When God Shakes the Earth

Bible prophecy says massive earthquakes, tidal waves, huge storms and catastrophes in unimaginable intensity are to shake this earth just prior to Christ's return. Are we now entering a time of increasingly devastating natural calamities? Is the eruption of Mount St. Helens only another in a long history of natural disasters, or a harbinger of something much worse to come?

"The earth is completely broken down; the earth is totally rent—the earth is moved exceedingly. The earth shall reel to and fro like a drunkard, and shall be removed like a cottage; and the transgression thereof shall be heavy upon it; it shall fall, and not rise again. And it shall come to pass in that day, that the Eternal shall punish the host of the high ones that are on high, and the kings of the earth upon the earth" (Isaiah 24:19-21).

Are all earthquakes, tidal waves, volcanic eruptions and hurricanes only chance occurrences of natural forces? A study of geologic history would reveal that the 1980 eruption of Mount St. Helens, for all its massive scope and far-reaching effects, is but a tiny and insignificant event in an ages-long series of calamitous and catastrophic occurrences that have built such massive mountain ranges as the Rockies, Himalayas, Pyrenees, Hindu Kush, Alps, Andes, Atlas and the Cascades of the Pacific Northwest.

The very continents themselves, their present location, form and shape, represent mute testimony to monstrous catalysms that defy human imagination wherein whole continents were submerged beneath the seas, perhaps emerging and resubmerging many times until the earth as we know it came to being.

Certainly the Mount St. Helens eruption was a major disaster. The effects, while severe enough, were but miniscule in comparison to those of some of recorded history's greatest disasters.

Krakatoa

The most stupendous explosion ever recorded by man was the blast that destroyed Krakatoa, a volcanic island that was located in Sunda Strait, between Java and Sumatra. But even this explosion, taking place in 1883, was miniscule in comparison with that which had occurred at some point long prior to any

Europeans exploring the region. In that volcanic blast, a mountain so large had been blown into the stratosphere that it left a broken crater ring, visible only by a string of islands which represented the outer portions of the base of an ancient massive mountain which had completely disappeared. As time went on, a new series of cones gradually built inside this ring of islands. The largest of these, Krakatoa, gradually rose to a height of 2,623 feet above sea level. By 1877 the Sunda Strait was being repeatedly rocked by earthquakes. Krakatoa was an uninhabited island whose lower slopes were covered with thick tropical growth. For the next several years, as the seismic activity continued, Krakatoa appeared quiet. Then the mountain began sending columns of smoke and ash into the air. The activity grew in intensity until gouts of pumice, ash and smoke were pouring out of the top of the cone, accompanied by explosions and earthquakes. Then, on Aug. 26, 1883, a series of imagination-defying detonations began. They came in quick succession, the four most violent on the following day, Aug. 27. As each titanic blast rocked the area, tens of thousands of cubic feet of the mountain were hurled into the skies, and massive clouds of ash and smoke rose into the upper stratosphere, reaching upward more than 50 miles.

As the solid matter came raining down, it completely buried the thickly covered islands in the vicinity, destroying the lush tropical jungles and greatly increasing the land mass of those closest to Krakatoa. Here and there new islands were formed as massive amounts of rock splashed into the shallow seas and built up above sea level. The amount of material belched up by the mountain as it eviscerated is incalculable.

Large quantities of ash fell over an area of 300,000 square miles as about five cubic miles of rock fragments were roaring into the skies. The hardening foam of volcanic explosions creates the familiar "pumice," or the only rock known to float, because of its light weight and porosity. Ships reported masses of volcanic pumice floating in the seas too thick to penetrate.

With each explosion, the mountain exposed more of the white-hot core of molten lava rising in its throat to the in rushing seawaters. As the waves rushed in, crackling explosions occurred, and massive columns of steam boiled into the skies. But the seas prevailed, eventually, until the rising lava cooled and temporarily stopped the upward surge of magma from beneath the earth's crust. Finally the pressure from beneath overcame the temporary plug in the mountain's throat and another titanic explosion occurred. This happened again and again

until a huge cavity, now 1,000 feet below the level of the sea, was all that remained of an island formerly 2,623 feet high.

Lamps were being lit at noonday in Batavia, Java, about 100 miles distant. It became black as midnight in towns and villages for 150 miles as the massive cloud of dust expanded. The tropical upper winds began carrying the dust from east to west at about 73 miles per hour until the entire space between 30 degrees north and 45 degrees south was covered with diffused material. Eventually this upper-level layer of dust was carried completely around the world. It was visible in North America, South America, Asia, Europe, Australia and from the far north of Scandinavia to the tip of the South Africa.

An atmospheric paroxysm, or shock wave, traveled completely around the world no fewer than seven times, and the actual sounds of the explosion were heard at Bangkok, in the Philippines, Ceylon, western and southern Australia and out into the Pacific islands, as much as 3,000 miles distant.

Meanwhile, the blast had created two kinds of titanic sea waves: a long wave which surged outward at about one hour intervals, and a ragged, more erratic short wave. In one combination of both, a wall of water 120 feet high smashed through towns and villages in the islands, killing an estimated 36,000 humans and hurling boats and ships far inland. The waves spread out through the Indian Ocean, rounded the Cape of Good Hope and finally spent themselves in the Atlantic and the English Channel.

World weather was affected for years, even if records are scant, and the whole human race was treated to spectacular, blazing red sunsets for several years after Krakatoa's explosion.

For the next 44 years the region was quiet as life gradually began to be carried by the winds, waves and birds, and tropical vegetation began to appear once more in areas that had been completely buried in tons of rock and ash.

Then, on Dec. 29, 1927, the sea floor began to erupt in the same region where previous cones had formed. By one month later the growing flow of lava had begun to emerge from the sea. It was named "Anak Krakatoa" (Daughter of Krakatoa) by the natives as soon as it appeared. For years following, the Daughter of Krakatoa continued with sporadic activity until it had reached a height of 360 feet above sea level by 1953. By the early 1960s the mountain was still continuing

The Ring of Fire

If one were to view the globe in current geophysical terms, studying the makeup of our planet from the overview now possible through satellite surveys and mapping of the ocean bottom, the traditional approach to geography would be dramatically altered.

One would see the whole of the crust of the earth as a series of "tectonic plates" of greater and lesser thickness "floating," as it were, on the magma beneath. While most of the earth appears to be water from the vantage point of space, the oceans themselves are but plains, valleys, mountain ranges, deep rifts and volcanic peaks covered to one degree or another by the waters of the sea.

There are three "rings of fire" which girdle the globe—the first extending along the entire Pacific coasts of North and South America and extending to Asia, the second extending from the Mediterranean through the East Indies (where Krakatoa blew up) and the third lying beneath the seas, cropping up now and then as islands in the midocean ridges.

Consider our western hemisphere. Beginning with the outermost tip of the Aleutian chain, you will notice some of the most spectacular mountain peaks in the world—and frequently notice volcanically active peaks, or mountains thought to be dormant (like Mount St. Helens was for so many years), but which were obviously active at some time in the past. An almost unbroken mountain chain, containing some of the largest mountains in the world (like McKinley, Wrangell, Torbert, Spurr and others in Alaska) extends from the Aleutians into Alaska, the Yukon, British Columbia and branching out to become the Rockies, the Cascades, the Sierra Madre range and other associated ranges in North America, becoming the Sierra of Mexico, the very active volcanic peaks of Guatemala (Fuego, Tajmulco, Acatenango, Irazu and others), Costa Rica, El Salvador and Nicaragua in Central America, and blending into the soaring Andes chain in South America.

Chimborazo, in Ecuador, soars upward to over 20,500 feet, higher even than famous Kilimanjaro of Tanzania (19,340 feet). Some of the most famous peaks in the Andes reach above 22,000 feet. The majestic Andes continue along the Atlantic coast of South America, extending through Colombia, Ecuador, Peru.

Bolivia and Chile to the "Land of Fire" (Tierra de] Fuego) at the tip of the continent, and Argentina.

Looking the other direction, this same chain dips under the North Pacific Ocean and then emerges as the volcanic chain of the Japanese Islands. Japan has been one of the most vulnerable areas in the world to massive earthquakes, accompanying tidal waves and potential volcanic activity. Spectacular Mount Fujiyama, long a symbol of Japan, sports rising steam from dozens of hot springs along its sides. Some far-out thinkers even proposed bombing the crater during World War II in the hopes a volcanic eruption could be triggered.

The four main islands, Honshu, Kyushu, Shikoku and Hokkaido, are all volcanic. From Japan, the ring of fire continues in the form of the major mountain chains of China and Tibet, the famous Himalayas featuring the mightiest peaks on the globe. The chain is broken by the Khyber Pass and the Bosporus-Dardanelles, and then continues into the Carpathians, the Alps and, finally, the Pyrenees, separating France from Spain.

The three "rings of fire" contain dozens and dozens of active volcanoes. Of the approximately 600 peaks which are active, some of the most famous are Mauna Loa and Mauana Kea, in Hawaii; Etna, Vesuvius and Stromboli in Italy and Sicily; Tristan de Cunha, in the Atlantic Ocean; and Popocatepetl and Paracutin, of Mexico. In addition to the 600 or so active mountains, there are another 10,000 volcanic peaks listed as inactive. Until 1980, Mount St. Helens was listed as among those.

But volcanic eruptions are nowhere nearly so famous for taking human life as are earthquakes. for all their spectacular displays.

Earthquakes in "Divers Places"

One of the great signs Jesus said would take place during the Tribulation, prior to His return to earth, is "...earthquakes in various places" (Matthew 24:7).

Are religiously inclined people correct in claiming earthquakes are always divine judgments on sinning mankind'? Or are some earthquakes (or most) merely the result of *natural* forces, with purely physical causes relating to the structure of the earth itself?

Any serious student of science would argue the latter is true. Atheists and agnostics would tend to see the mention in the Bible of earthquakes as the ignorant speculations of ancient seers who attributed purely natural phenomena to "God."

But are natural disasters and calamities always the judgment of God?

Let Jesus Christ answer.

When the curious pondered the philosophical question of divine wrath through mass, accidental death "...He answered them, 'Do you think that these Galileans were worse sinners than all the other Galileans, because they suffered thus? I tell you, No; but unless you repent you will all likewise perish. Or those eighteen upon whom the tower in Siloam fell and killed them, do you think that they were worse offenders than all the others who dwelt in Jerusalem? I tell you, No; but unless you repent you will all likewise perish' " (Luke 13:2-5).

Pilate had put to death a group, and another group had been the victims of supposed "natural" cause: the cascading collapse of a stone tower. Was an earthquake involved? The Bible doesn't say. Perhaps ancient mortar had so weathered that it finally gave way and the men were killed by the falling stones.

But, whatever the cause, Jesus denied it had a divine origin. He explained these unfortunate creatures were not being singled out as the special objects of God's wrath, sinners "above all else" and richly deserving their fate. No, they were the victims of purest chance. Jesus said when we repent God then intervenes (usually through His angels; 1 Corinthians 11: 10) to protect His people from such circumstances, but explained that these men were not singled out as victims to be killed by an earthquake or chance collapse of a stone tower.

All earthquakes are explainable through geophysical forces. Does this mean God does not, from time to time, specially intervene and directly use an earthquake for His purpose, or even bring about an earthquake? A little later we shall see.

For millennia, human beings have been wiped out by the tens of thousands in massive earthquakes. Quakes cause avalanches, huge earth slides that completely change the shape of whole mountains, burying towns and villages beneath millions of tons of rock, never to be seen again. They cause the dreaded "tsunamis" (the Japanese word for seismic, or "tidal," waves), huge surges of

water (not related to the tides at all, but misnamed) that can reach incredible heights, as the 120 foot wall of water that took 36,000 lives as a result of Krakatoa's explosions. Further, they can rain such clouds of pumice and ash as to bury whole cities (like Pompeii) and send torrents of red-hot molten lava flooding across the land, exterminating everything in its path. Huge splits and cracks can open up in the earth: whole buildings disappear. And, when the epicenter strikes near a modern city, the rupture of gas lines, electrical lines, water and sewer pipes creates havoc, sometimes (as in the disastrous San Francisco fire) resulting in greater destruction of life and property than in the guake itself.

The gas mains brings fires and the ruptured water main cannot put them out. In the aftermath, there is always the specter of polluted surface water and even subsurface wells, and disease.

Some of the most famous earthquakes of all time have occurred in the 20th century. While most Americans remember the San Francisco quake along the San Andreas fault—largely because of motion pictures, books and pictures—that quake, in 1906, caused only 700 deaths. By contrast, a quake that shattered Messina, Italy, just two years later took 75,000 lives, but most Americans would know nothing of it.

The largest loss of life comes when quakes hit the populated centers. Massive earthquakes have occurred in sparsely populated areas with little loss of life, and milder shocks, striking centers of population, have taken terrible tolls.

The earthquake that shook Kansu, China, in 1920 killed 180,000 people. Tokyo and Yokohama, Japan, were devastated by a quake whose combined effects (fires and tsunamis) wiped out 143,000 human beings. Only 12 years after the quake of 1920, Kansu, China, was again the scene of a giant earthquake, killing 70,000 more.

Sixty thousand died in Quetta, India, in 1935, and in 1939 Chillan, Chile, was the scene of a temblor that killed 30,000.

It may seem the most recent earthquakes are milder than those of the more distant past; comparatively fewer people died in the Los Angeles (Sylmar) quake on Feb. 9, 1971 (though property damage was extensive). But, as recently as 1960, Agadir, Morocco, was the site of a loss of 12,000 people from an earthquake. Two years later 10,000 died in Iran. and, again in 1968, an Iranian

quake killed 11,000.

The Peruvian quake of 1970 may be fading in many memories, yet it took 47,194 lives, buried whole towns and villages, caused tsunamis to come surging up the Pacific to cause damage to shore installations and shipping even to the California coast, and changed the whole shape of some of the Peruvian coastline.

In 1985, a temblor registering 8.1 on the Richter scale hit Mexico City and three coastal states, killing an estimated 25,000; and in December of 1988, a quake registering only 6.9, significantly lower than the most destructive quakes of the past, turned block after block of office and apartment buildings, housing developments, factories, schools and hospitals in the heavily populated towns of the northwest portion of Soviet Armenia into mounds of rubble, leaving between 40,000 and 70,000 dead, tens of thousands injured, and at least half a million homeless.

What causes quakes?

Our earth is about 70 percent water, as seen from space, and only about 30 percent land. But the oceans are like massive salt lakes resting on the rocky strata forming their bottoms, which are not unlike the features found on the continents: mountain ranges, deep, trenchlike rift valleys, isolated volcanic cones, plateaus and plains. All are found here and there on the sea floors.

This outer crust of rock (mostly sedimentary, or water formed) is composed of an upper and a lower layer. The upper layer is generally made up of the continents and their "continental shelves," or the shallower portion of the continents projecting into the oceans, prior to dropping into the abyssal depths of the sea floors. The lower layer, making up most of the sea floors, is called the "sima" and is mostly denser, hardened rock—formerly lava.

While the basic rock of most of the continents is granite, the heavier basalt lies beneath, and beneath the crust lies the "mantle" of the earth, a thick, plasticlike layer of rock about 1,800 miles deep with temperatures ranging from 1,600 degrees Fahrenheit to about 4,000 degrees.

Deeper within the earth are the outer core—about 1,400 miles thick and perhaps as much as 9,000 degrees Fahrenheit, composed, it is believed, of melted iron and nickel—and finally the inner core, perhaps consisting of pure iron and nickel in

molten form, perhaps 9,000 degrees.

The continents are thought to be "floating" as it were, on the molten mantle of the earth.

Around the entire crust are innumerable "cracks" in the rocks forming the continents and sea floors called "faults." With the recent advancements in geophysical knowledge related to satellite mapping and extensive oceanography, it is now known that the continents, sea floors, island chains and all geologic features of the crust are interrelated.

An analogy might be to soft-boil an egg, then gently crack the shell in dozens and dozens of places, but being careful not to break the skin inside the shell. The many pieces of shell left intact would represent the "tectonic plates" of the earth. The cracks would represent the innumerable fault lines, or cracks, in the crust. The mostly fluid yolk represents the incredibly hot core of molten iron and nickel, and the egg white would represent the "mantle" of superhot magma upon which the continents and ocean beds were "floating."

One could softly squeeze the egg, moving the cracked shell about a little, and yet not break the skin.

But here and there, along the three-part "ring of fire" on our earth, the molten magma of the mantle intrudes close to the surface. Sometimes movement of the magma causes increased melting of upper surface rocks and materials, creating compressed gas, ash, dust and steam.

In a volcanic explosion, such as that of Mount St. Helens, the magma causes rapidly expanding gas to rise in the vent holes (of which there may be many in some volcanoes) and in the core of the volcano. This explosion is not unlike that of a modern bullet. When the gun hammer smashes against the "primer" (a small "cap" of highly explosive material that serves to ignite the more slowly burning gunpowder), the primer vents its burning gases into the powder, causing it to explode. The rapidly expanding gases then dislodge the bullet from the throat of the shell and send it speeding out the barrel of the gun. The gases continue to expand until the bullet has actually left the barrel so that the effect of the burning powder is not contained merely in the shell casing but continues to burn behind the bullet and even to be partly expelled (seen in tiny flashes of streaking fire) as the bullet departs the muzzle.

The "bullet" in the throat of a volcano may be cubic miles of rock, earth, trees and even glaciers and lakes!

But, even without magmatic intrusions along fault lines or vent holes (as in a volcano), there is continual stress along the fault lines of the earth as the continual rotation of the earth, the effect of erosion, weather and tides contribute to earth movement.

Many believe the movement of the crust, in bending, building stress and then giving way or "snapping" suddenly as pressure is relieved (causing earthquakes), can be partially brought about by man.

By pumping vast amounts of oil, natural gas and salt-water from the deep wells, it is believed the subsurface rocks may collapse, causing quakes. It is claimed a whole series of smaller shocks in the Denver region was virtually "man-made," because of the pumping of wastes by the Army deep within the rocks in the earth's crust. When it was resumed, the quakes resumed, until it was as if man could "turn on and off" minor earthquakes at will.

But most earthquakes are not related to volcanic activity directly, even if molten rock, deep within the mantle might be an indirect cause.

Few know that there may be as many as one million earthquakes of greater or lesser intensity in any given year, most of which are taking place along the hundreds of fault lines beneath the seas, causing little or no damage.

As the gradually changing masses of molten rocks in the earth's interior shift, the crust is being continually squeezed and stretched. We think of rocks as very hard, and they are. Yet, to a degree whole mountain ranges of stratified or metamorphosed rocks can bend and stretch to certain tolerances.

When the forces from beneath become greater than the rocks can tolerate, they rupture, causing seismic waves that travel in three ways: compressional, shear and surface.

Compressional waves are like sound waves; all these waves of shock are measured by seismographic stations all about the earth.

The compressional waves pass completely through the earth in about 21 minutes.

While no part of the earth is completely "immune" from earthquakes (there is no such thing as an "earthquake-proof" region), about 95 percent of all earthquakes occur in two of the great "rings of fire," or earthquake belts, represented by the huge chain of mountains circling the Pacific and what is called the "Alpide" belt: the one extending from North Africa and Spain throughout southern Europe and to the Himalayas, Hindu Kush and beyond.

In recent years, seismology has made dramatic strides. With improved mapping of fault lines, and the constant discovery of smaller, little-known fault lines contiguous to the major ones, scientists have been moving increasingly toward that point in time when earthquakes may be "predicted" on a fairly accurate basis.

Today no such predictions are possible. However, within the framework of years, scientists are able to indicate where major quakes are *likely* to occur.

Careful measurements of earth movements along a fault line, as in the case of the highly visible San Andreas fault in California, provide information of impending rupturing of the rocks in the fault, and the resultant earthquakes. It is safe to say that the longer the time from the last great quake along such a fault, the closer we are to the next big one.

All of this purely physical, the *natural* result of known causes, the continual movement of earth as it rotates on its axis and makes its monthly and yearly trips in our solar system.

But what does *God* say about earthquakes? Are they always caused only by the stresses along known fault lines? Are they only *coincidental* with human sins and only viewed as the display of divine wrath *long after* the events, as ancient writers tried to find reasons for massive human loss of life and tragedy?

How God Used Earth's Forces in the Past

God's Word says the Eternal created the geophysical planet in six days (Genesis 1).

Endless theological arguments concerning creation week have arisen, and it is not our intention to laboriously explain and challenge each one of these. Some feel the "days" of creation week were in fact ages; others feel the whole tale is nothing but an ancient Hebrew myth; still others see the instantaneous creation of the earth as we know it today in exactly six days.

None of the above is true.

A careful study of the meaning of the words involved and the Bible *itself* shows the famous "creation week" of Genesis 1 and 2 was in fact a much later *recreation* of an original earth which was created countless ages in the past. The Eternal God is the Creator. However, *God does* work oftentimes through "natural" forces, using the very physical laws which He Himself has instituted and which He sustains.

The serious student of historic and dynamic geology, biblical prophecy and geophysical sciences of today would have no quarrel whatever with claims of great age for the earth: 4 1/2 billion years or more.

Actually, the rocks themselves prove there were many emergences and burials of the land masses of our earth beneath the surface of the sea.

The important thing to realize is Almighty God is shown to have directly intervened in the *forming of the continents themselves*, by divine command, causing "the dry land to appear" where, previously, the whole world was viewed to be nothing but the "deep," vast expanses of endless oceans.

This reshaping of earth's surface prior to the creation of Adam could have occurred ages after earlier stages of creation, wherein the world was populated by countless billions of the creatures we find in fossil form today, such as the dinosaurs, amphibians, gigantic carrion-eating birds, winged reptiles and monstrous land mammals.

Even the casual student of paleontology is brought very quickly face to face with the incontrovertible evidence of *sudden burial of* these incredibly huge populations of various life forms—and the fact that each of these life forms, in its own succession, "appears" and just as suddenly "disappears" in the record of the rocks!

One of the greatest weaknesses of the evolutionary theory is the astronomical number of "intermediate species" which are plainly missing!

By analogy, it is as if someone took a motion picture of you as a baby in diapers

gleefully playing with a rattle. Then, on your 40th birthday, he took a shot of you as a mature man, driving an automobile.

How many tens of millions of feet of motion picture film would have been required to have actually *watched* the gradual growth and development from the baby to the mature man? By way of analogy, such is the case with the "missing links" or missing intermediate species within the fossil record.

There would be overwhelmingly more creatures with partly formed scales, partly formed wings, ungainly, weird, undeveloped and *unfit to survive* relics of literally billions of intermediate species, than there would be the *finished forms!*

Suffice it to say that the fossil records in the rocks show such mammoth cataclysms in the past that they completely defy human imagination. It is doubtful that the most imaginative special effects, trick photography, graphic arts and skills of Hollywood could suffice to impress our minds with the real truth of what happened back in the distant past when all the dinosaurs died so suddenly!

When we are ushered on the scene, in creation week, we are seeing the emergence of our "lithosphere from the depths of the bathysphere," or the oceans. This meant the expanding of the tectonic plates of the earth on their floating mass of plasticlike magma, and the cascading and rushing of the waters from the continents and the continental shelves to their ocean beds. The forces at work, the building of mountains, rupturing of the earth along fault lines and explosions of volcanoes would have been absolutely tremendous.

In reading through the account in Genesis, one quickly comes (in only six chapters) across fully one sixth of all of recorded history from the time of Adam until now.

Once again, God uses the natural, geophysical forces of this earth to create a calamity: the Genesis flood!

However, in this drowning of the land masses, God not only "breaks up the fountains of the deep," but causes it to rain for 40 days and 40 nights. There is every reason to believe the earth had a "greenhouse" type climate prior to the flood. Human life span was much longer; the nature of animals was different (no carnivores); and giantism became common.

Some have seen the earth as a "Venusian" type atmosphere, completely encased in vapors, which meant the atmosphere was much more moisture-laden than is common today, and have attempted to account for much of the water of the Noachian deluge by this theory.

If the theory is correct, it is felt this thicker, far more humid atmosphere, would have created purely local showers (God says he caused a "mist" to go up from the ground to water the earth), and at the same time would have screened harmful ultraviolet rays which, it is supposed, directly affect the aging process in man. Whatever the truth concerning this theory, God's Word says He produced water, not only from above the earth in the form of 40 days and 40 nights of heavy rains, but "broke up the great fountains of the deep," causing subterranean water to come gushing upon the earth. Even more likely, the continents were gradually *submerged* once again by the squeezing of the plasticlike magma and slight shrinking of the outer crust of the earth until the combination of subterranean water, massive rainfall and onrushing seas served to drown all living creatures save Noah and his family and the animals aboard the Ark.

The total duration of the flood was more than one year, and the effects of the waters cascading from the emerging continents has been going on, in one sense, for 5,000 years since.

Vast areas of the dry land today were obviously once sea bottom; huge lakes (like the Great Salt Lake) are merely tiny puddles in what used to be a gigantic inland basin, wherein incalculable amounts of water were stored; the polar ice caps no doubt froze very quickly during the flood as the earth itself may have been "tilted" out of its former rotational pattern (does this account for the change between true north and magnetic north?), and countless animals (such as the mastodons and mammoths of the Siberian plains) were "quick frozen," with the evidence of having been grazing in a *tropical climate* still preserved in their mouths!

The Bible includes many accounts of God's direct intervention in "natural" forces! After all, God is the *Creator* of "nature," and is able to interfere in His creation from time to time as He chooses.

The shattering of Egypt as a mighty power, the many plagues heaped upon the Egyptians and the parting of the Red Sea are a major case in point.

One of the most striking examples of an earthquake being directly brought about

by God is found in Numbers 16. Korah, Dathan and Abiram and others rose up against Moses, claimed Moses had arbitrarily elevated himself over the common assembly, and caused a great confrontation.

Read the entire chapter. God is said to have warned Moses and the others to get away from the dwellings of Korah, Dathan and Abiram, and Moses specifically predicted, "If these men die the common death of all men, or if they are visited by the fate of all men, then the Eternal has not sent me. But if the Eternal create something *new*, and the ground opens its mouth, and swallows them up, with all that belonged to them, and they go down alive into the pit, then you shall know that these men have despised the Eternal." The Bible says as soon as Moses had finished speaking "the ground under them *split asunder*, and the earth opened its mouth and swallowed them up, with their households and all the men that belonged to Korah and all their goods, so they and all that belonged to them went down alive into the pit [Hebrews: sheol] and the earth closed over them, and they perished from the midst of the assembly."

Here God is said to have intervened directly by means of a huge split of the earth, as in an earthquake, and punished the rebellious from among the peoples of Israel before the startled eyes of perhaps nearly three million!

In addition, those who continued to rebel were consumed by a plague, so that eventually 14,700 died, including those who perished in the crack opened in the earth.

What about Joshua's famous "long day"? The Bible says (Joshua 10) that Joshua and the Israelites, in chasing the Gideonites, had direct assistance from God. "...The Eternal threw down great stones from heaven upon them as far as Azekah, and they died; there were more who died because of the hailstones than the men of Israel killed with the sword" (Joshua 10: 11).

No doubt these gigantic hailstones (in recent years huge hailstones the size of grapefruit and softballs have come cascading out of violent thunderstorms, smashing roofs, wrecking cars, breaking glass, killing cattle and those people unfortunate enough to be struck by them) were the result of a towering cumulus cloud whose top probably soared to more than 50,000 feet, and the Bible says God Himself directly intervened to cause it.

Joshua then called upon God for the sun to stand still, and the Bible says, "And

the sun stood still, and the moon stayed, until the nation took vengeance on their enemies. Is this not written in the book of Jashar? The sun stayed in the midst of heaven, and did not hasten to go down for about a whole day. There has been no day like it before or since, when the Eternal hearkened to the voice of a man; for the Eternal fought for Israel" (Joshua 10:12-14).

Those whose arguments would attempt to limit the incredible and almighty power of God seem to be willing to admit, tentatively, that God might have the power to do *one* act by interfering in the world He has made, but then other "natural forces" would be unleashed which would, in effect, render His first miracle impossible!

As some reason, even though God could have stopped the rotational pattern of the earth, this would have caused massive tidal waves by subjecting some portions of the earth to the pull of the moon over a protracted period of time, or any number of other possible dangerous catastrophes. What is lost on such skeptics is that God is God and has the limitless *power* to effect such a miracle, staying the forces which might cause additional damage if He so chose.

God has not only intervened in the actual building of the continents, forming of vast mountain ranges and the present "rings of fire" which girdle the globe, but has reached out His mighty hand to stop the earth's rotational pattern to create a longer span of daylight on behalf of Joshua and the Israelitish armies.

There are many other examples space does not permit us to explain.

One of the most important, however, is the earthquake which took place at the precise instant Jesus died!

By no stretch of the imagination could this be assumed to have been merely "coincidental."

The Gospel writers are very explicit in describing the manner in which the day became blacker and blacker until the lowering clouds made it virtually impossible to see. This was no fallout of volcanic ash, but perhaps God's intervention in the form of black and lowering clouds. At the moment Jesus died, God intervened in the crust of the earth in the region of Jerusalem (Israel is, as much of the rest of the Mediterranean, extremely vulnerable to seismic activity) by causing a great earthquake! The rumbling roar from the subterranean rocks caused men's hearts

to beat wildly with fear. Other great miracles occurred, such as the ripping of the heavy tapestry separating the holy place in the temple from the "holy of holies," thus symbolizing the way to God the Father and heaven itself was now made available to mankind in the broken body and shed blood of the Savior.

Also, some of the more noted "saints" among the elders of the land who had recently died were said to have been resurrected, miraculously returned to a few additional years of human life, to walk back into the city and be received of their friends, as a testimony to the mighty power of God and a forerunner of the coming resurrection.

Later, as intensive persecution began to occur against God's church, the leading apostles were gathered together in fear as a result of the threats from the Jewish religious and civil leaders.

Notice how they spoke to the God who had created the very earth:

"And when they heard that, they lifted up their voice to God with one accord, and said, Lord, thou art God, which hast made heaven and earth, and the sea, and all that in them is ... The kings of the earth stood up, and the rulers were gathered together against the Lord and against His Christ ... And now, Lord, behold their threatenings: and grant unto thy servants, that with all boldness they may speak thy word, by stretching forth thine hand to heal; and that *signs and wonders* may be done by the name of thy holy servant [margin] Jesus.

"And when they had prayed, the place was *shaken* where they were assembled together; and they were all filled with the Holy Spirit, and they spake the word of God with boldness" (Acts 4:23-31).

In this case, to show support and to strengthen the hearts of those who might have been fearful or faithless, God answered with a minor temblor, showing His great and mighty power to interfere in the very elements of the earth so as to bolster the faith and courage of the fledgling group of Christians who were to form a part of the very foundation of the Church of God.

The Earthquakes of Prophecy

There are *many* prophecies concerning massive interventions of God which will affect major areas of the earth.

The most famous of all prophesies is Jesus' "Olivet" prophecy, the step-by-step sequence of events He described that would accompany the coming "Great Tribulation," the time of troubles in the world such as has never been, and which would lead into the "Day of the Lord" and the return of Christ to rule the earth.

Jesus said an indeterminate number of earthquakes will begin occurring at the same time as major wars are erupting and disease epidemics are wiping out major portions of national populations!

"Then said He to them, nations shall rise against nation, and kingdom against kingdom; and *great earthquakes* shall be in divers [different, possibly implying along little-known fault lines, or in areas hitherto thought to be 'earthquake free'] places, and famines, and pestilences; and fearful sights and great signs shall there be from heaven..." (Luke 2 1: 10, 11).

Wars cause such disruptions in transportation, water supplies and food production that famines result. Massive dislocation of civilian populations bring about the same thing. Earthquakes can totally wipe out means for purifying water supplies and completely contaminate available water and foodstuffs, bringing local famines and disease epidemics in their wake. (See also Matthew 24:7, Mark 13:8.)

One of the mightiest of all of the great "heavenly signs" described in the Bible is the mysterious opening of the "sixth seal" of the seven seals of the book of Revelation. The book is divided into three sets of sevens. A scroll sealed with seven seals represents the entire scroll, or book, of Revelation. The first five represent conditions in the "Great Tribulation" predicted by Christ (also called "Jacob's trouble," or the time of great national privation and calamities to descend upon the peoples of Britain, the United States, Canada, South Africa, New Zealand and all the peoples of the democracies of Northeastern Europe). The sixth seal represents the great earthquake and other heavenly signs which will halt all human activity and prevent the extermination of mankind through nuclear war.

The seventh seal is composed of seven "trumpet plagues" to fall generally upon all gentile nations and all of mankind; the last three of those "trumpet plagues" are called "three woes." The third of them is again divided into *seven increments*, this time the famous "seven last plagues," which culminate in the greatest

earthquake in all history and the second coming of Christ.

Notice, "And I beheld when he had opened the sixth seal, and, lo, there was a *great earthquake*; and the sun became black as sackcloth of hair, and the moon became as blood..."

As we have previously seen, oftentimes earthquakes are accompanied by and can oftentimes be the harbingers of volcanic explosions. The two are definitely interrelated. As the plasticlike, molten magma beneath the crust continually exerts various changing pressures and forces upon the comparatively thinner outer crust, it requires more than one million minor "readjustments," accounting for the approximately one million earth tremors around our earth every year as a result.

As citizens from northeastern Washington to Montana and Wyoming discovered at the eruption of Mount St. Helens, the sun *can* become "black as sackcloth of hair, and the moon become as blood" by the superposition of gigantic volumes of pumice, ash and volcanic dust high in the atmosphere.

Whether this phenomenon is as it appears from earth or whether a direct intervention of Almighty God in the sun and the moon themselves is not entirely clear. However, massive earthquakes and volcanic explosions can accompany each other and be related to the same cause, as we know.

God's Word then describes a major meteorite shower. "And the stars of heaven fell unto the earth, even as the fig tree casteth her untimely figs, when she is shaken of a mighty wind." This is obviously not referring to the "stars" of outer space, which are oftentimes many times larger than our own sun, which would mean the total extinction of the earth, but a major meteorite shower with blazing and flashing meteors sending lightninglike streaks across the skies before the startled eyes of millions of earth's inhabitants.

In the succeeding verses, a very great miracle is described wherein God appears to rend the very heavens, giving mankind for the first time in all history a glimpse of a blinding, white light brighter than millions of suns, and sending startled human beings to the rubble and rocks, any kind of shelter, saying, "Fall on us, and hide us from the face of Him that sitteth on the throne, and from the wrath of the Lamb" (Revelation 6:17). As John describes the opening of the seventh seal and the beginning of the first of the "trumpet plagues," he says, "And the angel took

the censer, and filled it with fire of the altar, and cast it unto the earth: and there were voices, and thunderings, and lightnings, and an earthquake. "

Then follow even greater and more mind-boggling plagues, wherein, finally, more than a *third of the human race* is killed! Read the rest of chapters 8 and 9.

Chapter 9 reveals conditions on the earth during the first and second of the "three woes," and then follow several inset chapters which are not in specific chronological sequence, chapters 10 through 15.

Chapter 16 resumes the third woe, or the final seven last plagues.

Read the entire 16th chapter of Revelation, especially beginning in verse 17: "And the seventh angel poured out his vial into the air; and there came a great voice out of the temple of heaven, from the throne, saying, it is done.

"And there were voices, and thunders, and lightnings; and there was a *great* earthquake, such as was not since men were upon the earth, so mighty an earthquake and so great."

Obviously, though Jesus spoke of many earthquakes to come during the time of great tribulation immediately ahead of us now, and, while all of these will be equally as fearsome or more so than Mount St. Helen and the explosion of Krakatoa so long ago, they cannot *begin to compare* with the final, massive earthquake described as part of the seven last plagues!

God says, "And every island fled away, and the mountains were *not found*, and there fell upon men a great hail out of heaven, every stone about the weight of a talent [about 90 pounds]: and the men blasphemed God because of the plague of the hail; for the plague thereof was exceeding great" (Revelation 16:20, 21).

In this massive earthquake, whole mountain ranges will change, major mountains will disappear, and others be formed in their places. Islands will disappear beneath the seas, and others formed. Tidal waves (tsunamis) will send monstrous walls of water hundreds of feet high to smash against those cities that have survived the nuclear holocaust that will have been unleashed.

Whole cities and towns will disappear. Honolulu, Hilo and every other city in the Hawaiian Islands will be completely swallowed up. The "ring of fire" in the Pacific midocean region will cause massive explosions in the sea floor and along long-

extinct volcanic cones, bringing about huge waves that will smash against the coastlands from California to Japan and from Brisbane to Anchorage.

The Bible says the Mount of Olives will cleave in two, that a huge crevasse will open up, allowing the waters of the Mediterranean to roar into the Jordan Valley and the Dead Sea, creating a huge inland sea which will probably link up with the Persian Gulf and the Indian Ocean.

"Then shall the Eternal go forth, and fight against those nations, as when He fought in the day of battle. And His feet shall stand in that day [in the very same day as the great earthquake of Revelation 16:20] upon the Mount of Olives, which is before Jerusalem on the east, and the Mount of Olives shall cleave in the midst thereof toward the east and toward the west, and there shall be a very great valley; and half of the mountain shall remove toward the north, and half of it toward the south ... And it shall come to pass in that day, that the light shall not be clear, nor dark: but it shall be one day which shall be known to the Eternal, not day, nor night: but it shall come to pass that at evening time it shall be light. And it shall be in that day, that living waters shall go out from Jerusalem; half of them toward the former [eastern] sea, and half of them toward the hinder [western] sea, in summer and in winter shall it be... " (Zechariah 14:3-8).

The massive earthquake will lower the mountains south of Jerusalem (Zechariah 14: 10), and create a great rift valley. From the very center of the valley a massive artesian well, gushing forth voluminous amounts of crystal clear, "living" water (meaning life-giving, pure, moving water), will begin to flow. "And it shall be in that day, that living waters shall go out from Jerusalem; half of them toward the eastern sea, and half of them toward the western sea: in summer and in winter shall it be" (Zechariah 14:8).

Apparently God will use this means to cleanse the waters of the earth, sending a mighty river coursing both to the east, into the newly created seas caused by the access of Mediterranean waters to the Jordan Valley and Dead Sea areas (far below the present-day sea level), and to the west.

Ezekiel saw, in vision, how Christ's very throne would be established on this site. Will it be placed so that the waters seem to gush forth from *beneath that throne?*

"Afterward He brought me again unto the door of the house; and, behold, waters issued out from under the threshold of the house eastward: for the forefront of

the house stood toward the east, and the waters came down from under the right side of the house, at the south side of the altar.

"Then brought He me out of the way of the gate northward, and led me about the way without unto the outer gate by the way that looketh eastward; and, behold, there ran out waters on the right side. And when the man that had the [measuring] line in his hand went forth eastward, he measured a thousand cubits, and he brought me through the waters; the waters were to the ankles.

"Again he measured a thousand, and brought me through the waters; the waters were to the knees. Again he measured a thousand, and brought me through; the waters were to the loins. Afterward he measured a thousand; and it was a river that I could not pass over; for the waters were risen, waters to swim in, a river that could not be passed over.

"And he said unto me, Son of man, hast thou seen this? Then he brought me, and caused me to return to the brink of the river. Now when I had returned, behold, at the bank of the river were very many trees on the one side and on the other. Then said he unto me, these waters issue out toward the east country, and go down into the desert, and go into the sea, which being brought forth into the sea, the waters shall be healed" (Ezekiel 47:1-8).

This amazing prophecy follows in a logical sequence.

Ezekiel's vision commencing with the 40th chapter sees the Holy City, the temple of God and the many details of both. These visions follow along naturally from the 38th and 39th chapters, depicting the final great Battle of Armageddon and the destruction of the monstrous army of 200 million (Revelation 9:16, 12-14) that will invade Israel and be destroyed by Christ Himself at His coming.

The vision sees a *huge river*, each thousand cubits being approximately three fifths of a mile or so, gushing from beneath the threshold of the temple, a river over two miles wide before becoming too deep to wade. Assuming it is equally wide on the opposite bank, that means the river is at *least* five miles wide and perhaps much wider.

Is this only symbolic? One Bible commentary tends to see the river as indication of how we wade "ankle deep" into the Word of God and are finally confronted by a river of understanding above our depth. But these fanciful interpretations are but

feeble attempts to allegorize vast and important prophecies of God's Word.

Ezekiel's prophecy goes on to describe how the waters will *heal* the polluted, blood-filled waters of earth, now a blackened, turgid mess of dead humans and millions of fish; that trees and plants will once again begin to grow along its banks; and that cuttings will be taken to other places, and the earth's restoration to the beauties described during the millennium will begin.

"And it shall come to pass, that every thing that liveth, which moveth, whithersoever the rivers shall come, shall live: and there shall be a very great multitude of fish, because these waters shall be healed; and every thing shall live whither the river cometh" (Ezekiel 47:9).

On an infinitesimally tinier scale, I well remember visiting an old resort area in the mountains between Los Angeles and Bakersfield years ago. Old-timers in the region remembered how the beautiful little creek flowing along their property had been completely dry for many, many years. Then, as a result of an earthquake, the water suddenly began running again—and it had subterranean origins, not originating from melting snows or runoff—and their resort came to life again.

There are many other references to earthquakes in God's Word. But the great earthquakes of the Tribulation and the Day of the Lord will eclipse any previously known earthquakes in recorded history.

When the cataclysms of Revelation 16 begin to occur, they will cause more human deaths than all the great quakes of the past put together. Never in the history of man from Noah to this day will such massive movements of earth's fault lines, tectonic plates, continents, mountain chains and volcanoes take place.

In the ancient past, when God came down to the earth He had created, *He gave a command;* saying, "Let the dry land appear," and by His command the great continents of Asia, Africa, North and South America, Europe, Antarctica and Australia began to emerge from a featureless sea.

By His word the continents were moved into their positions, the westerly movement of the North and South American continents causing massive ruptures of the many-layered rocks, heaving gigantic granite blocks of rock into the skies, molding, overturning, crumbling, sliding, shifting, roaring with noise no human or animal ear ever heard. The great, soaring peaks of the Andes, the Sierra Nevada,

the Cascades, the Rockies and all their associated ranges were formed.

The next time you have opportunity to see a breathtaking view of Rocky Mountain National Park, to see the majesty of McKinley, Lassen, Shasta, Rainier, Hood, the Grand Tetons or Pike's Peak, perhaps you should wonder, "What was it like the day God formed these mighty mountains?"

In "reading" the record of our earth's geologic past, we can gain perspective into prophesied earth shocks of the future.

During an earthquake, all men are equal. As the deep, awesome rumbling from beneath the earth—the thin wail of cats and howling of dogs, the dizzying feeling of disequilibrium—comes to you as the sounds of thousands of roaring locomotives thunder beneath; as all the familiar things with which you surround yourself, your own home and so well-remembered environment, the very buildings, houses, streets, stones, trees and walks, your automobile, as all begin to move, swaying, groaning, giving way with splintering crashes and groaning roars; all men, rich and poor, great and small, suddenly realize their incredibly fragile humanity.

God says, "Enter into the rock, and hide thee in the dust, for fear of the Eternal, and for the glory of His Majesty.

"The lofty looks of man shall be humbled, and the haughtiness of men shall be bowed down, and the Eternal alone shall be exalted in that day. For the Day of the Lord of Hosts shall be upon every one that is proud and lofty, and upon every one who is lifted up; and he shall be brought low ... And they shall go into the holes of the rocks, and into the caves of the earth, for fear of the Eternal, and for the glory of His majesty, when He ariseth to *shake terribly the earth*.

"In that day a man shall cast his idols of silver, and his idols of gold, which they made each one for himself to worship, to the moles and to the bats; to go into the clefts of the rocks, and into the tops of the ragged rocks, for fear of the Eternal, and for the glory of His majesty, when He ariseth to *shake terribly the earth*" (Isaiah 2:10-22).

It is true not all earthquakes are of "divine origin," especially triggered by divine fiat, by God's command. Not all earthquakes, volcanic explosions, hurricanes, tidal waves, tornadoes and hailstorms are the result of God's wrath against a

carnal-minded, rebellious, sinning mankind.

But, though we may see purely "natural causes" in the rupturing of rocks along a fault line, the venting of gases and ash in a volcanic explosion, the cyclonic winds of major tropical storms, let's never forget who is the Author of all that we call "nature."

God *formed* our earth as we know it; He set in motion the forces that act upon it. *He* is the Author and Designer of gravity, of the magnetism of our earth's poles, of the pull of earth's gravity that reaches out into space to hold captive our moon, of the pull of our sun's gravity that holds both captive at just the right distance to provide life on this planet.

He has *intervened* in His world He built from time to time in the past.

He did it during "creation week," perhaps more than 4 1/2 billion years after an earlier creation. He did it again at the flood of Noah, and again in the parting of the Red Sea, the opening of the rocks to devour Korah, the long day of Joshua, and the earthquake when Christ died.

He answered His apostles' prayers by shaking the building where they were.

He will intervene again. So says your Savior and coming King, Jesus Christ of Nazareth.

Where will you be, what will you be doing in the day God arises to shake terribly the earth?

Here's God's own advice to you!

"See that ye refuse not Him that speaketh. For if they escaped not who refused Him that spake on earth, much more shall not we escape, if we turn away from Him that speaketh from heaven: whose voice then shook the earth: but now hath He promised, saying, Yet once more I shake not the earth only, but also heaven.

"And this word, 'Yet once more,' signifying the removing of those things that are shaken, as of things that are made, that those things which cannot be shaken may remain...

"Wherefore we receiving a kingdom which cannot be moved, let us have grace,

whereby we may serve God acceptably with reverence and Godly fear:

"For our God is a consuming fire" (Hebrews 12:25-29). Your sure foundation that cannot be shaken is Jesus Christ of Nazareth.

Those who *repent* of their sins, who ask Christ to become their *Ruler*, *their Savior*, their High Priest and soon-coming King, and those who *get busy doing His work* on this earth, are promised, "Because thou hast kept the word of My patience, I also will keep thee from the hour of temptation [trial, *or Great Tribulation*] which shall come upon all the world, to try them that dwell upon the earth" (Revelation 3: 10).

Look at God's promise: "He that dwelleth in the secret place of the Most High shall abide under the shadow of the Almighty.

"I will say of the Eternal, He is my refuge and my fortress; my God; in Him will I trust.

"Surely He shall deliver thee from the snare of the fowler, and from the noisome pestilence. He shall cover thee with His feathers, and under His wings shalt thou trust: His truth shall be thy shield and buckler.

"Thou shalt not be afraid for the terror by night; nor for the arrow that flieth by day; nor for the pestilence that walketh in darkness, nor for the destruction that wasteth at noonday.

"A thousand shall fall at thy side, and ten thousand at thy right hand; but it shall not come nigh thee. Only with thine eyes shalt thou behold and see the reward of the wicked.

"Because thou hast made the Eternal, which is my refuge, even the Most High, thy habitation!" (Psalms 91:1-9).

John, in vision, saw how countless people would finally accept God's loving appeal. They would *see* the Great Tribulation coming on the earth and finally *repent* and be spared the monstrous calamities of the great and terrible Day of the Lord.

Read Revelation the seventh chapter!

Just *after* the great heavenly signs, accompanied by a massive earthquake, *and just before* the beginning of the great "trumpet plagues" and the final Battle of Armageddon, John said, "And after these things I saw four angels standing on the four corners of the earth, holding the four winds of the earth, that the wind should not blow on the earth, nor on the sea, nor on any tree.

"And I saw another angel ascending from the east, having the seal of the living God; and he cried with a loud voice to the four angels, to whom it was given to hurt the earth and the sea, saying, 'Hurt not the earth, neither the sea, nor the trees, till we have sealed the servants of our God in their foreheads' " (Revelation 7:1-3).

That "sealing" is a symbol of repentance, baptism and receiving of God's Holy Spirit; becoming the begotten *child of God* as an act of your conscious will (in their foreheads).

Christ said, "Repent ye, and believe the Gospel."

The gospel includes Matthew 24 and Christ's sure prophecies about the great day approaching when God shall arise to *shake terribly this earth!*

When will you answer the call of Jesus Christ—and repent?

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