

ABOUT THE COVER

The 1989 Loma Prieta earthquake (San Francisco Bay Area) did much damage to buildings, bridges and roads, along with taking lives. And yet the greatest earthquakes to rock the world are still to come!

PHOTO: J.K. Nakata, U.S. Geological Survey

Why the PROPHETIC CONDITIONS Series?

Knowledge and technology are exploding, yet the world is drowning in a sea of problems! *Alcohol abuse* is on the rise. Vast regions of farmland are "dying of thirst" due to droughts and erratic *weather* patterns. The allure



PROPHETIC CONDITIONS

of *drugs* is fast seducing a younger generation that no longer knows how to be kids. *Crime* is more violent, more entrenched, more widespread than ever. *Pornography* is robbing families and youth of their innocence by "entertaining" sick, perverted, carnal desires. And the earth is choking in the *polluted* filth produced by humanity.

WHY?

The *Prophetic Conditions Series* will report global trends and problems. It will explain why man is hopelessly deluged with such overwhelming—and insoluble—problems.

And it will point to mankind's only solution!

Trend reports in the Series:

The Alcohol Epidemic
Earthquakes and Volcanoes in Prophecy
What's Wrong With the Weather?
The Tragedy of Drug Abuse
Why the Crime Explosion?
The Plague of Pornography
This Polluted Earth
The Scourge of STDs

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EARTHQUAKES and VOLCANOES in Prophecy

No longer can the earth be considered a rock solid foundation to be taken for granted. Ominous danger looms beneath the surface of the earth. Earthquakes and volcanic acitivity are on the rise. There is a reason. Throughout history, God has used earthquakes to serve His purpose. The Bible foretells that the greatest period of earthquake activity in history lies just ahead. Here is why!

he Bible speaks of "earthquakes in various places" at the end of the age. These are foretold for important reasons. You need to understand the causes behind earthquakes—and volcanoes. They will soon affect your life—and the security and stability of the whole world.

This report has been divided into three parts. It covers: (1) The Science Perspective, (2) How God Has Used Earthquakes, and (3) Great Earthquakes to Precede Christ's Return.



PROPHETIC CONDITIONS

EARTHQUAKES AND

VOLCANOES IN PROPHECY

PART 1 THE SCIENCE PERSPECTIVE

S cientists now better understand what makes up the earth's core, mantle, and crust. They have also learned of the mind-defying forces in dynamic motion at or near

the earth's surface. These forces are unpredictable and carry the potential for enormous destruction.

Understanding the earth's interior will help us to better understand earthquakes.

The distance from the center of the earth to the surface is approximately 4,000 miles. The core of the earth consists of superheated dense metallic compounds. The inner core is believed to be solid. The outer core is molten. Beyond the outer core lies the mantle, which is 1,800 miles thick and consists of semi-molten and semi-solid rock. Because of the soft consistency of the mantle, some refer to it as the "hot plastic layer" that the tectonic plates float on.

Tectonic plates are the large semirigid slabs that form most of the earth's crust. These plates may be thousands of miles wide, but only 3 to 45 miles thick. Consider this analogy: If the earth were the size of an apple, the thickness of the crust would be less than the thickness of the apple's skin.

The earth's surface is made up of tectonic plates. The visible surfaces of these plates are the landmasses known as continents. For most continents, such as Africa and the Americas, the boundary of the plate upon which they rest coincides with their own boundary or shoreline. At the edge of a tectonic plate, where it borders another plate, is an area of geologic activity. A visible fault line that gives evidence of the past geologic turbulence identifies this boundary.

Africa is bordered by a fault system that travels along the Red Sea and Suez Canal in the northeast, besides a fault system within the main continental plate in eastern Africa. The western border of the African plate is located in the middle of the Atlantic Ocean and is called the Mid-Atlantic Ridge. This ridge also marks the border of the South American plate to the west of the African plate. The ridge extends on to the North Pole, dividing the North American and the Eurasian plates, as well.

The Mid-Atlantic Ridge has formed because, as the plates separate, molten magma pushes up to the surface and "repairs the breach." (This is one example of how the earth is self-sustaining.) The entire Mid-Atlantic Ridge extends 12,000 miles, from Antarctica to the North Pole.

When the movement of tectonic plates becomes restrained by irregular surfaces or friction, energy is stored, as the masses try to continue moving.

Earthquakes occur when this tension exceeds the strength of the impeding rock masses at the edge of the affected plates. Some plates may move only an inch or so in a given year. Periods of no movement are interpreted as danger signals. When impeding formations block further movement, energy is being stored up for a powerful quake.

A worldwide network of seismographs (instruments that detect tremors) detects about a million small earthquakes per year. Major earth-

quakes occur every few years. Moderate earthquakes, such as the January 1994 quake of Northridge, California, that registered 6.8 on the Richter scale, and the 1995 quake in Kobe, Japan, that registered 6.9, occur about 20 times per year.

In the past 500 years, quakes of all sizes have claimed several million lives worldwide. The danger is now greater than ever, since the population has dra-

matically increased during the last two centuries. Some of the world's most earthquake-prone regions are also the most densely populated.

The Pacific Rim has been the most volatile region for earthquakes. It accounts for 80% of released earthquake energy. Several thousand small to moderate quakes occur each year around the west coast of North and South America, at the eastern flank of the Pacific Rim. The southeastern Asian countries and many island nations in the region are also experiencing heightened seismic activity. Each year, Japan alone is shaken by more than 1,000 tremors of magnitudes greater than 3.5 (*Microsoft*)

Encarta Encyclopedia 2000).

The formation of the Andes Mountain range in South America has resulted from the ocean plate wedge beneath the continental plate, pushing the continental plate upward, forming the higher elevations. Catastrophic volcanoes formed some of the mountain formations of this range, adding more landmass. By contrast, the trough beyond the shoreline is one of the deepest in the world (4,400 feet), due to the sunken Pacific plate.

Volatile Earthquakes

Near the Pacific coast in Chile, high in the Andes, a terrible series of earth-

1989 Loma Prieta earthquake: Los Gatos, Calif.
PHOTO: U.S. Geological Survey

quakes began on May 21, 1960. On the following day, a quake registered 9.5 on the *moment magnitude scale* (explained later)—the highest reading ever recorded. The effects of these quakes were enormous. New volcanoes and several older volcanoes were suddenly activated. Islands disappeared off the coast.

During this quake, an entire 25 mile-long strip of the coastal mountains (about 2 to 3 miles wide) suddenly dropped 1,000 feet, finally wedging between the two giant plates, now partially submerged in the sea. Casualties from these quakes reached nearly 5,000, as several mountain and coastal villages were severely hit.

These quakes generated seismic waves that sped across the Pacific at about 500 miles per hour. In some areas, these waves exceeded 150 feet. They proved to be destructive wherever they hit. The warning of this tsunami (another term for seismic waves) was not heeded in Japan, although it took 22 hours to reach the islands, and would have allowed time for evacuation. Since a tsunami had never before originated as far away as South America, the warning was ignored. When it hit the coastal villages, mass destruction occurred and 138 were reported killed or missing. Fortunately, hundreds managed to evacuate various shore areas.

In 1771, a tsunami generated by an earthquake hit Japan with a 260-foot wave. The destruction was enormous, with 11,000 killed or missing.

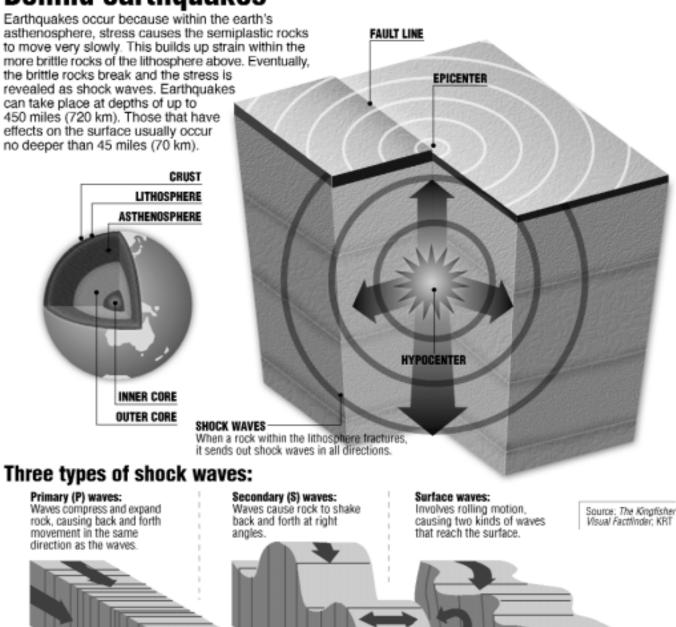
In 1883, a 120foot, volcano-generated tsunami between Java and
Sumatra erased all
life from many
islands. In Java and
Sumatra alone,
36,000 died.

Another earthquake-generated tsunami hit the Philippines in 1976,

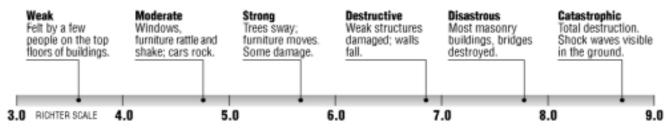
killing over 5,000. Tsunamis are erroneously called tidal waves, but tidal forces do not cause them. They result mainly from underwater earthquakes or volcanoes.

The strongest earthquake recorded in North America was centered near Anchorage, Alaska in March 1964. It registered 8.5 on the Richter scale and 9.2 on the moment scale. It caused approximately 12,000 square miles of land, southeast of Anchorage, to rise about 7.5 feet. About 35,000 square miles to the northwest *dropped* about 5 feet. The damage from this quake was enormous, yet only 131 died, since most damage occurred in sparsely populated areas.

Behind earthquakes



Measuring the intensity of an earthquake:



In 1976, there was a tremendous loss of life from earthquakes. In Guatemala, 23,000 died and a million were left homeless. However, in China, the Tang Shan quake, near Peking, claimed an unbelievable 655,000 lives!

In 1974, another quake of similar proportions could have been as lethal, but local farmers recognized that a normal well began yielding artesian water, which is water under sudden pressure. Past experience had revealed this as one of the indicators of an imminent quake. The local populace sounded the warning and an evacuation took place in Haich'eng China, saving many thousands of lives (*Powers of Nature*, Tom Melham, 1978, p. 46).

Measurement of Earthquakes

Dr. Charles Richter, seismologist at Cal Tech, first developed the Richter scale in 1935. While not a precise measure of earthquake energy, the Richter scale provides a rough comparison of earthquakes. The scale is open-ended in that very small earthquakes may register as minus numbers, and no maximum limit exists. So far, no earthquakes have registered above 9, although the 1960 Chilean quake came close.

The Richter scale is logarithmic.

This means that for each unit jump (such as from 6.0 to 7.0 on the scale), the seismic wave amplitude increases 10 times over and the energy of the auake actually increases 30 times. This same comparison would apply from a 7.0 to an 8.0 on the scale—a 10fold increase in seismic wave amplitude and a 30fold increase in energy level. But, from 6.0 to 8.0 there would be a 100-fold increase in seismic amplitude and a 900-fold increase in energy level.

In a 1978 interview, Dr. Richter explained the scale, expressing his surprise that it worked as well as it did. He indicated that it was based on an assumption that could not possibly be true—that one could compare earthquakes merely by multiplying some arithmetical factor. He emphasized that every quake was unique and that two magnitude 6.5 tremors could release appreciably different amounts of energy (Ibid. p. 19).

Seismologists today generally use an improved and updated scale along with the Richter scale. The newer scale is called the *moment magnitude scale*. The moment magnitude is determined by the area of the fissure of the quake and the amount of displacement of the relative plates.

The moment magnitude of the 1906 San Francisco quake would be 7.6; the Alaskan quake of 1964 would be 9.2; the 1995 Kobe, Japan quake would be 7.0. The three quakes listed would have registered on the Richter scale as 8.3, 8.5, and 6.9, respectively.

(Often, publications differ with each other on the magnitude of the same earthquake. Sometimes these contradictions derive from confusion as to which scale was used to report the quake.)

Secondary Effects

Just as energy levels of earthquakes can vary, so can the after-effects. On May 31, 1970, a minor earthquake (about 4 or less on the Richter scale) in Peru triggered avalanches and mudflows. The mudflows buried the town of Yungay, killing over 18,000. The overall death toll in Peru from major quakes that struck that same day was 66,000.

The same was true for the 1906 San Francisco earthquake. As devastating as it was, more were killed in the resulting fires than by the quake itself. Since death and destruction can be an indirect result of a quake, neither the Richter scale nor the moment magnitude scale can factor in all the secondary destruction.

Another indirect effect of the 1906 quake (and most quakes) is that water-saturated sandy soil becomes like quicksand and foundations of homes and buildings give way, leading to the damage or collapse of many structures.

Earthquakes do not produce volcanoes. But in regions where volcanoes exist, they are indications of imminent volcanic activity. Volcanic eruptions *can* cause earthquakes. As the fluid magma rises to the surface in a volcano eruption, the magma fractures rock masses and causes continuous

tremors for hours or days at a time. Volcano-induced quakes were responsible for the disappearance of the massive face of Mount St. Helen in the 1980 eruption.

When touring Japan to learn of earthquake preparation techniques employed by the Japanese, a writer for *National Geographic* magazine gave account of his experience in an earthquake simulator.

Frequency of earthquakes since 1900

The U.S. Geological Survey estimates that several million earth-quakes occur in the world each year. Many go undetected because they hit remote areas or have very small magnitudes. The NEIC* now locates about 50 earthquakes each day, or about 20,000 a year.

Magnitude	Average Annually
8.0 plus	1
7-7.9	18
6-6.9	120
5-5.9	800
4-4.9	6,200 (estimated)
3-3.9	49,000 (estimated)
Less than 3.0	Magnitude 2 - 3: about 1,000 per day Magnitude 1 - 2: about 8,000 per day
	8.0 plus 7-7.9 6-6.9 5-5.9 4-4.9 3-3.9 Less than

SOURCE: U.S. Geological Survey *National Earthquake Information Center

The simulator would begin with low to moderate tremors. In demonstrating more intense tremors, the motion would be vertical *and* lateral. At the most intense setting, not only was the writer unable to stand, he was immediately thrown against the wall. (Emergency personnel have traditionally warned about flying glass fragments during an earthquake—another reason to take refuge under desks and strong tables away from windows and mirrors.)

As the writer emerged from the simulator, he was informed that he had failed the experiment. He failed to turn off the stove in the simulator and quickly grab the fire extinguisher, as instructed to do while he could still stand. He was told that, in a real earthquake, that mistake could have cost him his life in a blazing inferno (Ibid. p. 37).

The Tokyo quake of 1923 (8.3 on Richter scale) shows the destructiveness of fire during an earthquake. This quake ripped through the city just as thousands of stoves were being lit to prepare the noon meal. Many of the wooden buildings collapsed at once.

Strong winds mushroomed the uncontrolled fires that swept through the city for nearly two days. Some 40,000 victims crowded into a vacant 17-acre lot, finding themselves trapped between Tokyo's Sumida River and the advancing wall of fire. About 38,000 drowned or were burned there; another 20,000 died throughout Tokyo; 41,000 more died in Yokohama and other Japanese cities (Ibid).

The Coming Quake

The San Andreas fault line extends from the gulf of Baja California, across much of southern and central California, where it again follows the coastline. This fault line is the boundary of the huge Pacific and North American plates. Much detailed study of this fault system by geologists and seismologists has contributed greatly to understanding earthquakes.

Scientists can study the geologic history of such fault lines and determine the normal rate of slippage



1989 Loma Prieta earthquake: A car is crushed in downtown San Francisco. PHOTO: U.S. Geological Survey

between tectonic plates and establish somewhat of a behavior pattern across hundreds of years. They can determine when a quake is due in a given area by the lack of recent slippage of the plates.

Scientists can identify *seismic gaps*, which are areas of the fault line that sustain the greatest strain. Scientists pay close attention to precursors like *seismic silence*—an absence of slippage. They also examine any recent absence of a major quake within a past span, where major quakes had historically followed a regular pattern.

Such key precursors help scientists predict (with reasonable accuracy) the probability of a quake in a specific region. However, unlike weather forecasting, no specific date can be given —only the probability within a broad time frame of a decade or so.

Much research and time has been invested in the study of known and unknown precursors of earthquakes, but without consistent results. Yet, the inevitability of a major earthquake with massive destruction in populated areas of California is not science fiction, but a *scientific fact*. The idea that most of the southern California coastline could disappear into the ocean *is* more fiction than fact. But the probability of a *major* destructive earthquake

along the San Andreas fault in the near future is extremely high!

The moderate earthquake of October 17, 1989, in the San Francisco Bay Area (causing the partial collapse of the upper deck of the massive Oakland Bay Bridge) registered 7.1 on the Richter scale. Suppose this quake had been 8.1—10 times the seismic amplitude and 30 times the energy how much more destruction would have occurred? Would the death toll have been 10 times the 61 that actually perished in this quake? Or would it have been 100 times, or perhaps 1,000 times? The projected statistics of a major quake in population centers are not pleasant to contemplate.

The quake of January 17, 1994, was another "moderate" quake, with the epicenter in Northridge, just north of Los Angeles. The freeway bridges and overpasses—built according to some of the highest standards in the world—buckled like toys. Here, the death toll was also relatively low—only 62—resulting mainly from collapsed apartment dwellings.

This quake registered 6.8 on the Richter scale. Suppose this quake had resulted from a 200-mile fissure in the

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arthquakes and volcanoes are related—both geologically and in Scripture. Their internal forces are shared and their effects are similar. When earthquakes are mentioned in prophecy, volcanoes usually accompany them. The devastation of both is

beyond comparison to anything in nature.

A volcano is a crack, or vent, in the surface of the earth—the crust. This crack, known as a magma chamber, may form suddenly or over thousands of years. It acts like a conduit for melted rock—magma—to push its way to the surface.

Over time, magma fills this chamber and causes pressure to build. An

eruption is the final releasing of this pressure. Scientists believe that over 3,000 volcanoes have erupted in the last 50 years. There are over 50 active volcanoes in the world today, existing in various states of activity. Some are slowly spewing lava, while others are quietly building, or rebuilding, pressure. Ironically, if a volcano is slowly spewing lava, it is considered "safe." The danger arises when pressure builds enough for a large eruption. Depending on the makeup of the volcano, the eruption varies from a slow lava flow to a great explosion.

The 1982 eruption of Mount St. Helens was an example of the latter type. It was one of the largest eruptions in modern times. The explosion that accompanied it changed the entire face of that mountain. The initial explosion had the force of 24 megatons of thermal energy and flattened an area of 230

The Link Between Earthquakes and Volcanoes

square miles. (This is roughly the size of the Los Angeles Basin.) Six-foot thick trees as far as 15 miles away were mowed down like grass!

Following the initial explosion, which can consist of steam, gas or magma, volcanoes spew what are called pyroclastic *flows*. Larger volcanoes, like Mount St. Helens, also experience pyroclastic *surges*. Both are a combination of hot ash, rock

Sept. 30, 2001: Lava flow, Kilauea, Hawaii. PHOTO: R. Hoblitt, U.S. Geological Survey, Hawaiian Volcano Observatory

fragments and gas that can reach temperatures of 1500 degrees and travel at 150 miles per hour!

A *surge* carries more energy and is mostly rock fragments and superheated gas. It moves even faster than a *flow*, although both bring similar devastation.

St. Helens generated a series of flows and surges that completely *sterilized* the soil for 6 square miles. Flows can continue for hours after the explosion.

Flows are generally followed by *Lahars*. These are a combination of water, rock, sand and mud, which rushes down valleys leading away from volcanoes. They move like rivers, but have enough force to uproot trees, tear houses from their

foundations and rip bridges away from their supports. The Lahar that followed the St. Helens eruption was the largest in recorded history. It destroyed 27 bridges, 200 homes, 185 miles of roadway and 15 miles of railway. Some areas were buried in over 600 feet of mud and debris!

The final fallout from an eruption is the ash cloud. A volcano can project ash over 12 miles above the opening in as little as 30 minutes. The ash cloud from St. Helens was deposited over 20,000 square miles. Those far away from the volcano generally find ash particles to simply be a nuisance. But if the volcano is close to a city, the weight of the ash particles is capable of collapsing buildings.

When factoring in all these after-effects, one can see the danger and destruction that volcanoes can cause. Today, scientific equipment can help predict them before they erupt. Obviously,

this did not help the 57 who died at St. Helens, or the endless thousands who died in historic eruptions like Pompeii and Krakatau.

Detection is done by checking the "heaving" of the land. This will show how much pressure is building up in the magma chamber. An additional method is to record the frequency and intensity of earthquakes around the volcano. As the frequency increases, and as they become centered on the volcano, conditions become ripe for an eruption.

This connection between earthquakes and the eruption is why earthquakes and volcanoes are so intrinsically linked. While the most powerful earthquakes are not the result of a volcano, all volcanic eruptions will cause a series of smaller earthquakes.

In the case of St. Helens, a large earthquake triggered an already sensitive volcano to erupt. This is the danger in many volcano-sensitive areas throughout the world. Their volcanoes have been silently building pressure and a major earthquake could become the catalyst to release an eruption.

Another common type of volcano is located underwater. The floor of

the ocean is scattered with this type of volcano. The Hawaiian Islands are a direct result of their underwater eruptions. The danger posed by these types of volcanoes is in the form of tsunamis.

As covered in this report, though tsunamis are commonly referred to as tidal waves, they are somewhat different. Volcanoes can also create these devastating waves. They usually result from underwater mudslides that follow the eruption.

One of the most devastating tsunamis in history was caused by the eruption of Krakatau in 1883. The resulting pyroclastic flow from this Indonesian volcano caused massive waves that took the lives of 36,417 people. Thousands more were left homeless.

The initial explosion of this volcano was heard in Perth, Australia—over 2,000 miles away! The eruption spewed ash 50 miles high. The dust cloud encircled the earth, changing global weather patterns. Many normally temperate areas of the world experienced some snow in each of the *next 12 months*. It is thought that the Irish Potato Famine was caused by this change in climate.

Like many volcanoes, Krakatau is

located in a region known as the "Ring of Fire." The largest eruptions in history have occurred here. The Ring of Fire consists of the western coasts of North and South America, the eastern coast of Asia and the islands of Southeast Asia.

Another volcano in this region, Mt. Pinatubo, erupted in June 1991. It displaced millions of Filipinos and devastated much farmland. The ash cloud from just this eruption lowered the average *world* temperature by almost two degrees Fahrenheit!

While these eruptions were large, there exists another volcano in North America that is relatively unknown. It is quietly building immense pressure and is waiting for the moment—or an earthquake—that will cause it to erupt. Yellowstone National Park's scientists have said this volcano has the destructive power to make St. Helens "look like a sneeze."

As this age comes to a close, we will see more powerful earthquakes. They will awaken giant volcanoes like the one in Yellowstone. These will be the largest eruptions of all time. But they will not just alter the face of a mountain. They—with earthquakes—will alter the face of the earth.

Major volcanoes around the world





1989 Loma Prieta earthquake: Bicycles are crushed by falling unreinforced brick facade, Santa Cruz, Calif. PHOTO: U.S. Geological Survey

Science

Continued from page 5

San Andreas fault shifting more than thirty feet, producing a Richter magnitude of 8.8. That would be 100 times the seismic amplitude of the Northridge quake and 900 times the energy. This does not consider the area affected by the shock, which would be many hundreds of times greater! This type of quake may occur in the near future.

The Coming Quake: Science and Trembling on the California Earth-quake Frontier, written by T.A. Heppenheimer, is not science fiction. Rather, Dr. Heppenheimer projects what could result if a major quake caused the fault line directly beneath downtown Los Angeles to break open. He estimates that 33,000 of the 700,000 buildings in the city would be destroyed. Another 22,000 would need major repair.

Concerning the impact of a future major quake upon metro Los Angeles,

he writes, "While damage to homes will rank as the most serious threat to personal safety, the general collapse of the freeway system will stand as the next major problem." The collapse of bridges and overpasses of the freeways, as well as railroads will complete "the near-isolation of Los Angeles [from] the rest of the country" (pp. 197-198, 200).

Heppenheimer stresses, "Water systems will present overwhelming problems. These may take the most deadly form imaginable: the failure of a major dam...If you drive north on Interstate 5...an immense flat-topped embankment of earth can be seen...This is Castaic Dam. It holds 350,000 acre-feet of water, enough to flood fifty square miles to a depth of ten feet...Now proceed farther along I-5...to...Pyramid Dam, nearly four hundred feet tall...179.000 acre-feet of water...And still farther back in the hills...Bouquet Canyon, the site of another major dam..." (pp. 200-201).

"Across vast areas, then, people will be left without lights. There will

be no radio or television, except for battery-operated portables. There will be cold, as well as dark; most homeheating systems rely on electricity... Refrigerators will be out as well as kitchen ranges...And on top of all these hardships, there will be major fire hazards" (p. 205).

Heppenheimer then summarizes the disaster: "The Big One, in short, will overwhelm existing abilities to cope with disaster. There will be not one, but a combination of large-scale losses, any of which by itself could cripple the region: breakdown of the freeways, blockage of the railroads, overload of the phone system, widespread damage to the sewer system, disruption of the water supply, severe shortages of electric power, and substantial fire hazards from petroleum and natural-gas pipelines. All these together will strain the region's emergency services well beyond the point of breakdown. It will be several days, at least, before the main aftershocks cease to rumble, the freeways are cleared, and a semblance of power is restored, and the people who need help can begin to see the assurance that it is at hand" (p. 206).

All the while, as California awaits the "Big One," earthquakes continue to occur around the world in various places. Some take a heavy toll, like the one in western Turkey in August 1999, which claimed over 17,000 lives, or the one in India in January 2001, which killed about 20,000.

For an extensive listing of some of the major earthquakes of recent years, you may wish to consult *The World Almanac 2002*. Also, websites such as the one sponsored by the U.S. Geological Survey (earthquake.usgs. gov) provide much information about earthquakes, including the most recent quakes of the last 30 days—worldwide.



PROPHETIC CONDITIONS

EARTHQUAKES AND

VOLCANOES IN PROPHECY

PART 2

HOW GOD HAS USED EARTHQUAKES

od has used earthquakes in more ways than realized. His Word shows that He uses earthquakes to:

- (1) Show His presence
- (2) Show His deliverance
- (3) Show His wrath
- (4) Indicate His unfolding Plan
- (5) Announce Christ's Return
- (6) Accompany prophetic events
- (7) Reshape the earth's surface

Earthquakes Resulting From God's Presence

The Bible reveals that the presence of God can cause the earth to tremble. He uses such upheaval to send a powerful message: "Tremble, you earth, at the presence of the Lord, at the presence of the God of Jacob" (Psa. 114:7).

On this same theme: "He looks on the earth, and it trembles: He touches the hills, and they smoke" (104:32).

Not only can the earth tremble and quake at God's presence, but volcanoes erupt as well: "The mountains quake at Him, and the hills melt [lavaproducing volcanoes]..." (Nah. 1:5).

God can and does manifest Himself in other ways, according to the needs of a given situation. The account of Elijah reveals that God's presence need not always be accompanied by earthquakes or other physical events, but can be manifested in a "still, small voice" (I Kgs. 19:9-18).

There was also a thunderous trembling when God gave the Ten Commandments: "And all the people saw the thunderings, and the lightnings, and the noise of the trumpet, and the mountain smoking: and when the people saw it, they removed, and stood afar off" (Ex. 20:18).

Verse 20 focuses on the key reason: "And Moses said unto the people, Fear not: for God is come to prove you, and that *His fear may be before your faces*, that you sin not."

Exodus 19:18 shows what had happened: "And mount Sinai was altogether on a smoke, because the LORD descended upon it in fire: and the smoke thereof ascended as the smoke of a furnace, and the whole mount quaked greatly." God's presence generated an earthquake! He used His power over the elements to get Israel's undivided attention.

Moses' response indicated that the message came through, loud and clear: "And so terrible was the sight, that Moses said, I exceedingly fear and quake" (Heb. 12:21). If Moses, who had communed with God, responded this way, imagine the response of the others—especially wide-eyed children.

Accompanying God's Deliverance

In I Samuel 14:15, God was moved by the faith and courage of Jonathan and his armor-bearer and wrought a mighty deliverance: "And there was *trembling* in the host, in the field, and among all the people: the garrison, and the spoilers, they also trembled, and the earth *quaked*: so it was a *very great trembling*."

God intervened due to Jonathan's daring courage: "...it may be that the LORD will work for us: for there is no restraint to the LORD to save by many or by few" (vs. 6). After sending the earthquake, which terrorized the Philistines, God caused the enemy to turn on each other, resulting in the deaths of thousands. The survivors fled.

Other accounts of earthquakes accompanying God's deliverance occurred shortly after the beginning of the New Testament Church, in A.D. 31. The first account is Acts 4:29-31: "And now, Lord, behold their threatenings: and grant unto Your servants, that with all boldness they may speak Your Word, by stretching forth Your hand to heal; and that signs and wonders may be done by the name of Your holy Child [Servant] 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 spoke the Word of God with boldness." The quake showed that He had heard and answered their prayer.

Another earthquake occurred when the Apostle Paul was accompanied by Silas in the city of Philippi in Asia Minor. They were illegally beaten and cast into prison. But God delivered them: "And suddenly there was a *great earthquake*, so that the foundations of the prison were *shaken*: and immediately all the doors were opened, and every one's bands were loosed" (Acts 16:26).

This miracle also resulted in the conversion of the prison keeper and his family.

A Result of God's Wrath

Psalm 18:7 briefly reveals this aspect of God's use of earthquakes: "Then the earth *shook* and *trembled*; the foundations also of the hills *moved* and were *shaken*, because *He was wroth*."

Also notice: "But the LORD is the true God, He is the living God, and an everlasting King: *at His wrath* the earth shall *tremble*, and the nations shall not be able to abide His indignation" (Jer. 10:10).

Many earthquakes prophesied for the end time will carry this overtone. This involves, primarily, the major earthquakes listed in the book of Revelation. They will convey God's wrath to a world that refuses to heed His warnings and correction.

Earthquakes at Past Events in God's Plan

Earthquakes have also accompanied events in God's unfolding Plan. Some examples of this are recorded in the account of the crucifixion: "And, behold, the veil of the temple was rent in twain from the top to the bottom; and the earth did *quake*, and the *rocks rent*" (Matt. 27:51).

Next is another aspect of the same earthquake: "Now when the centurion, and they that were with him, watching Jesus, saw the earthquake, and those things that were done, they feared greatly, saying, Truly this was the Son of God" (vs. 54).

Another "great earthquake" accompanied Christ's resurrection, three full days later: "And, behold, there was a great earthquake: for the angel of the Lord descended from heaven, and came and rolled back the stone from the door, and sat upon it" (Matt. 28:2).

Certainly the earthquakes showed the utmost importance of Christ's death and resurrection.

Recall that an earthquake accompanied the giving of the Ten Commandments (Ex. 19:18). God's giving His Law to Israel was definitely a crucial juncture in His Plan.

Earthquakes Announcing Christ's Return

In Matthew 24, Christ told His disciples of the signs that would precede His Second Coming.

In verse 7, He stated, "and there shall be...earthquakes, in diverse places."

This verse did not define any particular earthquake that would traditionally announce a particular event. Rather, it defined the sign as "earthquakes," and that they would take place in various places—scattered

throughout the world.

Mark 13:8 and Luke 21:11 also reflect this. Christ meant that, as a sign, earthquakes would proliferate as the time of His Return drew near.

Had earthquakes been as prolific throughout history as they are today, then they would not indicate that the end of the age was near. They are much more common now than in the days of the early Church or the Church during the Middle Ages.



PROPHETIC CONDITIONS

EARTHQUAKES AND

VOLCANOES IN PROPHECY

PART 3

GREAT EARTHQUAKES TO PRECEDE CHRIST'S RETURN

e have seen that God often uses earthquakes in the fulfillment of His Plan. The Bible prophesies that great earthquakes will soon strike earth for a great reason.

For 6,000 years, since the Garden of Eden, a rebellious humanity has rejected the Creator's instruction. He has allowed this for His own great purpose. However, this is all about to change.

God is about to involve Himself in

the affairs of this world in a way that He has *never* done before. Earthquakes play a significant role in what is about to occur.

The book of Revelation prophesies FIVE specific earthquakes. There is strong indication that each of these earthquakes is unique, and that each occurs at a particular juncture of God's final prophetic timeline.

Revelation 6:12

This earthquake occurs after the Fifth Seal, upon the opening of the Sixth Seal. The terrible time of the Fifth Seal involves the military invasion and the captivity of the peoples of modern Israel. This includes the two and a half years of unparalleled suffering and tribulation—the worst time of suffering in all of history, to be brought upon *this* generation.

By its very timing and context, this earthquake proclaims the *end of the tribulation* and the *beginning of signs that appear in the heavens*.

Revelation 6:12 states, "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."

This event is also covered in Matthew 24:29: "Immediately *after the tribulation* of those days shall the



sun be darkened, and the moon shall not give her light, and the stars shall fall from heaven, and the powers of the heavens shall be *shaken*."

Luke 21:25-26 describes this same event: "And there shall be signs in the sun, and in the moon, and in the stars; and upon the earth distress of nations, with perplexity; the sea and the waves roaring [tsunamis]; Men's hearts failing them for fear, and for looking after those things which are coming on the earth: for the powers of heaven shall be shaken."

based on God's government.

Again, this earthquake announces the SIXTH SEAL—the heavenly signs. Though frightening, this seal quickly passes, as people take this as an ominous sign of things yet to come.

Notice Isaiah's description of this time: "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 LORD, and for the glory

This earthquake represents the beginning of the *seven trumpet* plagues. This means the beginning of the fulfillment of the Seventh Seal and the beginning of the Day of the Lord.

Certain scriptures speak of the solemnity of this time: "Alas for the day! For the day of the LORD is at hand, and as a *destruction* from the Almighty shall it come" (Joel 1:15).

Joel 2:31 shows the precise timing of this event: "The sun shall be turned into darkness, and the moon into blood, *before* the great and the terrible Day of the LORD come." This matches the sequence in Revelation, as the heavenly signs immediately precede the Day of the Lord.

Revelation 11:13

This earthquake occurs after the *two witnesses* are resurrected. The timing of this earthquake is prior to the time of the seventh trumpet—the Return of Christ, and the First Resurrection (I Cor. 15:51; I Thes. 4:16).

Notice Revelation 11:12-13: "And they heard a great voice from heaven saying unto them [the two witnesses], Come up hither. And they ascended up to heaven in a cloud; and their enemies beheld them. And the same hour was there a *great earthquake*, and the tenth part of the city [Jerusalem] fell, and in the earthquake were slain of men seven thousand: and the remnant were affrighted, and gave glory to the God of heaven."

This earthquake appears to be centered mainly in the area of Jerusalem, but could still be worldwide in scope. It cannot be the same one described in Zechariah 14:4, because all nations will not yet have gathered for the Battle of the Great Day of God Almighty (the time of the last plague, or sixth vial of wrath–Rev. 16:12-15).

This particular earthquake precedes and announces the pivotal event in mankind's history—Christ's Return.

Revelation 11:19

This earthquake occurs *after* the seventh trumpet has sounded (Rev. 11:15). This is the time of the Return



Yet the context of Revelation 6 reveals more about this earthquake: "and every mountain and island shall be moved out of their places" (vs. 14).

This earthquake will be worldwide in scope. But all the geological features of the earth will not necessarily be totally changed by one single, final earthquake. The process of altering the earth's surface appears to take place in stages. God could bring it about in such a way as to preserve life on the earth, with each of these five final earthquakes contributing to some aspect of the geological transformation.

If all the necessary geological changes were a result of one final cataclysmic earthquake, it could threaten all life on earth. Actually only a tenth of humanity will survive into the millennium, to begin the new civilization of His majesty, when He arises to shake terribly the earth" (2:20-21). The above verses compare closely to Revelation 6:15-16.

Finally, notice Revelation 6:17, in which the people lament, "For the great day of His wrath is come; and who shall be able to stand?" Here the people terribly fear facing the One whom they have openly disobeyed. They dread facing His full wrath.

Revelation 8:5

As the SEVENTH SEAL is opened, seven angels stand before God and receive the seven trumpets. Another angel took a censer "...and filled it with fire of the altar, and cast it into the earth: and there were voices, and thunderings, and lightnings, and an *earthquake*."

of Christ, as expressed in the latter part of verse 15: "...and there were great voices in heaven, saying, The kingdoms of this world are become the kingdoms of our Lord, and of His Christ; and *He shall reign for ever and ever*."

Verse 19 states, "And the temple of God was opened in heaven, and there was seen in His temple the ark of His testament: and there were lightnings, and voices, and thunderings, and an earthquake, and great hail." This earthquake occurs immediately after the Return of Christ and the First Resurrection—it marks the fulfillment of these events.

Christ's Return brings the First Resurrection and makes every following event possible. This pivotal event is the most crucial in all history! Earthquakes before and after this event underscore its momentous importance in God's Plan. No other event bears such distinction.

This earthquake is also one that results from the *presence* of God. Jesus Christ will then be *present* on earth as King—assuming rulership in glory over the earth.

At this event, the earth quakes with gladness, along with the whole creation: "Let the sea roar, and the fullness thereof; the world, and they that dwell therein. Let the floods clap their hands: let the hills be joyful together before the LORD; for He comes to judge the earth: with righteousness shall He judge the world, and the people with equity" (Psa. 98:7-9).

Romans 8:19: "For the earnest expectation of the creature [creation] waits for the manifestation of the sons of God." This event will fulfill the hope and expectations of the very creation—the Return of Christ along with all the other Sons of God in the First Resurrection.

Revelation 16:18

This is the final earthquake and will be the most powerful one ever to occur since man was created upon the earth. Verses 17-18 record, "And the seventh angel poured out his vial into the air; and there came a great voice out of the



1989 Loma Prieta earthquake: A car lies crushed under the third story of a San Francisco apartment building. PHOTO: U.S. Geological Survey

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."

This is the great earthquake in which the remaining topography of the earth is changed. Notice verse 20: "And every island fled away, and the mountains were not found."

This earthquake appears to complete the process begun by the earthquake of Revelation 6:12-14, in which "every mountain and island were moved out of their places."

This is the same earthquake mentioned in Zechariah 14. It follows the time when all nations are gathered for battle, coinciding with the sixth vial of wrath of Revelation 16:12-15.

Zechariah 14:4 states, "And His feet shall stand in that day 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."

Finally, verse 9 states, "And the LORD shall be King over all the earth..."

In summary of the earthquakes of Revelation listed above, note that they are accompanied by *voices*, *lightning*, and *thunder*. They occur at the time of the earthquake of Revelation 8:5 (at the beginning of the Day of the Lord), the earthquake of Revelation 11:19 (after the Return of Christ), and the final earthquake of Revelation 16:18 (at the end of the seven last plagues).

For audible voices to be heard in the midst of an earthquake, especially accompanied by lightning and thunder, they would have to be those of God's mighty angels.

Notice Revelation 4:5: "And out of the throne proceeded lightnings and thunderings and voices..." A number of scriptures associate lightning with God's throne in heaven.

God engraves these earthquakes with His "signature"—voices, lightnings, and thunderings.

The following verses apply generally to all the final earthquakes of Revelation, but especially to that final great earthquake.

- Isaiah 13:13: "Therefore I will shake the heavens, and the earth shall remove out of her place, in the wrath of the LORD of hosts, and in the day of His fierce anger."
- Isaiah 24:19-20: "The earth is utterly broken down, the earth is clean dissolved, the earth is moved exceed-

ingly. 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; and it shall fall, and not rise again."

- Ezekiel 38:20: "...and all the men that are upon the face of the earth, shall shake at My presence, and the mountains shall be thrown down, and the steep places shall fall, and every wall shall fall to the ground."
- Joel 3:16: "The LORD also shall roar out of Zion, and utter His voice from Jerusalem; and the heavens and the earth shall shake: but the LORD will be the hope of His people, and the strength of the children of Israel."
- Haggai 2:6-7: "For thus says the LORD of hosts; Yet once, it is a little while, and I will shake the heavens, and the earth, and the sea, and the dry land; and I will shake all nations, and the desire of all nations shall come: and I will fill this house with glory, says the LORD of hosts."

Earthquakes Used to Reshape the Surface of the Earth

Extending beyond the *context* of these five earthquakes of Revelation, they will also serve to reshape the earth's surface. The God of all power, who formed the hills and mountains, will *reform* them and *reshape* the surface of this earth (Amos 4:13; Psa. 90:2).

Notice Isaiah 40:4-5: "Every valley shall be exalted, and every mountain and hill shall be made low: and the crooked shall be made straight, and the rough places plain: And the glory of the LORD shall be revealed, and all flesh shall see it together: for the mouth of the LORD has spoken it."

These verses speak of dramatic changes in the earth's surface. Vast mountain ranges will no longer exist. Any remaining mountains and hills will be used for a special purpose as God has appointed.

The highest "mountain" during the time of the millennium may be mentioned in Isaiah 2:2: "And it shall come to pass in the last days, that the mountain of the LORD's house shall be established in the top of the mountains, and shall be exalted above the

hills; and all nations shall flow unto it."

Of course, this is symbolic, because it speaks of nations. Though it may not refer to a literal mountain, it probably does.

Notice Ezekiel 40:2, which also refers to this mountain of the future: "In the visions of God brought He me into the land of Israel, and set me upon a *very high mountain...*"

The scripture continues to give detailed descriptions of the temple of the Lord, which will be located upon this mountain.

The renewal of the surface of the earth will be to accommodate the vast number of humanity that will populate the earth by the later stages of the millennium and also the many billions that will come up later in the general resurrection—the White Throne Judgment (Rev. 20:11).

The earth will be able to accommodate many more billions than now, once more usable land becomes available for farming and for living space.

Not only will mountain ranges be removed, more land will be reclaimed from the deserts and oceans as well. These changes in the topography of the earth will accommodate a change in the weather. It will become favorable, rather than the harsh, threatening, destructive element during the course of human history.

Without droughts and floods, and without the terrible extremes of temperature, precipitation and destruction from other elements in nature, farming will be more productive. Even the waters of the oceans will be healed and purified (Ezek. 47:8-10).

Earthquakes have been instrumental in serving God's purpose in a number of ways. Indeed there is a purpose for every aspect of God's creation: "To every thing there is a season, and a *time to every purpose* under the heaven" (Ecc. 3:1).

The good news beyond the depressing trends and statistics of this present world will eventually eclipse the human tragedies that occur in this age. Earthquakes will play a role in this transition that ends in peace, security and fulfillment for the survivors.

As frightening and destructive as they are, God will use earthquakes to reshape the earth's surface, in preparation for the greatest time of peace and abundance that mankind has ever known.

This is a wonderful time that the whole world can look forward to. It is coming soon! \Box





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