton and "Tectonic Globaloney" (2004) and "Tectonic Globaloney: Closing Arguments" (2012) by N. Christian Smoot.

<sup>3</sup> Austin, S.A., J.R. Baumgardner, R.D. Humphreys, A.A. Snelling, L. Vardiman, and K.P. Wise. "Catastrophic Plate Tectonics: A Global Flood Model of Earth History." *Third International Conference on Creationism*, Technical symposium sessions, Creation Science Fellowship, Pittsburgh, PA. 1994. Online at [www.icr.org/article/catastrophic-plate-tectonics-flood-model](http://www.icr.org/article/catastrophic-plate-tectonics-flood-model)

1997, an article in *US News and World Report* described him as “the world’s pre-eminent expert in the design of computer models for geophysical convection.”<sup>4</sup>

*“[Baumgardner] retired from Los Alamos in 2004 and joined the Institute for Creation Research in 2005 where he helped develop a state-of-the-art computer program (named Mendel’s Accountant) for modeling the [biological] processes of mutation and natural selection. In 2008, he joined Logos Research Associates, a collaborative network of Christian research scientists whose focus is origins and earth history issues from a biblical perspective.”*<sup>5</sup>

Dr. Baumgardner’s web site, [globalflood.org](http://globalflood.org), includes a list of his major publications on CPT and related creation issues.

## Observational Evidence Supporting CPT

CPT proponents cite the relatively younger age of the oceanic crust as key observational evidence supporting their theory. More than 45 years of deep ocean drilling activity since the 1960’s has produced detailed information about the makeup of the basalt that lies beneath the sediments that cover the ocean bottom. CPT proponents claim that radiometric dating of core samples of these basalts demonstrate that the age of all basaltic ocean crust on earth is less than the age of the fossil-bearing sediments on the continents, which supports their explanation.<sup>6</sup> (This assumes there is no other explanation for a “young” ocean floor. As we have seen in Part 2, the HPT explains this and many other physical features of our earth – and solar system.)

Analysis of these core samples reveals other valuable information: plankton shells in the sediment cores provide a vertical fossil history, and the orientation of grains in magnetic minerals are interpreted as a record of the orientation of the earth’s magnetic field over time.

CPT advocates also interpret prominent physical aspects of the present ocean floors as indicators that massive plate tectonics activity *did* occur in the earth’s past and that this activity produced the present-day basaltic ocean crust. They cite the fracture zones associated with offsets in the mid-ocean ridge system; evidence of extreme heat flow along the axis of the mid-ocean ridge system and decreasing heat flow as one moves away from that axis; the lack of sediment along the axis of the mid-ocean ridge system and its increasing thickness with distance away from that axis; and linear chains of oceanic volcanoes. (As we have seen in Part 2, the HPT interprets the physical evidence differently.)

## Computer Simulations of CPT

Dr. Baumgardner has applied computer simulation to address questions about CPT that observations of the earth’s surface features, and even seismic studies of the earth’s interior, do not answer. For example, he applied his 3D *Terra* program to approximate the way rock inside the earth might move during an episode of rapid tectonic motions. He states, *“By applying a trial-and-error approach to discover what initial conditions might yield a reasonable set of surface plate motions, I have been able to generate some plausible plate motion histories beginning from a single supercontinent.”*

---

<sup>4</sup> Burr, Chandler. “The Geophysics of God: A scientist embraces plate tectonics—and Noah’s flood.” *U.S. News & World Report*, June 16, 1997. Online at:

[web.archive.org/web/20121023040454/http://www.usnews.com/usnews/culture/articles/970616/archive\\_007221\\_print.htm](http://web.archive.org/web/20121023040454/http://www.usnews.com/usnews/culture/articles/970616/archive_007221_print.htm)

<sup>5</sup> “John Baumgardner, Ph.D. Biography.” Creation Ministries International. <http://creation.com/john-baumgardner>

<sup>6</sup> CPT proponents maintain that radiometric ages are not absolute, but they *are* valid for relative comparison purposes. For example, material with a radiometric age date of 20 million years is not really 20 million years old, but it *is* younger than material with an age date of 100 million years

Baumgardner has also explored what might have initiated the flood cataclysm using computer simulation.<sup>7,8,9</sup> His published results typically assume, as a starting condition, a zone of cold rock in the upper mantle at depths between 60 and 240 miles. *“Temperature within this zone in most models is about 400°C (752° F) cooler than the surrounding rock, which typically has a temperature of about 2000°C (3,632° F). This zone of cold rock lies mostly around the boundary of a large pre-Flood supercontinent. Such a feature inside the earth must date back to God’s original creation of the earth when He declared on Day 3, ‘Let the waters below the heavens be gathered into one place, and let the dry land appear.’”*

Why would this zone of cold rock surrounded by much hotter upper mantle not begin to sink immediately after creation due to its higher density? According to Baumgardner, *“There are reasons why this cold rock may have been initially stable. I suspect, however, that after the Fall [of Genesis 3], this cold rock began slowly to sink and for some 1,650 years was moving toward the point of dramatic instability. The fateful moment of runaway of this cold rock inside the earth occurred after Noah, his family, and the animals were safely aboard the ark. In this scenario, no additional triggering event is required.”*<sup>10</sup> He cites the results of other computer simulations to show that *“runaway instability lowers rock strength by many orders of magnitude throughout the mantle and results in plate speeds at the earth’s surface of several miles per hour.”*<sup>11,12,13</sup>

However, Baumgardner stresses that it is *observational evidence* – not his computer simulations – that comprises the logical basis for CPT. Nonetheless, those with whom I spoke cite his computer simulations as primary support for CPT’s flood explanation.

CPT proposes that once runaway subduction was underway, frictional heat generated by this movement melted rock inside the earth. This magma, along with some moisture from deep in the earth, rose through cracks (rift zones) in the ocean floor. As it came in contact with seawater, boiling began, giving rise to supersonic steam jets that traveled through the ocean layer. Then, as Baumgardner explains:

*“As these steam jets rip upward through the overlying layer of ocean water, they entrain vast quantities of liquid water and carry this water into the stratosphere to fall back to the earth as heavy rain.”*<sup>14</sup> *As the rapidly subducting oceanic plates alternately stick and then slip as they interact with the adjacent overriding plates, that process generates giant tsunamis. These giant tsunamis initially emplace more water onto the continental surface than can drain away by gravity and consequently flood the continental surface to depths of several thousand feet. The tsunamis also erode the continents’ crystalline bedrock by thousands of feet in many areas. The rapidly moving turbulent water transports*

---

<sup>7</sup> Baumgardner, J. R., “3-D finite element simulation of the global tectonic changes accompanying Noah’s Flood,” *Proceedings of the Second International Conference on Creationism, Volume II*, R. E. Walsh and C. L. Brooks, eds., Creation Science Fellowship, Inc., Pittsburgh, PA, 1990, 35-46. Online at: [icr.org/article/article/simulation-noahs-flood](http://icr.org/article/article/simulation-noahs-flood)

<sup>8</sup> Baumgardner, J. R., “Computer Modeling of the Large-Scale Tectonics Associated with the Genesis Flood,” *Proceedings of the Third International Conference on Creationism, Technical Symposium Sessions*, R. E. Walsh, ed., Creation Science Fellowship, Inc., Pittsburgh, PA, 1994, 49-62. Online at: [icr.org/article/article/tectonics-flood-model](http://icr.org/article/article/tectonics-flood-model)

<sup>9</sup> Baumgardner, J. R., “Catastrophic plate tectonics: the physics behind the Genesis Flood,” *Proceedings of the Fifth International Conference on Creationism*, R. L. Ivey, Jr., Editor, Creation Science Fellowship, Pittsburgh, PA, 2003, 113-126. Online at: [icr.org/article/article/catastrophic-plate-tectonics-flood](http://icr.org/article/article/catastrophic-plate-tectonics-flood)

<sup>10</sup> Horstemeyer, M. F. and J.R. Baumgardner, “What initiated the Flood cataclysm?” *Proceedings of the Fifth International Conference on Creationism*, R. L. Ivey, Jr., editor, Creation Science Fellowship, Pittsburgh, PA, 2003, 155-164.

<sup>11</sup> Baumgardner, J. R., “Runaway Subduction as the Driving Mechanism for the Genesis Flood,” *Proceedings of the Third International Conference on Creationism, Technical Symposium Sessions*, R. E. Walsh, ed., Creation Science Fellowship, Inc., Pittsburgh, PA, 1994, 63-75. Online at: <http://www.icr.org/article/runaway-subduction-genesis-flood>

<sup>12</sup> Baumgardner, 2003, *op. cit.*

<sup>13</sup> Sherburn, J. A., J. R. Baumgardner, and M. F. Horstemeyer, “New material model reveals inherent tendency in mantle minerals for runaway mantle dynamics,” in *Proceedings of the Seventh International Conference on Creationism*, M. Horstemeyer, editor, Creation Science Fellowship, Inc., Pittsburgh, PA, 2013.

<sup>14</sup> Baumgardner, 2003, *op. cit.*



*the sediment and distributes it across the continents. When the temperature differences driving the runaway subduction are exhausted, the plate speeds fall, the steam jets cease, the tsunami frequency and amplitudes decline toward zero, and the water that had covered the continents drains back into the ocean basins.<sup>15</sup> By the conclusion of the cataclysm, the super-continent Pangea was torn apart into the continents we know today.”*

## CPT and the Major Creation Science Organizations

CPT is popular among some creationists today and is the flood theory currently advocated by ICR and AiG. CMI’s Dr. Tas Walker told me that their researchers hold a variety of views and that CMI’s official position is to hold everything lightly except the Word of God. However, CMI’s excellent video production, “Evolution’s Achilles Heels” describes the flood with a CPT-as-fact scenario. Despite its popularity, however, some leading creationists object to CPT for reasons including its incompatibility with features of the fossil record.<sup>16</sup>

CRS does not advocate any flood theory at present. One representative stated, *“I don’t consider myself an opponent of any particular flood model. I consider myself skeptical of any and all of them. Because I don’t think we have enough information to go to that level. A lot of things are completely unknown... There is almost an unwillingness to consider the impact of the direct work of God in doing that. Is it something that is amenable to scientific exploration?”* Another CRS representative stated more succinctly that, in effect, since we cannot ever know with certainty the extent to which God may have supernaturally intervened in the flood event, why bother with “those grand” flood theories? This position seems peculiar for an organization named for and dedicated to creation and flood research.

## Biblical and Technical Objections to CPT

### Where did the water come from?

CPT critics point out that the theory does not harmonize very well with Genesis’ straightforward, cause-and-effect, chronological account of the flood:

1. First, the “bursting forth of the great deep” that initiated the flood (Genesis 7:11, 12; Job 38:8-11; Psalm 18:15; Proverbs 3:20)
2. Then torrential 40 days of rainfall (Genesis 7:12)
3. Then waters continued to “prevail upon the earth” for another 110 days, eventually flooding the entire earth to a height of 22 feet above the mountains (Genesis 7:17-20, 24).

When I asked CPT proponents these questions during my interviews, I received a variety of vague answers.

Baumgardner maintains that the CPT scenario – the sudden splitting apart of the mid-ocean ridge with magma coming into direct contact with ocean water to form a curtain of supersonic steam jets – *“certainly seems to do justice to the Biblical text that all the fountains of the great deep burst open [or were cleaved apart].”* As previously described, he asserts that these steam jets entrained a large volume of liquid water that subsequently would have fallen back to earth as torrential rain.

---

<sup>15</sup> Baumgardner, J., “Numerical Modeling of the Large-Scale Erosion, Sediment Transport, and Deposition Processes of the Genesis Flood,” *Answers Research Journal*, February 24, 2016. Available online at [answersingenesis.org/geology/sedimentation/numerical-modeling-large-scale-erosion-sediment-transport-and-deposition-processes-genesis-flood/](http://answersingenesis.org/geology/sedimentation/numerical-modeling-large-scale-erosion-sediment-transport-and-deposition-processes-genesis-flood/)

<sup>16</sup> “Froede, Jr., Carl R., A. Jerry Akridge, and John K. Reed. “Phanerozoic Animal Tracks: A Challenge for Catastrophic Plate Tectonics.” *Creation Research Society Quarterly* 51, 2014, 96-103.



ICR's creation geologist and CPT proponent Dr. Tim Clarey believes that the pre-flood oceans provided most of the floodwaters. He stated to me, "*The water for flooding the continents is mostly from the original oceans. The CPT and PT model argues that the newly created ocean lithosphere is hotter, less dense and rises upward. This shallower seabed pushes the ocean water onto the continents. [Dr. Andrew] Snelling has calculated this can raise sea level 1.6 km, adding to the flooding of the continents. As the newly formed ocean lithosphere cooled, it began to sink, helping to draw off the water after day 150 of the Flood and back into the ocean basins where it began.*"

Clarey suggests that water from deep in the earth that emerged from rifts also contributed to some degree as well. "*I don't think CPT has a problem with the water coming from rifts all over the earth at the start of the flood. The water geysers came from water trapped in the minerals of the upper mantle... There was enough [water] in the mineral lattices.*"

In other words, the floodwaters were made up of water in the pre-flood oceans plus water trapped in the mineral lattices of the upper mantle that was somehow released during the event.

Both explanations for the source of the floodwaters seem to raise serious technical questions. For example, lithospheric cooling could not occur this rapidly (within the span of a single year) without a miracle. Also, while some research seems to suggest the presence of water in the mantle, it is the hydroxide ion ( $\text{OH}^-$ ), not free water ( $\text{H}_2\text{O}$ ), found locked within the microscopic lattices of some mantle minerals. One *Nature* article states, "*A hydrous transition zone may have a key role in terrestrial magmatism and plate tectonics, yet despite experimental demonstration of the water-bearing capacity of these phases, geophysical probes such as electrical conductivity have provided conflicting results, and the issue of whether the transition zone contains abundant water remains highly controversial.*"<sup>17</sup> Further, by what mechanism could hydroxide ions locked within the crystal lattices of minerals deep in the mantle be released and then find and combine with hydrogen ions ( $\text{H}^+$ ) to become the Bible's fountains of the great deep?

Regardless, both scenarios describe something quite different than the plain Genesis narrative. For Bible-believers, this is a huge problem with CPT.

### Subduction – How does it start?

CPT also shares significant technical problems that are inherent in secular plate tectonic theory. Both PT and CPT assume that Earth's crust was initially intact. So to create tectonic plates, you must first crack the crust like an eggshell all over the globe and then "unstick" them from the underlying mantle so that they can freely move. No mean feat! Neither PT nor CPT theory proposes a mechanism by which this could occur.

Then, once you have cracked the crust, you *must* initiate subduction. PT/CPT advocates admit that there is no known mechanism to cause a 30-to-60-mile thick slab of earth's upper crust to begin sinking into the solid mantle and then under its adjacent 30-to-60 mile thick slab.

One CPT proponent with whom I spoke admitted, "*Even secular scientists don't know how subduction begins.*" In fact, secular scientists admit: "*The initiation of subduction remains one of the unresolved challenges of plate tectonics.*"<sup>18</sup> And "*In spite of its importance, it is unclear how subduction is initiated.*"<sup>19</sup>

---

<sup>17</sup> Pearson, D. G., F. E. Brenker, F. Nestola, J. McNeill, L. Nasdala, M. T. Hutchison, S. Matveev, K. Mather, G. Silversmit, S. Schmitz, B. Vekemans, and L. Vincze. "Hydrous Mantle Transition Zone Indicated by Ringwoodite Included within Diamond." *Nature* 507, no. 7491 (2014): 221-24.

<sup>18</sup> Klaus, Regenauer-Lieb et al., "The Initiation of Subduction: Criticality by Addition of Water?" *Science*, 294, 19 October 2001, 578.

<sup>19</sup> Robert J. Stern, "Subduction Initiation: Spontaneous and Induced," *Earth and Planetary Science Letters*, 226, 2004, 275.

Baumgardner responds, “*On the issue of subduction initiation, mantle plumes have been proposed by many [secular scientists] as an adequate mechanism.*” He also states, “*The issue of ‘subduction initiation’ in these publications has to do with how subduction began early in earth history when the mantle presumably was much hotter than it is today and the lithosphere much thinner. That question is drastically different from how subduction takes place today.*” Nonetheless, for subduction to occur today, it had to *begin* sometime in the past.

How does subduction begin in the CPT scenario? As previously described, Baumgardner’s CPT model now assumes as a starting point, a zone of rock that is about 750° F colder than the surrounding hot mantle. Despite its higher density, this cold, heavy rock lies unperturbed atop the less dense mantle until at some point and triggered by an unknown cause, the cold rock begins slowly sinking. About 1,650 years after Creation, it suddenly and rapidly plunges, triggering a cataclysmic, runaway subduction event and the ensuing global flood.

Not explained is why the zone of cold rock did not begin to sink immediately after its creation. Picture a marble “floating” (not sinking) in a glass of water. Further, the cold, dense rock would have warmed over the centuries as it absorbed heat from the surrounding hot rock, becoming less dense and thus more stable over time. So why does this rock suddenly and catastrophically dive down at a much later time, when it was more stable than when first created?

### Continuing Subduction

Once you somehow are able to initiate subduction, you must explain how the plates continue to move. The mechanism has been debated over the years. By analyzing the forces involved, Dr. Brown demonstrates why subduction cannot occur by either pushing or pulling forces.<sup>20</sup>

Despite the physics, ICR’s geologist, Dr. Tim Clarey, asserts that seismic tomography proves unequivocally that subduction *does* occur. This would be true if there were only one way of interpreting the seismic data. But there almost always is more than one way of looking at data, and this is certainly true in this case. Brown offers an alternate interpretation.<sup>21</sup>

### The Heat Problem

Other technical problems that arise from the CPT scenario include the vast heat produced by rapid plate movements and the millions of years it would take to cool afterwards. Baumgardner acknowledged this “heat problem” in his very first paper on CPT, published 30 years ago.<sup>22</sup> At that time, he concluded that God must have miraculously intervened to remove the waste heat. He stated to me that nothing has changed relative to this issue since then.

### Relying on Computer Models

Many people are unaware that computer simulations are highly simplified approximations and will yield a variety of results depending upon the way you structure the computer program, data you choose to use, the data you choose to ignore, the assumptions you make, and the importance you assign to the model parameters. “*Run Terra one way, and you can watch Noah’s flood take place before your eyes, mathematically calculated by a supercomputer. Run Terra another way, and you get the standard geological story of 4.6 billion years. The results obtained from the code are – as Baumgardner readily points out – dependent on the numbers fed into it*

---

<sup>20</sup> Brown, Walter, “In the Beginning: Compelling Evidence for Creation and the Flood – Does Subduction Really Occur?” <http://www.creationscience.com/onlinebook/TechnicalNotes22.html>.

<sup>21</sup> Brown, op. cit., “Is this a Subducting Plate?” <http://www.creationscience.com/onlinebook/Trenches5.html>

<sup>22</sup> Baumgardner, J. R., “Numerical Simulation of the Large-Scale Tectonic Changes Accompanying the Flood,” *Proceedings of the First International Conference on Creationism*, Vol. 2, Creation Science Fellowship, Pittsburgh, PA, 1986.

*in the first place.*”<sup>23</sup> Or, in the words of one University of Wisconsin professor of industrial engineering, “*All [computer] models are bad. Some are useful.*”

The key starting condition for Baumgardner’s most recent analysis is a zone of cold rock encased in the surrounding hot mantle, which as we have seen, he derived through many trial and error cycles.<sup>24</sup> However, the analysis included other important assumptions that must be closely evaluated as well. Below are some questions about this paper that I posed to Dr. Baumgardner for which I have not yet received a reply:

- You appear to set aside sediments that are problematic for CPT by stating they were pre-flood. However, creationists have long maintained that continental sediments are the result of the global flood catastrophe, not millions and billions of years of erosion. And this introduces other problems – for example, how do creationists now address the long time period requirements for laying down these sediments under non-catastrophic processes?
- You state, “*In terms of erosional processes, we restrict our scope to the mechanism of cavitation, again for simplicity. We assume that contributions from other processes were small by comparison.*” What “other processes” did you choose to ignore and how do you defend ignoring them? How do you know their contributions were small? As you know, the HPT also accounts for the aggressive assault of supercritical water (SCW) below the crust. The presence of underground SCW is well documented. What is your explanation for SCW, and how does it play into the CPT scenario?
- You state, “*In this model we neglect carbonates which in the actual rock record represent on the order of 30% of the total sediment volume.*” What is your rationale for excluding a significant (30%!) of the volume of sediments? Why did you do so?
- “*The depth of the ocean basins today—and presumably also during the Flood—is about 4 km (2.5 mi).*” How do you know this is a valid assumption?
- Intuitively, it seems that under the scenario you describe, the continental edges should comprise a deep rim of heavy, larger sedimentary particles, with increasingly shallower layers of finer and finer sediments as one proceeds further inland. Even in turbulent flow, large heavy particle will settle out faster. Is this what we observe? What observational evidence can you cite in support of this scenario?
- What predictions can/have you made<sup>25</sup> based uniquely upon CPT that have been validated by subsequent discoveries?

Baumgardner’s CPT model is an example of starting with a desired end result (here, runaway subduction) and working backwards to determine the starting conditions and assumptions needed to produce it. This approach can be meaningful when the starting conditions and scenarios so derived can be validated by other means. This validation process is *especially* critical for results from computer simulations, which by their nature are simplified approximations. In this case, there is no way to validate the reasonableness of Baumgardner’s initial conditions and assumptions since the computer model proposes to simulate an event that occurred in antiquity.

---

<sup>23</sup> Burr, Chandler, *op. cit.*

<sup>24</sup> Baumgardner, J., “Numerical Modeling of the Large-Scale Erosion, Sediment Transport, and Deposition Processes of the Genesis Flood,” *op. cit.*

<sup>25</sup>

## Answering the Critics

With respect to subduction, Baumgardner states, “*My own modeling and the papers I have published show, in my opinion convincingly, what drives plate motion and subduction. The science is there for anyone who cares to look into the matter.*” He also pointed to his published defense of CPT, a result of a panel review of various flood theories conducted between 2009 and 2011.<sup>26</sup>

Baumgardner addresses some of CPT’s other technical problems by invoking what one creationist has referred to as “miracles of convenience.”<sup>27</sup> Baumgardner writes, “*Finally, it seems evident that the Flood catastrophe cannot be understood or modeled in terms of time-invariant laws of nature. Intervention by God in the natural order during and after the catastrophe appears to be a logical necessity. Manifestations of the intervention appear to include an enhanced rate of nuclear decay during the event and a loss of thermal energy afterward.*”<sup>28</sup>

Baumgardner states that CPT advocates acknowledge the validity of “miracles of convenience” criticism. However, he believes that relying on extra-biblical miracles to solve CPT’s scientific problems is justified because “*both the physics and the observational support for CPT appear to cohere so well...*” Baumgardner cites 2 Peter 3:3-6 as support, stating, “*We understand this passage to indicate that scoffers in the last days, in rejecting the proposition that Jesus will return, will use the excuse that ‘all continues just as it was from the beginning of creation.’ CPT advocates interpret this excuse as an assertion of the idea of the uniformity of natural law and hence the absence of any miracles in the past history of the world.... They note that Peter uses three prominent examples of God’s miraculous intervention in the normal course of nature. The three examples are Creation and the Flood in the past and a renovation of the heavens and the earth by fire in the future.*” Baumgardner argues that anyone claiming that it is possible to understand the flood cataclysm without any intervention by God is “likely wrong” in light of this 2 Peter passage.

However, while this passage does not prove that God did *not* use miracles during the flood, neither does it state, much less imply or prove, that He *did*. In context, the passage is a warning to scoffers who mock the truth that Jesus *will* come again, and that He *will* judge the world.

Certainly God *has* performed miracles in the past – the Scriptures record them. However, creating ad hoc, extra-biblical miracles in order to solve scientific problems is not science. It is relying on what *Real Science Radio* co-host Bob Enyart refers to as “rescue devices.”<sup>29</sup>

## What does the Bible Say?

ICR Founder Henry Morris wrote, “*The Bible specifically attributes the Flood to the bursting of the fountains of the great deep and the pouring down of torrential rains from heaven. These two phenomena are sufficient in themselves ....to explain the Flood and all its effects without the necessity of resorting either to supernatural creative miracles or to providentially ordered extraterrestrial interferences of speculative nature. The breaking up (literally ‘cleaving open’) of the fountains of the great deep is mentioned first and so evidently was the initial action which triggered the rest. These conduits somehow all developed uncontrollable fractures on the same day. For such a remarkable worldwide phenomenon, there must have been a worldwide cause. The most likely*

---

<sup>26</sup> *The Flood Science Review*. In Jesus’ Name Productions, 2011.

<sup>27</sup> *The Flood Science Review*. In Jesus’ Name Productions, 2011, 1606. “‘Miracles-of-convenience’ are herein defined as exceptions to physical laws which are required to justify unworkable model parameters.”

<sup>28</sup> Baumgardner, John R, “Numerical Simulation of the Large-Scale Tectonic Changes Accompanying the Flood,” *op. cit.*

<sup>29</sup> *The Global Flood and the Hydroplate Theory*. Produced by Real Science R ([rsr.org](http://rsr.org)), 2014. DVD/Blue-Ray.

*cause would seem to have been a rapid buildup and surge of intense pressure throughout the underground system, and this in turn would presumably require a rapid rise in temperature throughout the system.”*<sup>30</sup>

Somewhat ironically, this quote is a very good description of the HPT, which we examined in Part 2.

In the fourth and final part of this series, we will explore issues that have hindered creationists’ progress in flood research.

---

<sup>30</sup> Morris, Henry M. *The Genesis Record*, San Diego, California: Creation-Life Publishers, 1976, 196.

# Noah's Flood – The Bible, the Science, & the Controversy

By Jane Albright, P.E.

## Part 4 – The Controversy

### Recap

So far in this series, we have looked briefly at the biblical account of Noah's flood and three well-known theories for how it might have occurred. In Part 1, we saw that the Vapor Canopy Theory (VCT), built upon the framework of atheist Isaac Vail, lacks biblical and scientific support, and few creation scientists today view the VCT as scientifically or biblically viable.

In Part 2, we discussed the Hydroplate Theory (HPT), a flood explanation that is consistent with the biblical record and relies on the application of God's laws of science without invoking extra-biblical miracles to solve scientific problems. HPT also explains many of the unexpected features of today's Earth and solar system. In addition and uniquely, the HPT has successfully predicted many later discoveries on Earth and in space, powerfully strengthening its case as a viable flood explanation.

In Part 3, we saw that Catastrophic Plate Tectonics (CPT), which is built upon the secular uniformitarian plate tectonics theory (PT), inherits PT's technical problems and creates some of its own. To solve these problems, CPT relies on multiple miracles not mentioned in the Bible. Further, the CPT scenario is not consistent with the biblical account.

Nonetheless, the major creation science organizations currently oppose HPT; have published misleading information about it; squelch rebuttals from HPT supporters; have privately and publicly discouraged others from investigating the HPT for themselves; and some have falsely accused Dr. Brown of threatening to sue the Institute for Creation Research (ICR). Instead, they promote CPT despite its many scientific problems and lack of biblical support; another explanation with far less scientific and biblical support, or take no position at all, maintaining that developing a viable flood explanation is beyond the realm of scientific research.

All but one of the 16 creationist scientists and leaders whom I interviewed agreed that there was harmful division in the creation research community over this issue and expressed hope that it could be resolved. In this final part of our series, we will explore some of the issues that divide us.

### The History

In his video production, Pastor Bob Enyart refers to the creation community's opposition to Brown and the HPT as the "elephant in the room."<sup>1</sup> He traces its roots to more than 30 years ago. Brown frequently received questions about the VCT during the one-hour Q&A sessions that concluded his creation seminars. (Between 1981 and 1999, Brown conducted 200 full-day seminars in the United States and Canada.)

Brown says, *"I never brought up the subject, and always tried to make my answer accurate but brief. I knew how explosive any opposition to the VCT was, but in about half the seminars, someone in the audience would*

---

<sup>1</sup> *The Global Flood and the Hydroplate Theory*. Produced by Real Science Radio ([rsr.org](http://rsr.org)), 2014. DVD/Blue-Ray.



*ask about it. I could see the crestfallen expressions on many in the audience when I laid out problems with the canopy theory. I am sure that many people were calling ICR and reporting heresy in the creationist ranks.”*

Remember that ICR’s founder, Henry Morris, popularized VCT in his book *The Genesis Flood*, and VCT was the accepted flood explanation for decades afterwards. To expose VCT’s scientific and biblical flaws in the 1980’s was virtual heresy and perhaps viewed as an attack on the venerable Morris himself. As Pastor Enyart says, broken relationships are difficult to heal, *“even though now they all agree with him [Brown]!”*

As word spread that Brown opposed the VCT, repercussions followed. In a cordial telephone conversation in 1982, Morris asked Brown to set up his own organization, one not affiliated with ICR.<sup>2</sup> Then in 1984, Morris published *The History of Modern Creationism*, which included a negative description of Brown’s leadership during his tenure as head of the mid-west office of ICR.<sup>3</sup> The second (1993) edition of Morris’ book omitted that negative section. According to Brown, the reason that Morris’ deleted the section from his updated edition was a result of a discussion the two men had about the single source of that misinformation, someone who wanted to be a board member on Brown’s new organization but was not selected.

Brown adds, *“Unfortunately, Henry Morris did not first check the facts with me. Later, he learned how incorrect that piece was, so he removed it from the second edition. However the damage was done. Demand for our seminars dropped, and people even began canceling seminars that were already scheduled. I closed our Chicago office and moved to Phoenix to be near my aging parents and consider our next steps. Peggy [Brown’s wife] went back to teaching.”*

Brown’s fall into disfavor with ICR over VCT seems to have encouraged additional, unnecessarily severe opposition from other creation scientists with competing flood explanations and gossip from others. Thirty years later, the four largest creation organizations and their followers are still largely opposed to HPT, damaged relationships remain unhealed, and false gossip and misinformed criticisms continue.

Here, we will briefly examine some of the reasons for this division and close with thoughts on how we can move forward with restored trust and mutual respect, even while acknowledging our differences.

## Appealing to Authority

As I quickly discovered in my interviews, many in the mainstream creation science community today dismiss HPT because “few creation geologists support it.” For example, the recently-retired former President of CMI, Dr. Carl Wieland, told me, *“It is something I can’t help paying attention to. Over the years, I’ve known many qualified geologists in the creation science movement. I can’t help noticing that in the Brown camp, there is a real paucity of geologists who support it.”*

In another example, the author of one online CMI article mentions the biblical strengths of HPT but then states, *“Yet it has failed to attract the support of many creationist geologists and geophysicists, many of whom have no reason to reject a successful flood model.”*<sup>4</sup> This claim, from an extraordinarily accomplished and highly

---

<sup>2</sup> In the late 1970’s, Brown decided to retire from the Air Force - foregoing his next opportunity, an important assignment as Director of the Air Force Geophysics Laboratory near Boston – in order to devote more time to his creation studies, lecturing, and writing. Upon his 1980 retirement from the military, Brown declined a job offer from a large corporation in order to become the Director of the “ICR Midwest Center” in the Chicago area at Henry Morris’ request. Brown began presenting creation seminars while serving in this capacity.

<sup>3</sup> Morris, Henry M. *A History of Modern Creationism*. San Diego, CA: Master Book Publishers, 1984. (This incident is also discussed on page 296 of the book *Christian Men of Science: Eleven Men Who Changed the World* by George Mulfinger and Julia Mulfinger Orozco.)

<sup>4</sup> Sarfati, Jonathan. “Flood Models and Biblical Realism.” Flood Models Biblical Realism. Accessed February 07, 2016. <http://creation.com/flood-models-biblical-realism>.

respected creationist, is false on its face. Scientists, throughout the history of science, including creation science, are highly competitive and often guilty of “groupthink.”

*Arguing against HPT* because some creation geologists oppose it is reasonable. *Dismissing HPT* outright because some creation geologists oppose it is to commit the logical fallacy of an “appeal to authority.” It is similar to the secularist who says, “*Creation must be false because most scientists believe in evolution; therefore, I don’t need to investigate the case for creation myself.*” **Further, not a single creation geologist with whom I spoke had actually read the entire Hydroplate Theory, and their remarks revealed a great lack of understanding regarding it.** Most simply repeated HPT criticisms that originate from CPT authors and their allies.

Pastor Kevin Lea of Calvary Church Port Orchard in Washington State is a passionate apologist for creation and the flood and has a naval nuclear engineering background. After his own in-depth study of the HPT, he wondered why so many in the major creation science groups were opposed to it. He relates, “*I contacted other prominent AiG and ICR detractors of Walt’s theory trying to learn their technical reasons for disagreement. Not one responded with any kind of technical argument, written or oral. What continued to shock me was that none had read the book. One detractor, Russ Humphreys of ICR, agreed to make a technical response if I would send him a free copy of the book. I sent the book. Six weeks later, he told me that he still had not read the book, did not intend to, and would not make any kind of technical response, since he knew the Catastrophic Plate Tectonic Theory was correct and therefore the Hydroplate Theory had to be wrong.*”

In my own experience over the 18 months or so that I have worked on this project, it has been amazing to observe the devotion of some geologists to PT/CPT *despite* that:

1. The PT/CPT is inconsistent with the Bible
2. CPT relies on numerous ad hoc assumptions to work
3. The CPT explains very few features of our earth and contradicts many
4. The CPT has demonstrated little or no predictive capability, a key hallmark of a viable scientific theory
5. The HPT is consistent with the Bible
6. The HPT is consistent with laws of physics
7. The HPT explains numerous features of our earth and solar system
8. Many predictions based on the HPT have already been fulfilled.

So why *do* these creation geologists oppose HPT? We’ve seen two reasons already – Brown exposed the scientific flaws in the VCT in the early 1980’s and that offended ICR and other influential VCT supporters. Further, HPT contradicts CPT, and that offends influential CPT authors and supporters today. But I’ve learned that there is more to it than this.

## Challenging an Established Paradigm

That some creation geologists are antagonistic to the HPT – will not even read it – is not surprising because the HPT is a radical departure from the established paradigm, which is plate tectonics. All geologists were schooled in plate tectonics for many years, and most accept its core aspects as fact. (Remember that CPT is plate tectonic theory, only accelerated a billion-fold by assuming miracles not mentioned in the Bible.) Plate tectonics is the accepted paradigm and basis for today’s secular *and* creation geologists – their theories, talks, publications, books, and videos.

However, the HPT rejects plate tectonic theory and re-interprets the physical evidence in light of the Bible and the laws of physics. In fact, one of my interviewees stated, “... *I know of no one that does not believe in plate subduction. This is a significant problem for his [Brown’s] model... And a lot of people have not bothered to*

*read it because he doesn't believe in plate subduction.*"<sup>5</sup> It appears that asking a geologist to consider the HPT is somewhat like asking my atheist friend to consider the evidence for creation. She doesn't even want to consider it because it conflicts with her established paradigm.

The history of science is replete with examples of the inherent bias against any new theory that challenges an established paradigm. Well-known examples are the discoveries of Copernicus, Galileo, and Semmelweis.<sup>6</sup> Thomas Kuhn, in his classic, The Structure of Scientific Revolutions (1962), explained how and why this happens:

1. Each scientific advance brings with it a cadre of scientists (the "experts") who understand and teach it in the universities. Their prestige, power, and income derives from this new advancement, which becomes the reigning paradigm. Professors train many graduate students who become the next generation's teachers of the reigning paradigm, and so forth.
2. After years with the "reigning paradigm" however, its proponents usually begin to notice anomalies—observations that contradict that paradigm. At first, such anomalies might be ignored. But then *"...its defenders will do what we have already seen scientists doing when confronted by anomaly. They will devise numerous articulations and ad hoc modifications of their theory in order to eliminate any apparent conflict."*<sup>7</sup>
3. If however, the anomalies continue to accumulate without resolution under the reigning paradigm, someone will propose another theory, one that explains not only all that the reigning paradigm did, but the anomalies as well. *"Almost always, the men who achieve these fundamental inventions of a new paradigm have been very young or very new to the field whose paradigm they change... These are men who, being little committed by prior practice to the traditional rules of normal science, are particularly likely to see that those rules no longer define a playable game and to conceive another set that can replace them."*<sup>8</sup> This brings hostility from "the establishment" – scientists, professors, textbook publishers, and universities who fear loss of their prestige, power, and income. Thus, a crisis results. Such a crisis *"may end with the emergence of a new candidate for paradigm and with the ensuing battle over its acceptance."*<sup>9</sup>

Creation science is a major paradigm shift from secular science, which rejects outright any supernatural explanation for the existence of the world, its inhabitants, and the rest of the universe. This current battle over flood explanations is a minor paradigm shift, understood primarily by active creationists. But a huge paradigm shift will likely follow because a correct understanding of the flood seems to explain hundreds of anomalies that contradict (1) the theory of evolution, (2) plate tectonic theory, and (3) the theory for the origin of the solar system. The global flood is the explanation for many of these anomalies. The HPT provides a scientifically and biblically-consistent explanation for the flood in a way that students at many levels can understand.

Consider fossils. A fossil is formed when an animal or plant dies and is buried in sediments (mud, sand) that will harden into rock, preserving the organism's shape and often, even its biological tissue. Where did all these sediments come from? If they accumulated over thousands of years, as the evolutionists maintain, wouldn't the plants and animals have decayed (or been eaten) long before they were completely buried? Where did the cementing agents come from? Why are fossils of sea life found on top of every major mountain range on Earth, even on Mount Everest, which rises more than five miles above sea level? At present, the HPT best explains

---

<sup>5</sup> In Table 4 at [creationscience.com/onlinebook/Trenches5.html](http://creationscience.com/onlinebook/Trenches5.html), Brown lists 17 reasons why plate subduction cannot occur.

<sup>6</sup> Medical pioneer Dr. Ignaz Philipp Semmelweis (July 1, 1818 –August 13, 1865) promoted antiseptic procedures. His life provides a classic case study of what happens when a scientific community rejects an alternate view – even in the face of evidence – because it is not supported by the majority. [wikipedia.org/wiki/Ignaz\\_Semmelweis](http://wikipedia.org/wiki/Ignaz_Semmelweis)

<sup>7</sup> Kuhn, Thomas S. "The Response to Crisis." In *The Structure of Scientific Revolutions*, 78. Fourth ed. Chicago: Chicago Press, 2012.

<sup>8</sup> Kuhn, *op. cit.*, 90.

<sup>9</sup> Kuhn, *op. cit.*, 84.

the sources of the sediments and cementing agents, the rapid burial necessary for fossil formation, the one-time horizontal layering, and how the layers then folded, buckled, or inclined globally. The HPT also provides a source for the additional water needed to flood the entire earth.

Most proposed theories, of course, never become a ruling paradigm. The new theory must survive challenges in broader and broader forums. Brown has a standing offer to engage in a moderated, public oral and written debate on the HPT with anyone who is willing to read the entire theory beforehand. I proposed this to each HPT critic I interviewed and to another 16 creationist leaders who had declined to be interviewed. All declined (directly or by non-response).<sup>10</sup> Reasons included being too busy and objections to his proposed format (which includes recorded and transcribed phone exchanges) and the requirement for the debate to be made available to the public. Brown is now even more eager to debate creation and the flood versus evolution with a leading evolutionist.

## The Tongue – Slander and Gossip

Most of my interviews were cordial, engaging, informative, and open. However, more than a few with whom I communicated repeated false gossip and outright slander. For example, several repeated statements like *“Walt can’t be trusted”* and *“Walt is a nasty person.”* Dr. Baumgardner wrote me, *“From the nasty interactions that Brown had with ICR in the 1990’s, including threats of lawsuits ... Walt seems to have a very short fuse with people who cross him. I personally have no desire to deal with such nastiness.”* After reading for myself all the correspondence on the “lawsuit issue” and sharing with Dr. Baumgardner the actual history, he then replied, *“I admit my understanding of the interactions between Walt Brown and ICR was all based on second-hand sources on my part.”*

Shockingly, even the president of the Creation Research Society, Dr. Don DeYoung, said to me, *“You may even be aware that there have been lawsuits between Walt Brown and ICR. Saying that they have stolen each other’s ideas.”* I respectfully challenged him on this because I knew that it was not true. He claimed to have documentation proving that it was true, but declined to produce it. I then asked him to speak directly with Brown and me on this subject, but again he refused.

What is the source of this false gossip? It sprang from events in 1989 when an ICR creation geologist (and CPT co-author) read Brown’s breached lake explanation for the formation of the Grand Canyon in the 5<sup>th</sup> edition of Brown’s *In the Beginning* and then adopted and published it as his own. For several years, HPT readers shared their concerns about this plagiarism, but Brown thought it best not to respond. Eventually, however, this geologist began telling others that Brown had plagiarized *his* work. This lie began affecting more people and endangering at least one person’s investment in a costly creation project. Having read all of the voluminous correspondence between the parties in this dispute (which others can do as well), I can say without reservation that Walt Brown never threatened or implied that he might sue ICR. Instead, he laid out a proposal for impartial Christian mediation with this individual and his superior at ICR.<sup>11</sup> This was mostly successful, even though the geologist subsequently broke the mediation agreement.<sup>12</sup>

It is clear that those who had knowledge of these interactions either carelessly or intentionally told others that, *“Brown was suing ICR.”* The Scriptures (1 Corinthians 6:1-8) teach that believers should avoid going to court against one another. As such, this false gossip, which has spread for decades by leaders in the creation

---

<sup>10</sup> However, in April 2016, one CPT proponent agreed to speak with Dr. Brown by informally telephone. The result was an amicable discussion, but largely unfruitful since this person had not read the HPT and had no rebuttals for any of Dr. Brown’s challenges to the CPT. An offer for follow-on discussions that would be moderated and recorded was disallowed by this person’s organization.

<sup>11</sup> Christian mediation provides an alternative way to resolve disputes within the church without going to court.

<sup>12</sup> After receiving many inquiries over the years on this, Dr. Brown added a summary of the issue in his book with a link to the complete history and correspondence. See Endnote 39 at [www.creationscience.com/onlinebook/GrandCanyon17.html](http://www.creationscience.com/onlinebook/GrandCanyon17.html).

movement, impugned Brown's reputation and continues to harm him today. I hope and pray for public retractions from Drs. Baumgardner and DeYoung on their false allegation and have arranged for such to be published online at [rsr.org/retractions](http://rsr.org/retractions).

My research indicates that the history of this controversy includes other instances of slander against Brown's scientific integrity and personal character, which has occurred within creation circles for decades and with apparent impunity. Our Lord commands us to control our tongues, and the Scriptures contain grave warnings about the evils of gossip.<sup>13</sup>

But even if Brown *were* a nasty person, this would not be a valid reason to dismiss the HPT from consideration. Many brilliant scientists would be unlikely to win popularity contests.

## Peer Review

Another criticism is that Brown will not allow his work to be peer-reviewed. Brown recalls this criticism circulating since the first International Conference on Creationism in 1986. At that ICC, he chose to present the HPT in the General Track instead of the Professional Track, which included an automatic peer review. Brown says, *"I did that for a very simple reason. My challenge, and I believe the challenge of most creationists, is to explain technical topics so laymen can understand them. Technical people are not usually turned off by that and were free to attend."* No one from the large ICR contingent at this conference attended Brown's two-hour presentation. And thus began *"Brown won't allow his work to be peer-reviewed."*

Consider though, what is "peer review?" In science, the peer review process is intended to ensure that scientific work to be published in a journal meets quality standards for good research – for example, it acknowledges and builds upon other work in the field; it relies on logical reasoning and well-designed studies; backs up its claims with evidence; and so forth. The journal editors ask other scientists who work in the same field (the "peers") to provide feedback on the article.

While a quality peer review provides benefits, it is rarely as rigorous and pristine as we might expect, and the process has its detractors. Studies have shown that peer reviewers often fail to identify technical errors and even false data. Some critics also warn that peer review leads to the suppression of some scientists' results. *"...a reviewer – an established scientist in his field – might reject research that conflicts with his own. Such a reviewer might be accused of maintaining the 'scientific establishment' at the cost of innovative ideas."*<sup>14</sup>

A recent article in the journal *Nature* explored the peer review process from an historical perspective concluding that, *"Current attempts to reimagine [re-define] peer review rightly debate the psychology of bias, the problem of objectivity, and the ability to gauge reliability and importance, but they rarely consider the multilayered history of this institution... The imagined functions of this institution are in flux, but they were never as fixed as many believe."*<sup>15</sup>

As we have seen, creationists are not bias-free either. When asked how CMI's editors find peer reviewers, Dr. Walker told me, *"It is a challenge. We are aware of who is in whose 'camp' on particular issues. We will often try to send it to one or both sides and maybe a third person, someone new to the issue. There are people who will be objective – go either way, depending on the evidence."* With a chuckle, he adds, *"People say you can decide the outcome of your paper by the reviewers you choose."*

---

<sup>13</sup> For example, Leviticus 19:16, Proverbs 10:18, Galatians 5:16-26, and James 3:8-10.

<sup>14</sup> Harris, William. "How Scientific Peer Review Works." HowStuffWorks: Science. Accessed February 07, 2016. <http://science.howstuffworks.com/innovation/scientific-experiments/scientific-peer-review1.htm>.

<sup>15</sup> Csiszar, Alex, "Troubled from the Start." *Nature* 532, 21 April 2016, 306-308.



When asked why he does not publish in the mainstream creation journals, Brown states, “*Those making the complaint define ‘peer review’ as writing a short article and submitting it for their approval. I would need to summarize 360 pages of evidence and explanations in a short article, omitting much and leaving readers with many honest questions. Such an incomplete article would be more confusing than helpful. I believe I can make best use of my time and make HPT accessible (for free) to a larger and more diverse audience by independently publishing my work in my book and at the CSC web site.*” (Brown’s work, *In the Beginning*, is currently in its 8<sup>th</sup> print edition, and the 9<sup>th</sup> edition is available online free of charge.)

In fact, Brown has received constructive criticism from scores of scientists and engineers, both creationists and evolutionists, throughout his career as a creation scientist, and continues to do so. Brown adds, “*I welcome informed criticism from people who have actually read HPT, and I frequently receive helpful comments from many technically sophisticated people. In fact, those investigating the HPT know that I wish someone would formally peer review the HPT, provided: (1) The reviewers claim to be neutral, are named, and have read the latest version of the Hydroplate Theory; (2) I am allowed equal space to respond; (3) Both sets of comments are available to the public.*”<sup>16</sup>

## How We Disagree

As we’ve seen, some of the reasons that the HPT is opposed by the mainstream creation science community have nothing to do with the HPT’s technical soundness or biblical consistency. That does not mean, however, that other creation researchers have no technical objections to the HPT – we’ve looked at some of these in Part 2. This is the normal and expected state of research in progress. Our scientific understanding often advances as theories are discarded or corrected and refined through informed debate on areas of disagreement. Such debates between researchers can and should be transparent, cordial, and ruthlessly accurate. Unfortunately, this is not always the case.

*Unless the LORD builds the house,  
they labor in vain who build it.*  
Psalm 127:1a (NASB)

For example, I was surprised to learn that creation journals do not, as standard practice, provide an advance courtesy copy of a critique to the theory author for fact-checking before publishing it to a wide audience. As a result, published criticisms can be inaccurate. While it is certainly not wrong to disagree with someone’s theory, it is wrong misrepresent it.

## People are People (unfortunately)

When you also factor into this controversy the vast differences in personality, culture, and communication styles; differences in technical training and experience, biases, perspectives, and approaches to research and problem-solving; along with personal and organizational pride – it is not at all surprising that there is conflict and misunderstanding.

## Where To From Here?

Yet as followers of Christ, we have God’s abundant grace and wisdom available to help us resolve these conflicts and misunderstandings. In fact, God commands believers to be “*diligent to preserve the unity of the Spirit in the bond of peace.*” (Ephesians 4:3)

Creation science organizations are obligated not only to God, but to the larger body of Christ that supports them to govern in accordance with biblical principles, not the world’s methods and standards.

---

<sup>16</sup> Usually, reviewers are anonymous and their comments and the author’s responses are unavailable to the public.



Certainly God will answer our prayers for reconciliation as we humbly seek His direction to restore trust, respect, and productive communication. As a start, I propose the following challenges and changes:

### **Challenges to Creation Researchers**

Ask God how you, as an individual and/or leader in your organization, can help bring about restored trust and mutual respect in the creation science community. ([Ephesians 4:3](#))

When you have an issue with another person (or his theory), go directly to that person first – in a manner that is (in our case) both scientifically professional and Christ-like. Remember that critiques published without input from the originating source frequently lead to misinformation and then division. ([Romans 15:2-7](#))

When you disagree with another researcher, do your due diligence to ensure you understand their position before criticizing it to others. In accordance with professional courtesy, send an advance of your critique to the other person to ensure that you have accurately represented their work before publishing to a wide audience. ([Proverbs 10:9](#))

Agree to disagree and debate the science without personal attacks or unseemly defensiveness. ([Ephesians 4:15](#))

Do not gossip. Challenge others when they do. ([Proverbs 16:28](#); [Proverbs 20:19](#); [Romans 1:29](#)).

Know that your labor is not in vain ([1 Corinthians 15:58](#)).

***Special challenge to ICR*** – Consider how your organization can do more to inform the Christian lay community that creation scientists no longer view VCT as a scientifically or biblically valid theory for the global flood.

### **Challenges to the Church of Jesus Christ**

Know your Scriptures! As Bible-believing Christians, we are responsible to test *everything* – including scientific theories – against the truth of the Bible. ([2 Timothy 3:16](#))

Be assured that the ever-growing scientific case is on our side! Equip yourselves and your children to defend biblical truth using the wealth of resources available from creation ministries. ([Proverbs 22:6](#))

Focus on the majors. Do not succumb to “information overload” or get side-railed by minor details that may still be in dispute among creation scientists. Pray for the Lord to lead you to the best information and right conclusions. ([James 1:5](#))

Do not believe everything you read and hear about creation or flood theories and creation scientists. Check out the facts for yourselves. Gossip is evil and does much harm. Watch what *you* say and how you say it. (The Lord has shown me through this effort how far I have to go in this area.) We will one day all give an account. ([Romans 14:12](#))

Pray for creation ministries and those who labor in them. They face the ridicule of their secular colleagues and often experience professional and financial loss because of their stand for the truth of biblical creation. Pray that they would seek and follow God’s ways instead of the world’s. ([Proverbs 25:2](#); [1 Samuel 12:24](#), [Isaiah 55:8-9](#))

Ask God to pour out a spirit of grace, humility, repentance, forgiveness, healing, and restored trust among the creation science community and its supporters for His glory and the benefit of the entire of Christ. ([Romans 14:19](#); [Psalm 133:1](#); [Psalm 17:23](#))

Financially support creation ministries as you are able. Unlike institutions that support evolution, creation ministries receive no public funding and depend upon the financial support of each believer and of their churches. ([Philippians 4:19](#))

### *Acknowledgements*

A heartfelt thank you to the scientists, creationist leaders, and pastors who graciously gave of their time to help me prepare this series of articles. Any mistakes are my own. My prayer is that God will use this effort to bring about restored trust and mutual respect among creation scientists as they seek truth about the most cataclysmic geologic event in Earth's history.

---