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In the Name of God, Most Beneficent, the Merciful

Sub Water Volcanic Eruption As A Possible Cause Of The Great Deluge Of Noah

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Abstract

The great Noah's Deluge is a topic of interest in the Holy books and to us the present inhabitants of the Earth, as our ancestors were on the board of Noah's Ark.

What really happened from the geological and astronomical concepts will be discussed in the frame of the truthful light of the holy Quran.

The detailed main steps of this Dilemma are summarized in the Quran as follows:

1) So, when Our command came and <u>attenur¹ (volcano)</u> effervesced.

We said: "Carry in it two of every pair, and your family; except those against whom the word has been issued; and whoever believed." but those who believed with him were few (40). chapter 11

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¹ A ttanur is an Arabic word for a volcanic conical shape oven

- 2) And while it was running with them in waves like mountains.... (42) chapter 11
- 3) So We opened the gates of the sky with pouring water.(11) chapter 54
- 4) And we have exploded the earth with springs. The waters met to a command which had been measured.(12) chapter 54
- 5) And it was said: "O land, swallow your water, and O sky, cease." And the water was made to subside, and the matter concluded. And it was leveled on the Judi, and it was said: "Away with the wicked people." (44) chapter 11

The clear statement "waves like mountains" that carried the ark off the ground in the early stage of the event is an indication of Tsunami. Its cause is likely to be a sub-water volcanic eruption as indicated in step 1. There was enough time between the eruption of the volcano and the arrival of the water waves to embark pairs of animal and perhaps seeds of plants. This means that the location of the volcano was far enough. In addition all the underground water came above the ground through the springs and it is rather likely that this was a global event.

The other side of the event "We opened the gates of the sky with pouring water" is of astronomical interest.

When a severe coronal mass ejection, which is piece of the sun, hits the earth and the interplanetary magnetic field is directed opposite to that of the magnetosphere, a gate gets opened in the magnetosphere and pouring highly relativistic protons penetrate down to the troposphere through these opened gates as well as through the two polar gates inducing hurricanes and deluges.

At the end of the event, the earth swallowed its underground water and the sun stopped sending successive coronal mass ejections and their boat settled on the Judi in the extreme East of Turkey. The boat was preserved through the ages but an earthquake and heavy rain uncovered its position on the Judi and it was recently uncovered from its covering mud.

And We have left it as a sign. Do any of you wish to learn? (15) Chapter 54

Waves Like Mountains

A tsunami is actually a displacement wave. When a mass of land shifts under (or into) the sea because of submarine landslides, earthquake-caused slumps or uplifts of the sea floor, or volcanic activity, a mass of water must move (Kienle 1978). Submerged volcanoes pose Tsunami threat. If any one of these underwater volcanoes either explosively erupts or collapses in a sudden movement, it would have a massive impact on the ocean, triggering a tsunami which could devastate communities across the region. Figure (1) shows a photo of some of the newly discovered submerged volcanoes north of New Zeeland.

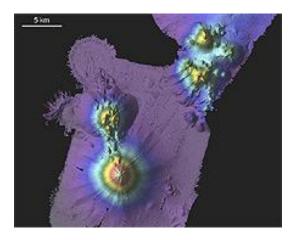


Fig 1: some of the submerged volcanoes found north of New Zeeland (physorg.com 2005)

Submerged volcanoes offer a direct channel to the Earth's mantle (physorg.com 2005). When the mantles effervesced, the lava gushes forth of the submerged volcano in eruption inducing a Tsunami.

Beget et al (2006) studied the nature and significance of volcanic tsunami since the last 250 years. The tsunami waves attenuate with distance and the largest tsunami waves reported are on the order of 30 m.

The event of December 2004 Tsunami in South East Asia was attributed to an earth quake however the bodies of the victims were found burnt indicating that there was also a sub-water volcanic eruption and the lava has burnt the bodies.

Fig 2 shows the moment of arrival of the tsunami to the shore with the waves writing (Allah) indicating that the Tsunami's destruction is God's order.

Fig 3 shows two satellite photos prior and after the destruction..



Fig 2: December 26 2004 Tsunami attacking the shore in the name of Allah



Fig 3: December 26 2004 tsunami destruction.

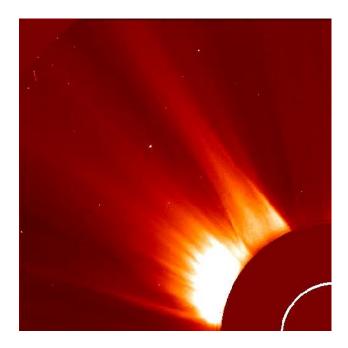


Fig 4: Solar coronal mass ejections ejected from the sun. The sun is occulted.

Coronal mass ejections are pieces of the high temperature solar corona ejected from the sun. They are frequently ejected from the sun in all directions; however their frequency increases with the increase of the state of solar activity. Sometimes they hit the Earth and are then called halo CMEs. The Earth is enveloped by the magnetosphere. CMEs are geo-effective provided the direction of their accompanying magnetic field is in the z direction. In that case a gate gets opened in the magnetosphere and relativistic solar protons and electrons leak inside, reach the troposphere and ionize some of its constituents. Such ions act as nuclei on which water cluster around. Clouds form quickly and flash floods develop. Hurricanes also can be related to halo solar coronal mass ejections.

The advantage of the rain and underground water is to wash out the salt from the ground and let it fertile for cultivation.

And we exploded the Earth with springs

We can imagine that as the lava gushed forth of the volcano indicating that magma in the earth's interior expanded considerably thus cracks in the earth's crust resulted every where.

Underground water rose up through those cracks. It is possible that the water was heated by the swollen magma.

Lunar Forcing on volcanoes and geysers

The following verse of the Quran is in moon chapter. "We exploded the earth with springs…" (12) The Moon

This can be inspiring to the role of the moon in this catastrophe. This role can be discussed from different aspects:

Tidal forcing on volcanic eruptions;

Tidal forces effect on the height and travel time of the Tsunami

Tidal forcing on geysers and springs.

Tidal Forcing On Volcanic Eruption

Tidal heating of the interior of Io, the satellite of Jupiter is very evident causing the eruption of volcanoes (Pogge 2006). Although the general idea is that the earth's magma is heated by radio activity, lunar tides can also have a contribution. Accumulated tidal heating might have caused a sudden eruption of the earth's magma. The swollen magma is easy to have gone through the submarine volcano causing it to effervesce and inducing tsunami.

Volcanoes, Tsunamis and Tides

Kienle (1987) put a computer model to study the October 1883 Tsunami induced by the eruption of Mt. St. Helens volcano with a portion of the volcano itself hurtled down. He came to the conclusion that the anchorage would have some four hours' time to prepare for a very small wave that would cause no problems at low tide. It, on the other hand, would have about an hour to get ready for a tsunami near the size of the one reaching English Bay (20 feet) that could inundate a lot of land if it came at a time of high tide.

It is thus reasonable to postulate that the Tsunami would come faster and higher at high tides. Lunar tides would have dual effect, it depends on how far is the eruptive volcano at the time of Noah and the time needed to embark the animals into the ship. Since the waves were like mountains, we can postulate that the Tsunami happened at the time of high lunar tides. This will put the position of the volcano further away than it would have been at low tides.

Assuming Noah and his people were located in Iraq, then for a direct hit of the Tsunami and assuming the cause of the tsunami was a submarine volcanic eruption, then it is likely that the location of the volcano be somewhere in the Indian Ocean to the south of the Arabian Gulf .perhaps near Madghushkar and moon islands . It is suggested that a research of such submerged volcano can be started in the likely position.

Tsunami waves can be very long (as much 100 kilometers) and be as far as one hour apart. They are able to cross entire oceans without great loss of energy. The Indian Ocean tsunami of December 2004 traveled as much nearly 5,000 kilometers to Africa, arriving with sufficient force to kill people and destroy property (national geographic news 2005 b).

Tidal Forcing on Geysers.

Earth tides, like ocean tides, arise from interactions between the gravitational fields among the earth, sun, and moon. These tidal forces can systematically affect geyser behavior (Streepey 1996). Figure 4 shows a schematic drawing of the effect of tides on plumbing systems. Low tides, which are associated with squeezing, close channel openings and restrict the flow of water into reservoirs. Conversely, dilation associated with high tides opens cracks and channels and allows a faster flux of water into the plumbing system. Many geysers have eruptive schedules that are in sympathy with tides. (Rinehart, , 1980; Figure 5).

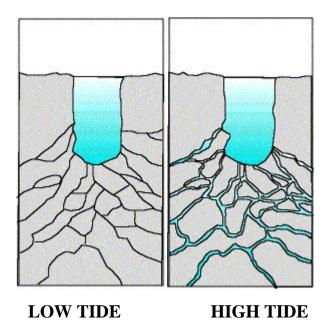


Fig 5: The effect of earth tides on plumbing systems (after Rinehart, 1980).

Earthquake Effects

There is a generally a strong correlation between earthquake activity and geyser behavior. This phenomenon has been observed for centuries, but only recently have the changes in geyser behavior been documented. The 1959 Hegben Lake earthquake has had the most dramatic effect on Yellowstone geysers of any earthquake since the park's discovery (Rhinehart, 1980). Since the epicenter was so close to Yellowstone (only about 50 km away) the effects were significant. Immediately after the earthquake, all the geysers in the park erupted, and the average temperature in geysers and springs increased by an average of 2°C. Some geysers that were previously dormant became active, ostensibly by the opening of sealed channels along planes of weakness, and several active geysers changed their eruptive behavior. However, it has responded to several other earthquakes with epicenters much farther away, such as the magnitude 8.4 earthquake in Alaska in 1964. Some geysers in California show changes in observable activity before nearby earthquake activity. They surmise that, although the response of geysers to tectonic strain is not well understood, there are two basic mechanisms by which seismic activity could affect geyser behavior. In the first, changes in the regional strain field change the volumetric flow velocity into the reservoir, thus affecting the interval between geyser eruptions. In another scenario, the permeability of the plumbing system could change due to strain-induced changes in micro fractures in the geyser reservoir.

And it was said: "O land, swallow your water, and O sky, cease." And the water was made to subside...."(44) Chapter 11

How this catastrophe came to an end? Two commands were given. An order to the earth to swallow its water and another to the sky to cease.

- 1. As for the earth, the swollen magma returned to its pre- effervesced state (Osama 2007), thus the expelled water returned to their underground aquifers.
- 2. As for the sky, the excessive sending of the sun to its geo-effective halo coronal mass ejections came to a halt, thus the opened gates in the magnetosphere were closed and the rain and hurricanes were stopped.

...and the matter concluded. And it was leveled on the Judi (44)chapter 11

When the water was subsidized, the boat was leveled on mount Judi in the extreme east of Turkey (fig. 7). The Judi has the advantage of having a flat top in order that the ship would be leveled. Most important is that the number of Aiat 44 stating the leveling on Judi is actually the longitude of the arch on mount Judi.

About a decade ago I had the privilege of visiting this site and to pray on board the boat which was then covered by mud.(fig. 8).



Fig 7; East of Turkey showing Mount Arrarat. Mount Al Judi is near by Ararat. The nearest Turkish- Kurdish town Duga Biazeid..

And We bore him on that which was made of planks and nails (13) It ran under Our watchful eyes; a reward for one who was rejected (14) And We have left it as a sign. Do any of you wish to learn?(15) Surart the moon

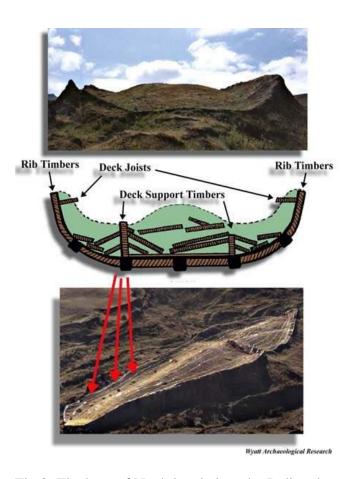


Fig 8. The boat of Noah leveled on the Judi and covered by mud



Fig 9.After failing to find the boat on mount Ararat (seen in the background), a Christian excavation team cleared the boat from mud on the Judi. .

When Was The Great Noah Deluge???

The drowning of planet earth at the time of the Prophet Noah is of great interest. The main source of the excessive water is underground aquifers and excessive rain. The underground water which might be hot raised the sea temperature and acted in melting snow in the Polar Regions particularly when hot water springs gush out underneath the ice. The increased activity of the sun and the frequent bombardment of coronal mass ejections acted in increasing the earth's temperature suddenly. The active sun would increase the energy budget of the sun reaching the earth and would increase the earth temperature. Prior to the deluge it is highly likely that in the vicinity of Noah's people area, drought prevailed as evident by the absence of tree rings in the wood of Noah' ark and by Noah's advice to his people in Noah's chapter in the holy Quran

"Then I said, Ask forgiveness of your Lord, surely He was ever the most Forgiving (10) He will send the sky on you in abundance (11) And He provides you with money and sons, and He makes for you gardens, and He makes for you rivers (12) chapter 71.

So they had shortage of rain, rivers and plantation prior to the deluge. This would imply a rather inactive sun.. During the duration of the opening of the gates of the magnetosphere, the sun became excessively active with very high irradiance level, enough to change the status of the earth from an ice age epoch to an interglacial period in extremely short time. This will suddenly raise the sea level and add up to the liquid water enormous quantity needed to drown planet earth completely.

The combined effect of these factors would terminate the ice age abruptly and forced the earth to enter the interglacial epoch of the Holocene. If this assumption is right and God knows best then the Noah catastrophe is possibly around 11600 BP as seen in fig (6). Ice core records from Greenland show in less than a decade there was a sudden warming of around 15 degrees Celsius of the annual mean temperature. At the same time a doubling of annual precipitation occurred Alley, et al. 1993). paleoclimate research has shown that climate can in fact change very quickly, in a matter of seasons and years rather than centuries or millennia as was previously thought. (climate science). It is suggested that the switch between glacial and interglacial was of the order of months. This will drown all inhabitants in the Arabian Gulf, in the south of Japan, in the black Sea and other places which were land in the ice age and which are now submerged.

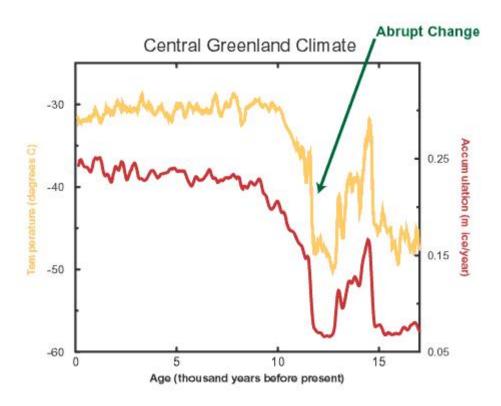


Fig 6 Abrupt climate change some 11,600 years ago at the termination of the Younger Dryas cold event, which was the last blast of cold climate at the end of the last Ice Age.

Some Geological Evidences Of Noah's Deluge

Animals are known to feel catastrophes beforehand. Mott (2005) reported that before the giant Tsunami waves slammed into Sri Lanka and India, elephants screamed and ran to higher grounds. Other animals also seemed to know what was about to happen and fled to safety. The existence millions of animals in grave yards can be explained by the collective trial of escape of multitudes of animals from a great catastrophe.

The geological evidences of the great Noah Deluge are taken from Hills (2003).

1-Fossil Graveyards

The existence of fossil graveyards in every continent of the world is strongly of a global flood disaster. Several animals have been found to be preserved whole, with flesh and even hair intact. Undigested vegetation from a much more temperate climate has been found in their stomachs.

These mammals are found together with smashed trees up to 200 feet long.

The evidences suggest that these millions of mammals were suddenly drowned in silt and flash frozen relatively recently. Mammoths' carbon dating gives ages ranging between 11,450 to 39,000BC (the 11, 4500 limit is consistent with end of ice age). Whether this wide spread in ages is genuine or artifact of the carbon dating method is difficult to judge. Similarly, hundreds of mammoths together with bison, horse and sheep have been found frozen on the island of Kotelni even further inside the Arctic Circle where no vegetation grows today, even during the short summer months. The Islands .of Bielbkov and Stolbovni are likewise strewn with bones of ancient creatures.

Mammoth bones have been dredged up from the Arctic Ocean and storms have washed them up on many of the northern coasts. The banks of the great rivers Ob, Yenesets, Lena and Indigrika, flowing through hundreds of miles are wearing away their banks and exposing more and more mammoth bones.

The intact specimens are obviously well fed and obviously did not die of hunger.

Many other parts of the world have "fossil graveyards" containing vast conglomerates of mixed fossils of modern and extinct fish. Birds, reptiles, mammals, insects and plants all jumbled together in huge masses.

The "Karroo Beds "in South Africa contains the remains of some 800 billion vertebrates, ranging from lizards to mammals. Such a large number is staggering and hard to reconcile with a local flood.

There are documented examples of caves strewn with bones of hippopotami, pigmy, elephants and other recent mammals in widely separated regions as South America, Java, Australia, France, Sicily, Cyprus and Malta.

Many of these fossil graveyards contain deposits of birds such as giant eagles with long range flight capabilities which are hard to explain if the floods were only local. In addition, the observation that each of these deposits contains mixtures of fossils from widely different geographic locations.

2-Breccia Deposits

Breccia derives from Iranian word for "Broken walls". It consists of sharp fragments of stone mixed with clay and gravel and cemented together with calcium deposits.

Ossiferous berccia also contains broken fragments of bones, teeth, jaws and vertebrae from many different kinds of animals. They are spread in many parts of the world.

3-Un fossilized Sea-Shells at high Altitudes

The unexpected existence of un fossilized sea shells at high monotonous regions including some found 1300 feet up in the Andes mountains and others 1350 feet up in the mountains Moel Tryfan regions of North Wales.

The fact that these shells are un fossilized shows that they were deposited relatively recently. While not proven a global flood. There existence is certainly hard to explain without it.

4- Existence of Conglomerate Rock

Compromises a matrix of sandstone or other fine grated rock, but contained within this matrix are many rounded pebbles of various sizes and even boulders. They are usually deposited from fast flowing water under extreme flood conditions, sufficient to roll or carry the rocks and boulders. Such conglomerates are found throughout the world and can cover wide areas. For example, the Shin rump conglomerate of Colorado plateau covers an area of about 125,000 square miles.

5- Badland Drainage Features

If a global flood covered the continental plates and then drained away one would expect to find surface erosion features corresponding to sudden flood conditions in some unusual places. One example is the Scabland architecture of North America.

6- Silt Layers

The Discovery of Silt layers in Mesopotamia, the Black Sea, Central Europe and South East Asia could be suggestive of a global flood.

A suggested Model of Noah Deluge

- 1-The earth's mantle was over heated, perhaps the lunar tides has an effect on this heating. The mantle thus expanded causing the lava to bubble up from a volcano.
- 2- It is rather likely that this was a sub-water volcano.
- 3- Such volcanic eruption has initiated a severe tsunami with waves like mountains. The waves lifted the ark off the ground.
- 4- The swollen molten mantle caused the earth's crust to crack open.
- 5-Underground water gushed forth with the explosion of the crust by springs.
- 6-The sun during the time of the prophet Noah was inactive and it seems that drought prevailed in his location as he told them to ask God for forgiveness so that He would send the sky on them continuously. This would imply sending coronal mass ejections frequently from a very active sun towards the earth. Those geo-effective coronal mass ejections open gates in the magnetosphere through which relativistic protons and electrons pass through to the troposphere initiating flash floods, cyclones and hurricanes.
- 7- Underground water came out of the earths crust cracks in great quantities. Some of these springs might have been coming from the deep and were hot.
- 8- Beasts have run towards the edge of continents in millions but died collectively.
- 9- The extraordinary active sun then had caused the temperature of the earth to rise and the snow in the ice caps to melt. Such melting was greatly accelerated by the explosions of hot water and the excessive pouring water.

Thus the combined effect of the solar induced climate change and the explosion of spring particularly hot water springs have caused the earth to switch from the glacial epoch to the interglacial epoch. The level of the water kept on rising quickly till the

earth was covered completely by water up to the height of the Himalaya. Geological recent marine fossils on high mountains points towards coverage of the earth by water.

10- Every thing was drowned and the matter concluded and an order was given to the sun to stop sending halo coronal mass ejections and the rain ceased.

11- The magma cooled off and shrank to its normal position and the water was swallowed by the earth through the cracks and was reserved underground.

The boat settled on mount Judi.

Acknowledgements

I am deeply thankful to god for given m the chance to be on Noah's ship on the Judi and to be able to write this paper.

My sincere thanks are also due to my parents. and to all who discussed the process that led to Noah's great deluge. I also appreciate the chance given to me by Prof. Aly Sadik to publish this work.

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