

Scriptural constraints on the variation of water level during the Genesis Flood

M. J. Hunter

A careful exegesis of the Genesis Flood narrative (Genesis chapters 7 and 8) indicates that the floodwaters started at antediluvian sea level, rose to their maximum level by Day 40, and remained at that level until Day 150. On Day 150 the Ark grounded and the floodwaters began to subside, attaining the present sea level by Day 371, when the earth was dry and the Ark was abandoned. The water level is thus constrained at four dates during the Flood event.

Considerable discussion has occurred recently in the *CEN Technical Journal* regarding the depth of water and the timing of various events during the Genesis Flood year.¹⁻⁸ Much of this discussion relates to speculation regarding the location of the Flood/post-Flood boundary in the geologic record, and various scenarios for the variation of water depth with time have been advocated. The discussion also encompasses such issues as the altitude of pre-Flood mountains and the location of the site where the Ark grounded.

Much misunderstanding regarding the profile of water level vs time during the Flood seems to derive from interpretations of Gen. 8:2 and 8:3. A correct interpretation of these verses, in conjunction with the remainder of the Flood narrative, allows the Flood water level to be accurately constrained by Scripture at four points during the Flood event. The resulting water level vs time profile (Figure 1) should, I believe, be beyond dispute.

The water depth vs time profile presented in this paper is the same as earlier interpretations of the variation of the water level with time, including those of Leupold⁹ and Whitcomb and Morris,¹⁰ and is almost identical to a water level profile I proposed in 1992.¹¹

A correct understanding of the variation of water level vs time during the Genesis Flood should contribute significantly to valid conclusions regarding the expected geological products of each hydrodynamic stage of the Flood, and thereby to the development of a valid Flood geological model.

The Genesis Flood

The Genesis Flood can be divided on the basis of variation of the water level, into three stages (Figure 1):

- Stage I: (Day 1 to Day 40) — rising water level,
- Stage II: (Day 40 to Day 150) — steady water level,
- Stage III: (Day 150 to Day 371) — falling water level.

The geological characteristics of the products of each of these stages should reflect the unique hydrodynamic conditions prevalent during that stage.

Stage I: (Day 1 to Day 40) — rising water level

There are a number of passages of Scripture that allow the variation in water depth during the first stage of the Flood to be established:¹²

Genesis 7:10. *'And it came to pass after seven days, that the waters of the **flood** were upon the earth [emphasis added].'*

Genesis 7:11. *'In the six hundredth year of Noah's life, in the second month, the seventeenth day of the month, the same day were all the **fountains of the great deep** broken up, and the **windows of heaven** were opened [emphasis added].'*

Genesis 7:12. *'And the rain was upon the earth forty days and forty nights.'*

Genesis 7:17. *'And the **flood** was forty days upon the earth; and the waters increased, and bare up the ark, and it was lifted up above the earth [emphasis added].'*

Genesis 7:18. *'And the **waters prevailed**, and were increased greatly upon the earth; and the ark went upon the face of the waters [emphasis added].'*

Genesis 7:19. *'And the waters **prevailed exceedingly** upon the earth; and all the high hills, that were under the whole heaven, were covered [emphasis added].'*

Genesis 7:20. *'Fifteen cubits upward did the waters **prevail**; and the mountains were covered [emphasis added].'*

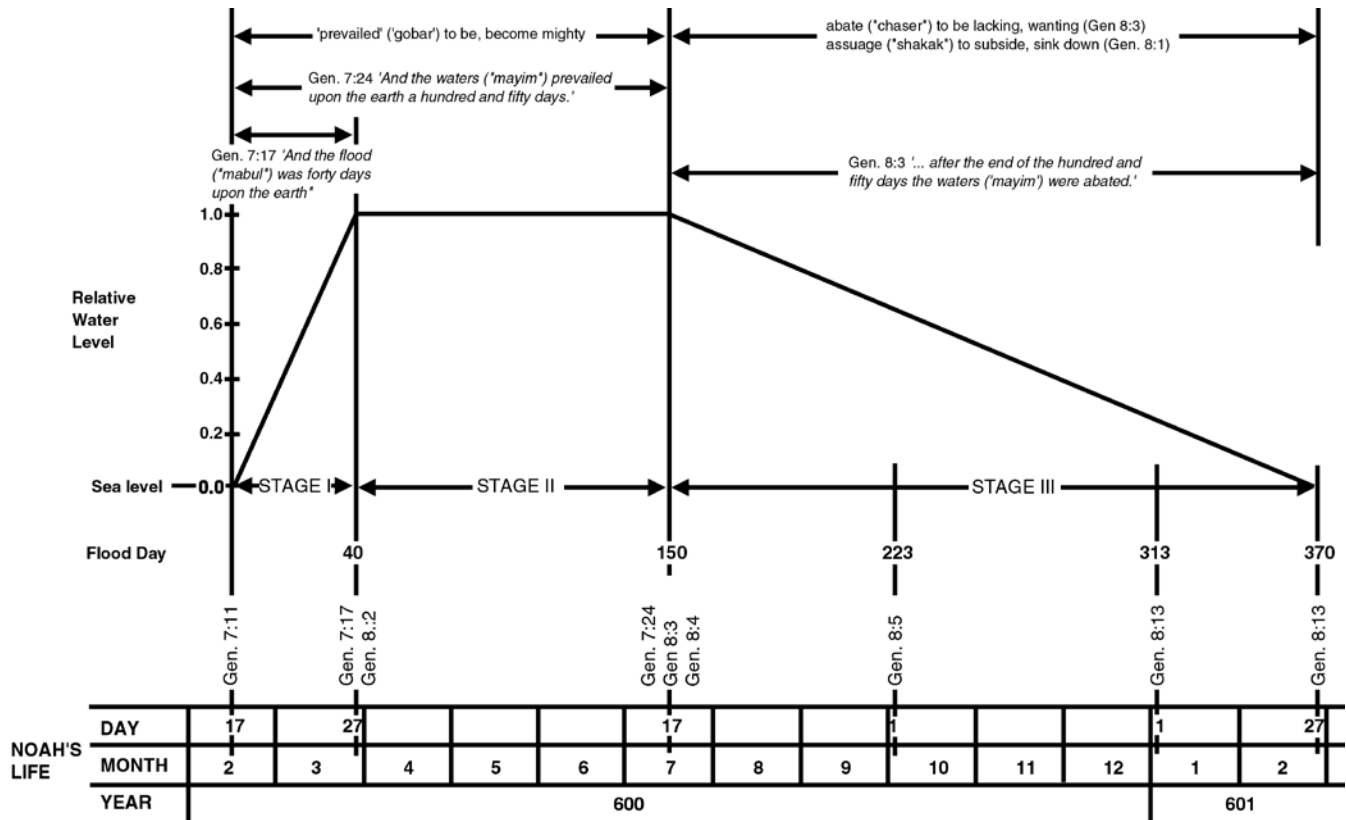
Genesis 8:2. *'The fountains also of the deep and the windows of heaven **were** stopped, and the rain from heaven **was** restrained [emphasis added].'*

Genesis 8:2 (NIV). *'Now the springs of the deep and the floodgates of the heavens **had been** closed, and the rain **had** stopped falling from the sky [emphasis added].'*¹³

We can logically assume that the Flood water level started at antediluvian sea level. Thus the first point of the water level vs time profile is established.

A key verse for determining the date at which the waters reached their maximum level, is Gen. 8:2.

When read in conjunction with Gen. 7:12, I believe



The variation of water level during the Flood as determined from the Genesis narrative.

Gen. 8:2 constrains the duration of the ‘fountains of the great deep’ to the first ‘forty days and forty nights’.

There has been some confusion in understanding Gen. 8:2 because of way the tense of the Hebrew verb ‘wayyachesru’ has been translated in the KJV. Now we know from Gen. 7:12 that the ‘rain’ or ‘windows of heaven’ had been stopped on Day 40. It would seem logical then to conclude that, because the ‘fountains ... of the deep’ (KJV) are also mentioned in Gen. 8:2, they also had been stopped on Day 40. In this instance, the NIV translation appears to be more accurate than that of the KJV.

Thus we deduce that both sources of water contributing to the increase in water level during Stage I of the Flood, the ‘fountains of the great deep’ and the ‘windows of heaven’, were stopped on Day 40. Consequently, there could be no rise in the water level after Day 40.

Other sources of water, such as delayed run-off from the land, could not have contributed to increased water level after Day 40, as the land had all been covered by this time (Gen. 7:20).

Corroborative support for the view that the water level did not increase after Day 40 is provided by the unique use of the Hebrew word *mabul* (translated *flood*). Johns³ notes that *mabul* is applied only to the first 40 days. (Gen. 7:17 ‘... the flood (*mabul*) was forty days upon the earth’).

Johns’ insight into this part of the Flood narrative is, I believe, worth quoting extensively:

‘... this word [*mabul*] applies to the condition of

the Earth when waters “overflowed” the mountains. It suggests submergence. The word refers only to the first 40 days of the Flood narrative by the end of which time the waters covered “all the high hills under the whole heavens” (Genesis 7:19).

...it is significant that *mabul* is not used in reference to the 150 days in either Genesis 7:24 or Genesis 8:3. The word **waters** (Hebrew *mayim*) is employed instead ...[emphasis added].

Only during this period [the first 40 days] were Flood waters becoming greater and greater

The world was submerged by water by the end of 40 days The 40 days of rain were part of the 150 days, or five months, of water being strong [KJV prevailing] on the Earth.’

The second point on the water level vs time profile is thus established as Day 40, when the waters attained their maximum level.

Stage II: (Day 40 to Day 150) — steady water level

The Scripture relevant to the variation in water level during Stage II of the Flood is:

Genesis 7:24. ‘And the waters **prevailed** upon the earth a hundred and fifty days [emphasis added].’

The Hebrew word for ‘prevail’ (Gen. 7:18, 19, 20, 24) is ‘**gabar**’, which Young¹⁴ sets out as meaning ‘to be or become mighty’.

Johns³ writes regarding the first 150 days of the Flood:

‘... it is most likely that the Biblical author wished to convey the thought that all mountains [= hills] were covered by the end of the 40 days. The 150-day period of Genesis 7:24 does not have the connotation of rising waters that the 40-day period has. Of that period it simply states the waters prevailed upon the earth (Genesis 7:24), whereas of the 40-day period it states that the “waters prevailed exceedingly” (Hebrew meodh meodh, literally “greatly greatly”, or “more and more” (Genesis 7:19)) ... there is a subtle but important, distinction made between the waters of the 150 days and the waters of the 40 days [emphasis added].’

Thus, for the first one hundred and fifty days (Gen. 7:24) the floodwaters were either **being** or **becoming** mighty. This is particularly relevant in relation to the interpretation of Gen. 8:3 discussed below.

A correct interpretation of Gen. 7:17–24 then, would seem to be that during the first forty days the waters were **becoming** mighty (*gabar* — to become mighty), and during the following one hundred and ten days, to Day 150, the waters were **being** mighty (*gabar* — to be mighty).

This, I suggest, precludes interpretations that have the water level still rising after Day 40.^{1,15}

I believe that the Scriptures teach that the maximum water level, attained on the 40th day, could not have been much higher than the top of the mountain upon which the ark grounded.

Scott¹⁶ and Whitcomb and Morris¹⁰ note that the cubit used to specify the dimensions of the ark (Gen. 6:15), and the maximum water level (Gen. 7:20), is probably the Hebrew ‘common cubit’ which measured 44.5 cm (17.5 inches). Whitcomb and Morris¹⁰ and Hong *et al.*¹⁷ agree that the draught of the Ark was 15 cubits (6.7 m) or half its total height of 30 cubits (13.4 m).

We shall see from Gen. 8:3 and Gen. 8:4 (below) that the ark came to rest on the same day that the waters began to ‘abate’, an interpretation supported by several authors.^{1,10,11}

I believe both scriptural (Gen. 8:4) and geographic evidence suggests the mountain on which the ark rested, on the same day that the waters began to ‘abate’, was Mt. Ararat in the ‘mountains of Ararat’ (*Urartu* in modern Armenia), Turkey.¹ Thus it is very likely that the maximum water level was only about 6.7 metres, the draught of the Ark, above the summit of Mt. Ararat, as it existed at that time.

Stage III: (Day 150 to Day 371) — falling water level

The third stage of the Flood was initiated as described in the following Scripture:

Genesis 8:1. *‘... and God made a wind to pass over the earth, and the waters assuaged [emphasis added].’*

The Hebrew word for ‘assuage’ (Gen. 8:1) is ‘*shakak*’, which Young¹⁴ sets out as meaning ‘to subside, sink down’.

Now, because the waters were ‘prevailing’ (Hebrew: *gabar*) during the first one hundred and fifty days (Gen. 7:24), Gen. 8:1 probably refers to some time **after** the end of the first one hundred and fifty days (Figure 1).

Whilst the waters may possibly be considered to have been ‘prevailing’ even if they were falling during the first 150 days,⁸ inasmuch as they would still be covering the highest mountains, it is more likely that the waters were not ‘prevailing’ and ‘assuaging’ at the same time.

The key verse regarding the third point on the water level vs time profile, the date on which the floodwaters began to abate, is:

Genesis 8:3. *‘And the waters returned from off the earth continually: and after the end of the hundred and fifty days the waters were abated [emphasis added].’*

Genesis 8:3 (NIV). *‘The water receded steadily from the earth. At the end of the hundred and fifty days the water had gone down [emphasis added].’*

The NIV version indicates that the waters had begun to ‘abate’ prior to the end of the one hundred and fifty days, however we have demonstrated that this was most probably not the case. The KJV version at first appears more ambiguous, however a detailed study of this translation, in conjunction with Gen. 7:24 and 8:1 reveals that the waters probably began to ‘abate’ on the 150th day.

The Hebrew word for ‘abated’ (Gen. 8:3) is ‘*chaser*’ which Young¹⁴ sets out as meaning ‘to be lacking, wanting’. Once again, in a similar manner to our understanding of Gen. 8:1 (above), the waters probably would not be described as ‘lacking’ or ‘wanting’ during the first one hundred and fifty days, when they were ‘prevailing’ (‘*gabar*’ — to be or become mighty). Thus Gen. 8:3 probably refers to the time immediately **after** the end of the first one hundred and fifty days.

The Hebrew verb ‘*wayyachesru*’ (Gen. 8:3), translated ‘had gone down’ (NIV) or ‘were abated’ (KJV), is a construction called the *waw* consecutive. Attaching the Hebrew letter *waw* (w) to the front of an imperfect verb form indicates events happening *in sequence* (consecutively).¹⁸

Hence, a more accurate alternative interpretation of Genesis 8:3 might be: *‘And the waters returned from off the earth continually: and after the end of the hundred and fifty days the waters began to be abated.’*

We can establish from Gen. 8:4, in conjunction with Gen. 8:3, that the ark rested on the same day that the floodwaters began to abate.

Genesis 8:4. *‘And the ark rested in the seventh month, on the seventeenth day of the month, upon the mountains of Ararat.’*

Now we have demonstrated that the waters probably began to abate on the 150th day (Gen. 8:3) which is also

'the seventh month, ... the seventeenth day of the month' (Gen. 8:4). We can conclude then, as have other writers,^{1,3,10} that the Ark rested on 'the mountains of Ararat' on the same day that the waters began to abate.

Thus the maximum water level could have been only marginally higher than the summit of the mountain on which the ark rested.

The end of the Flood

The fourth and final point on the water level vs time profile can be determined from the following Scriptures:

Genesis 8:14. 'And in the second month, on the seven and twentieth day of the month, was the earth dried.'

Genesis 8:18. 'And Noah went forth, and his sons, and his wife, and his sons' wives with him.'

Genesis 8:19. 'Every beast, every creeping thing, and every fowl, and whatsoever creepeth upon the earth, after their kinds, went forth out of the ark.'

These verses indicate that by the time the Noah and his family left the ark all of the floodwaters had run off the land into the current ocean basins, and the 'sea-level' had attained the present sea level.

Conclusion

A careful exegesis of the Genesis Flood narrative (Genesis chapters 7 and 8) allows the water level to be established at four dates during the Flood, allowing a water level vs time profile to be established. It is concluded that the floodwaters started at antediluvian sea level, rose to their maximum level by Day 40, and remained at that level until Day 150. On Day 150 the Ark grounded and the floodwaters began to subside, attaining the present sea level by Day 371 when the earth was dry and the Ark was abandoned. This water level profile should contribute significantly to our understanding of the expected geological products of each hydrodynamic stage of the Flood, and thus to the development of valid Flood geological models.

Acknowledgements

The editorial advice of Dr Tasman Walker and the comments of two anonymous reviewers are gratefully acknowledged. One of the reviewers provided particular insight into translation of the Hebrew verb 'wayyachesru' (Gen. 8:3).

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Max Hunter has a Fellowship Diploma in geology from the Royal Melbourne Institute of Technology and has worked in the mineral exploration industry for 27 years. He is currently based in Charters Towers, Central Queensland, Australia, where he is currently employed as a laboratory assistant.