

Chapter 12

Noah's Flood—what about all that water?

- Where did all the water come from for the Flood?
- Was there a water vapour canopy?
- How was Mt Everest covered with water?
- Where did the water go after the Flood?
- How could this have happened?

IN telling us about the globe-covering Flood in the days of Noah, the Bible gives us information about where the waters came from and where they went. The sources of the water are given in Genesis 7:11 as *'the fountains of the great deep'* and the *'windows of heaven'*.

The fountains of the great deep

The *'fountains of the great deep'* are mentioned before the *'windows of heaven'*, indicating either relative importance or the order of events.

What are the *'fountains of the great deep'*? This phrase is used only in Genesis 7:11. *'Fountains of the deep'* is used in Genesis 8:2, where it

clearly refers to the same thing, and Proverbs 8:28, where the precise meaning is not clear. ‘*The great deep*’ is used three other times: Isaiah 51:10, where it clearly refers to the ocean, Amos 7:4, where God’s fire of judgment is said to dry up the great deep, probably the oceans, and Psalm 36:6 where it is used metaphorically of the depth of God’s justice/judgment. ‘*The deep*’ is used more often, and usually refers to the oceans (e.g. Gen. 1:2, Job 38:30, 41:32, Psalm 42:7, 104:6, Isa. 51:10, 63:13, Eze. 26:19, Jon. 2:3), but sometimes to subterranean sources of water (Eze. 31:4,15). The Hebrew word (*mayan*) translated ‘fountains’ means ‘fountain, spring, well’ (Strong’s Concordance).

So, the ‘*fountains of the great deep*’ are probably oceanic or possibly subterranean sources of water. In the context of the Flood account, it could mean both.

If the fountains of the great deep were the major source of the waters, then they must have been a huge source of water. Some have suggested that when God made the dry land appear from under the waters on the third day of creation, some of the water that covered the Earth became trapped underneath and within the dry land.¹

Genesis 7:11 says that on the day the Flood began, there was a ‘breaking up’ of the fountains, which implies a release of the water, possibly through large fissures in the ground or in the sea floor. The waters that had been held back burst forth with catastrophic consequences.

There are many volcanic rocks interspersed between the fossil layers in the rock record—layers that were obviously deposited during Noah’s Flood. So it is quite plausible that these fountains of the great deep involved a series of volcanic eruptions with prodigious amounts of water bursting up through the ground. It is interesting that up to 70% or more of what comes out of volcanoes today is water, often in the form of steam.

In their catastrophic plate tectonics model for the Flood (see Chapter 11), Austin *et al.*² have proposed that at the onset of the Flood, the ocean floor rapidly lifted up to 2,000 metres (6,500 feet) due to an increase in

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1. Evidence is mounting that there is still a huge amount of water stored deep in the earth in the crystal lattices of minerals, which is possible because of the immense pressure. See Bergeron, L., 1997. Deep waters. *New Scientist* 155(2097):22–26: ‘You have oceans and oceans of water stored in the transition zone. It’s sopping wet.’
 2. Austin, S.A., Baumgardner, J.R., Humphreys, D.R., Snelling, A.A., Vardiman, L. and Wise, K.P., 1994. Catastrophic plate tectonics: A global Flood model of Earth history. *Proc. Third ICC*, pp. 609–621.



A lot of volcanic activity would be expected with such a cataclysm as the Flood.

temperature as horizontal movement of the tectonic plates accelerated. This would spill the seawater onto the land and cause massive flooding—perhaps what is aptly described as the breaking up of the *'fountains of the great deep'*.

The windows of heaven

The other source of the waters for Noah's Flood was *'the windows of heaven'*. Genesis 7:12 says that it rained for 40 days and 40 nights continuously.

Genesis 2:5 tells us that there was no rain before man was created. Some have suggested that there was no rainfall anywhere on the Earth until the time of the Flood. However, the Bible does not actually say this, so we should not be dogmatic.³

Some have argued that God's use of the rainbow as the sign of His covenant with Noah (Gen. 9:12–17) suggests that there were no rainbows, and therefore no clouds or rain, before the Flood. However, if rainbows (and clouds) existed before the Flood, this would not be the only time God used an existing thing as a special 'new' sign of a covenant (e.g., bread and wine in the Lord's Supper).

3. Some have claimed that because the people scoffed at Noah's warnings of a coming flood, they must not have seen rain. But people today have seen lots of rain and floods, and many still scoff at the global Flood. Gen. 2:5 says there was no rain *yet* upon the earth, but whether or not it rained after that in the pre-Flood world is not stated.



It is difficult to envisage a pre-Flood water cycle without clouds and rain, as the sun's heat, even in that era, must have evaporated large volumes of surface waters which would have to have eventually condensed back into liquid water. And droplets of liquid water form clouds from which we get rain.

The expression 'windows of heaven' is used twice in reference to the Flood (Gen. 7:11, 8:2). It is used only three times elsewhere in the Old Testament: in 2 Kings 7:2,19 and in Malachi 3:10. In all three cases, it refers to God intervening in an extraordinary way to pour out blessings on his people. 'Windows of heaven' is not a term applied to ordinary events. Clearly, in Genesis the expression suggests the extraordinary nature of the rainfall attending the Flood. It is not a term applied to ordinary rainfall.

What about 'the waters above'?

We are told in Genesis 1:6–8 that on the second day of creation God divided the waters that were on the Earth from the waters that He placed above the Earth when He made a '*firmament*' (Hebrew, *raqiya*, meaning 'expanse') between those waters.⁴ Many have concluded that this '*expanse*' was the atmosphere, because God placed the birds in the expanse,

4. In trying to disparage the Bible, some sceptics claim that *raqiya* describes a solid dome and that the ancient Hebrews believed in a flat Earth with a slotted dome over it. Such ideas are not in the Bible or in the Hebrew understanding of *raqiya*. See Holding, J.P., 1999. Is the *raqiya* ('firmament') a solid dome? Equivocal language in the cosmology of Genesis 1 and the Old Testament: a response to Paul H. Seely. *Journal of Creation* 13(2):44–51.

suggesting that the expanse includes the atmosphere where the birds fly. This would put these waters above the atmosphere.

However, Gen. 1:20, speaking of the creation of the birds, says (literally) '*let birds fly above the ground across the face of the expanse of the heavens.*'⁵ This at least allows that 'the expanse' may include the space beyond the atmosphere.

Dr Russell Humphreys⁶ has argued that since Genesis 1:17 tells us that God put the sun, moon and stars also '*in the expanse of the heaven*' then the expanse must at least include interstellar space, and thus the waters above the expanse of Genesis 1:7 would be beyond the stars at the edge of the universe.⁷

However, prepositions (in, under, above, etc.) are somewhat flexible in Hebrew, as well as English. A submarine can be spoken of as both **under** the sea and **in** the sea. Likewise, the waters could be **above** the expanse and **in** the expanse, so we should perhaps be careful not to draw too much from these expressions.

So what were these '*waters above*'? Some have said that they are simply the clouds. Others thought of them as a 'water vapour canopy', implying a blanket of water vapour surrounding the Earth.

A water vapour canopy?

Dr Joseph Dillow did much research into the idea of a blanket of water vapour surrounding the Earth before the Flood.⁸ In a modification of the canopy theory, Dr Larry Vardiman⁹ suggested that much of the '*waters above*' could have been stored in small ice particles distributed in equatorial rings around the Earth similar to those around Venus.

The Genesis 7:11 reference to the windows of heaven being opened has been interpreted as the collapse of such a water vapour canopy, which somehow became unstable and fell as rain. Volcanic eruptions associated with the breaking up of the fountains of the great deep could

5. Leupold, H.C., 1942. *Exposition of Genesis*, Vol. 1, Baker Book House, Grand Rapids, Michigan, p. 78.

6. Humphreys, D.R., 1994. A biblical basis for creationist cosmology. *Proc. Third ICC*, Pittsburgh, PA, pp. 255–266.

7. This could help explain the background microwave radiation seen in the Universe. See Chapter 5 and Humphreys, Ref. 6.

8. Dillow, J.C., 1981. *The Waters Above*, Moody Press, Chicago.

9. Vardiman, L., 1986. The sky has fallen. *Proc. First ICC* 1:113–119.

have thrown dust into the water vapour canopy, causing the water vapour to nucleate on the dust particles and make rain.

Dillow, Vardiman and others have suggested that the vapour canopy caused a greenhouse effect before the Flood with a pleasant subtropical-to-temperate climate all around the globe, even at the poles where today there is ice. This would have caused the growth of lush vegetation on the land all around the globe. The discovery of coal seams in Antarctica containing vegetation that is not now found growing at the poles, but which obviously grew under warmer conditions, was taken as support for these ideas.¹⁰

A vapour canopy would also affect the global wind systems. Also, the mountains were almost certainly not as high before the Flood as they are today (see later). In today's world, the major winds and high mountain ranges are a very important part of the water cycle that brings rain to the continents. Before the Flood, however, these factors would have caused the weather systems to be different.

Those interested in studying this further should consult Dillow's and Vardiman's works.

A major problem with the canopy theory

Vardiman¹¹ recognized a major difficulty with the canopy theory. The best canopy model still gives an intolerably high temperature at the surface of the Earth.

Rush and Vardiman have attempted a solution,¹² but found that they had to drastically reduce the amount of water vapour in the canopy from a rain equivalent of 12 m (40 ft) to only 0.5 m (20 in.). Further modelling suggested that a maximum of 2 m of water could be held in such a canopy, even if all relevant factors were adjusted to the best possible values to maximize the amount of water stored.¹³ Such a reduced canopy would not significantly contribute to the 40 days and nights of rain at the beginning of the Flood.

10. Movement of tectonic plates could also explain the polar occurrence of such warm-climate plant remains (see Chapter 11, p. 161).

11. Vardiman, Ref. 9, pp. 116,119.

12. Rush, D.E. and Vardiman, L., 1990. Pre-Flood vapor canopy radiative temperature profiles. *Proc. Second ICC*, Pittsburgh, PA 2:231-245.

13. Vardiman, L. and Boussetot, K., 1998. Sensitivity studies on vapor canopy temperature profiles. *Proc. Fourth ICC*, pp. 607-618.

Many creationist scientists are now either abandoning the water vapour canopy model¹⁴ or no longer see any need for such a concept, particularly if other reasonable mechanisms could have supplied the rain.¹⁵ For example, in the catastrophic plate tectonics model for the Flood (see Chapter 11),¹⁶ volcanic activity associated with the breaking up of the pre-Flood ocean floor would have created a linear geyser (like a wall) of superheated steam from the ocean, causing intense global rain.

Nevertheless, whatever the source or mechanism, the scriptural statement about the windows of heaven opening is an apt description of global torrential rain.

A vapour canopy holding more than two metres (7 feet) of rain would cause the Earth's surface to be intolerably hot, so a vapour canopy could not have been a significant source of the Flood waters.

Where did the waters go?

The whole Earth was covered with the Flood waters (see Chapter 10, *Was the Flood global?*), and the world that then existed was destroyed by the very waters out of which the land had originally emerged at God's command (Gen. 1:9, 2 Peter 3:5–6). But where did those waters go after the Flood?

There are a number of Scripture passages that identify the Flood waters with the present-day seas (Amos 9:6 and Job 38:8–11, note 'waves'). If the waters are still here, why are the highest mountains not still covered with water, as they were in Noah's day? Psalm 104 suggests an answer. After the waters covered the mountains (verse 6), God rebuked them and they fled (verse 7); the mountains rose, the valleys sank down (verse 8) and God set a boundary so that they will never again cover the Earth (verse 9).¹⁷ They are the same waters!

14. Psalm 148:4 seems to speak against the canopy theory. Written after the Flood, this refers to 'waters above the heavens' still existing, so this cannot mean a vapour canopy that collapsed at the Flood. Calvin, Leupold and Keil and Delitzsch all wrote of 'the waters above' as merely being the clouds.

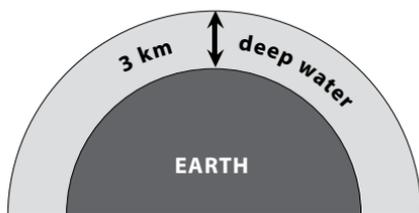
15. Of course we may never arrive at a correct understanding of exactly how the Flood occurred, but that does not change the fact that it did occur.

16. Austin *et al.*, Ref. 2.

17. The most natural translation of Psalm 104:8a is 'The mountains rose up; the valleys sank down'. See Chapter 11, footnote 27, p. 168.

Isaiah gives this same statement that the waters of Noah would never again cover the Earth (Isa. 54:9). Clearly, what the Bible is telling us is that God altered the Earth's topography. New continental land-masses bearing new mountain chains of folded rock strata were uplifted from below the globe-encircling waters that had eroded and levelled the pre-Flood topography, while large deep ocean basins were formed to receive and accommodate the Flood waters that then drained off the emerging continents.

That is why the oceans are so deep, and why there are folded mountain ranges. Indeed, if the entire Earth's surface were levelled by smoothing out the topography of not only the land surface but also the rock surface on the ocean floor, the waters of the ocean would cover the Earth's surface to a depth of 3 kilometres (1.8 miles). We need to remember that about 70% of the Earth's surface is still covered by water. Quite clearly, then, the waters of Noah's Flood are in today's ocean basins.



Without mountains or sea basins, water would cover the whole Earth to a depth of 3 km, or 1.8 miles (not to scale).

A mechanism?

The catastrophic plate tectonics model (Chapter 11) gives a mechanism for the deepening of the oceans and the rising of mountains at the end of the Flood.

As the new ocean floors cooled, they would have become denser and sunk, allowing water to flow off the continents. Movement of the water off the continents and into the oceans would have weighed down the ocean floor and lightened the continents, resulting in the further sinking of the ocean floor, as well as upward movement of the continents.¹⁸ The deepening of the ocean basins and the rising of the continents would have resulted in more water running off the land.

18. The geological principle involved is *isostasy*, where the plates are 'floating' on the mantle. The ocean basins are composed of denser rock than the continents, so the ocean basins sit lower in the mantle than the less dense continents with their mountains.



Even the high mountains of today have fossils of sea creatures near their peaks.

The collision of the tectonic plates would have pushed up mountain ranges also, especially towards the end of the Flood.

Could the water have covered Mount Everest?

Mt Everest is almost 9 km (5½ miles) high. How, then, could the Flood have covered ‘*all the high hills under the whole heaven*’?

The Bible refers only to ‘high hills’, and the mountains today were formed only towards the end of, and **after**, the Flood by collision of the tectonic plates and the associated upthrusting. In support of this, the layers that form the uppermost parts of Mt Everest are themselves composed of fossil-bearing, water-deposited layers.¹⁹

This uplift of the new continental land-masses from under the Flood waters would have meant that, as the mountains rose and the valleys sank, the waters would have rapidly drained off the newly emerging land surfaces. The collapse of natural dams holding back the floodwaters on the land would also have caused catastrophic flooding. Such rapid movement of large volumes of water would have caused extensive erosion and shaped the basic features of today’s Earth surface.

Thus it is not hard to envisage the rapid carving of the landscape features that we see on the Earth today, including places such as the

19. Gansser, A., *Geology of the Himalayas*, Wiley Intersciences, London, 1964, p. 289.

Grand Canyon of the USA. The present shape of Uluru (Ayers Rock), a sandstone monolith in central Australia, is the result of erosion, following tilting and uplift, of previously horizontal beds of water-laid sand. The feldspar-rich sand that makes up Uluru must have been deposited very quickly and recently. Long-distance transport of the sand would have caused the grains to be rounded and sorted, whereas they are jagged and unsorted. If they had sat accumulating slowly in a lake bed drying in the sun over eons of time, which is the story told in the geological display at the park centre, the feldspar would have weathered into clay. Likewise, if Uluru had sat in the once-humid area of central Australia for millions of years, it would have weathered to clay.²⁰ Similarly, the nearby Kata Tjuta (The Olgas) are composed of an unsorted mixture of large boulders, sand and mud, indicating that the material must have been transported and deposited very rapidly.

Receding floodwaters eroded the land, creating river valleys. This explains why rivers are often so much smaller than the valleys they flow in today—they did not carve the valleys. The water flow that carved out the river valleys must have been far greater than the volume of water we see flowing in the rivers today. This is consistent with voluminous Flood waters draining off the emerging land surfaces at the close of Noah's Flood, and flowing into the rapidly sinking, newly prepared, deep ocean basins.

Our understanding of how the Flood could have occurred is continually developing. Ideas come and go, but the fact of the Flood remains. Genesis clearly testifies to it, Jesus and the Apostles confirmed it, and there is abundant global geological evidence for a global watery cataclysm.



Photo by Carol Drew

Kata Tjuta in central Australia is composed of material which must have been deposited very quickly by water.

20. Snelling, A.A., 1998. Uluru and Kata Tjuta: Testimony to the Flood. *Creation* 20(2):36–40.