Response to "Candidate site for Noah's Ark, altar, and tomb" by Griffith and White

I applaud Ken Griffith and Darrell K. White for their recent article on a potential Ark landing site in *Journal of Creation*.[1] It was truly a monumental effort. I particularly appreciated how they attempted to tie the genetic ancestry of specific crops and a style of culture to the general area, if not the specific site. Furthermore, I am pleased that they find value in a Neogene-Quaternary post-Flood boundary, which I have proposed rather extensively, especially for the entire region surrounding Turkey.[2] And I agree that the Ark would have likely rotted away if it had landed below 3,000 m in elevation. Furthermore, I also agree that the Zagros Mountains were likely not the Ark landing site, but for a different reason. Research has shown that the Zagros Mountains were not in existence at the necessary time for the Ark landing.[3]

However, I do have a few issues with several of their other interpretations. Many of these seem to be based on rather speculative circumstantial evidence and/or an over-reliance on extrabiblical sources. The Bible is the only reliable source of information for the timing of the Ark landing and its landing site.

Specific issues with their proposed site

On page 53 of their article, Griffith and White discuss the geology of their proposed landing location. Both their timing for the volcanism at Karaca Dag and their timing for the landing of the Ark seem a bit off target. The Bible is quite clear that the Ark grounded on Day 150 of the Flood year (Gen. 8:3–4). This was the same day the floodwaters reached their highest point (Gen. 7:24 and 8:3). If Karaca Dag is dated at 2.7–1.5 Ma in secular years (and the relative timing confirms this), it is primarily a Pleistocene (Ice Age) eruption, not a Pliocene eruption, making it closer in age to Mt Ararat, which is also mostly a Pleistocene volcano. This makes both of these volcanoes essentially post-Flood features and virtually excludes them from the list of possible Ark landing locations.[4]

The Bible tells us we need an Ark landing site that was in existence at the peak of the floodwaters, at about Day 150 of the Flood. My research has found that the high point (peak) of the floodwaters was at about the level of the K-Pg (K-T) boundary (in the secular geologic column) based on detailed studies of the stratigraphy across multiple continents.[5] And instead of Karaca Dag and/or Mt Ararat, I have proposed an alternative site, west of Mt Ararat, that also fits the criteria laid out in the biblical account.[4]

The crustal rocks in much of northeastern Turkey consist of highly metamorphosed Mesozoic sediments and oceanic crust that were caught between colliding plates during the Flood. Uplift of this crustal complex produced a prominent ridge—with 'ridge' here matching the Hebrew phrase 'mountains/hills of Ararat'—known as Kagizman Ridge.[4] This east–west ridge extends for over 160 km to the west of Mt Ararat, with some peaks standing over 3,000 m in elevation (figure 1). This topographic ridge seems to have developed at about the same time the rocks encompassing the K-Pg (K-T) boundary were being deposited globally, placing its formation on, or about, Day 150 of the Flood.[5]

The Ark may have settled on one of the higher peaks of Kagizman Ridge as the area was thrust upward, grounding the Ark. Later, receding-phase sediments and subsequent volcanic activity filled in the basins on the flanks of the ridge. Importantly, no new sediments were deposited on the crest of the ridge itself. In contrast, Mt Ararat and Karaca Dag likely didn't begin to form until well after Noah had vacated the Ark during the post-Flood Ice Age.

Secondly, Griffith and White's speculation that the Ark was cut into three pieces with one segment tipped over and rolled downhill is rather

Figure 1. Map showing the locations of Kagizman Ridge, Mt Ararat, the proposed site of Babel from an earlier *J. Creation* paper by Griffith and White.[8] Note the travel direction (white arrow) from the 'mountains of Ararat' to the Babel site, whether the Kagizman Ridge or Mt Ararat itself, is from the east. Image courtesy of ICR.

implausible. This would entail quite an engineering feat, especially with the limited number of humans available at that time. There are a multitude of alternative methods that would have allowed access to the Ark without sawing it completely through twice and moving the massive pieces. The second cut at 45° seems particularly suspect if not outright unbelievable. Much of the impetus for suggesting these monumental cuts and shifts of the Ark is based on the improbable interpretation that the gravels are in-place ballast stones from the Ark. Instead, these gravels could have arrived at the site in a multitude of ways. Without better analysis of the 'gravels' at the surface, and in the subsurface, it is difficult to jump to the solitary conclusion that these are ballast stones from the Ark.

Finally, on page 61, the second paragraph, the authors mention the possibility of finding 'bitumen' flakes below the surface, presumably from the Ark. This seems to reflect the assumption that the Ark was covered with an oil product. But I don't think there was any real bitumen or oil product prior to the Flood.

Unfortunately, the so-called 'pitch' covering the Ark is frequently used by critics as an argument against a global Flood. For example, evolutionary geologist David Montgomery insists that most sedimentary rocks could not have formed during the Flood because

> "... a literal reading of the Bible requires that such rocks already existed at the time of the Flood because bitumen, the pitch or tar Noah used to caulk the Ark (Genesis 6:14), comes from sedimentary rock."[6]

However, the Hebrew word used in this verse, *kopher*, doesn't literally translate as 'pitch'. Henry Morris III stated:

> "The word is used 17 times in the Old Testament, and is translated 'pitch' only in Genesis 6:14. Most of the time, *kopher* is translated with some term that represents money [italics added]."[7]

It seems more likely that *kopher* was some sort of expensive (hence the possible reference to money) sheathing or covering that was placed over the wood of the Ark. It may have been some type of tree resin, but was unlikely to have been a true oil product.

The first actual reference to what's likely true oil or bitumen is found in Genesis 11:3, in the narration about the building of the Tower of Babel. The Bible says, "They had brick for stone, and they had asphalt for mortar". The Hebrew word for asphalt is *chemar*, which is sometimes translated as bitumen, cement, or slime. So here, unlike the use of the Hebrew word *kopher*, the Bible is likely describing a tar or bitumen product, essentially a hydrocarbon formed by the Flood.

Overall, I am pleased to see some fresh thinking on the Ark landing site. New ideas are always good. However, the details provided in the Bible cannot be side-stepped. All suggested Ark landing sites must fit the biblical timeframe and be supported by the geologic timeframe. We need a site that appeared, or was in existence (geologically), around the peak of the Flood (Day 150) and is part of the mountains of Ararat. In my opinion, Karaca Dag fails this test.

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References

1. Griffith, K. and White, D.K., Candidate site for Noah's Ark, altar, and tomb, *J. Creation* **35**(3):50–63, 2021.
2. Clarey, T.L. and Werner, D.J., Compelling evidence for an Upper Cenozoic Flood/post-Flood boundary: Paleogene and Neogene marine strata that completely surround Turkey, CRSQ **56**(2):68–75, 2019.
3. Clarey, T., New proposed Babel site supports Ark location, *Acts & Facts* **50**(11):7, 2021.
4. Clarey, T., The Ark landed west of Mt Ararat, *Acts & Facts* **48**(7):9, 2019.
5. Clarey, T., *Carved in Stone: Geological evidence of the worldwide Flood*, Institute for Creation Research, Dallas, TX, pp. 282–311, 2020.
6. Montgomery, D.R., *The Rocks Don't Lie: A geologist investigates Noah's Flood*, W.W. Norton & Company, New York, p. 235, 2012.
7. Morris III, H.M., *The Book of Beginnings: A practical guide to understanding Genesis*. Institute for Creation Research, Dallas, TX, p. 357, 2016.
8. Griffith, K. and White, D.K., An Upper Mesopotamian location for Babel, *J. Creation* **35**(2):69–79, 2021.

» Ken Griffith and Darrell White reply:

Ark sites are like football teams. Everybody has their favourite, but only one can win the championship. Our only objections to Dr Clarey's preferred Ark site are that the archaeology and plant biology don't seem to support it. That may change with new discoveries.

Geologists and archaeologists have one thing in common. They can both tell you the order in which things occurred, based on the stratigraphy. But they also tend to make the same error, which is to assume that because they know the order, therefore they know the date that something occurred. Dates require synchronisms in order to be confirmed. This is called calibrating the curve. Since the rocks don't come with labels and every place on Earth is different, geologists must be somewhat subjective in assigning any given formation a classification in the geological column.

Determining which strata in the geological column mark the midpoint and end of the Deluge is a highly speculative endeavour that has spawned decades of debate between creationists who agree the Flood was global. While we respect the geological models of Snelling and Clarey, the Ark site itself is the only data point for the midpoint of the Flood that could conclusively calibrate the models.

Karaca Dag is not a small volcano. The area which Clarey claims to be a post-Flood eruption, which the professional geologists classified as Pliocene (figure 1), covers 2,000 km^2 and extends all the way to the Tigris River. If Karaca Dag was actively erupting on such a scale in the centuries after the Flood, then the Prepottery Neolithic (PPNA) culture could not have

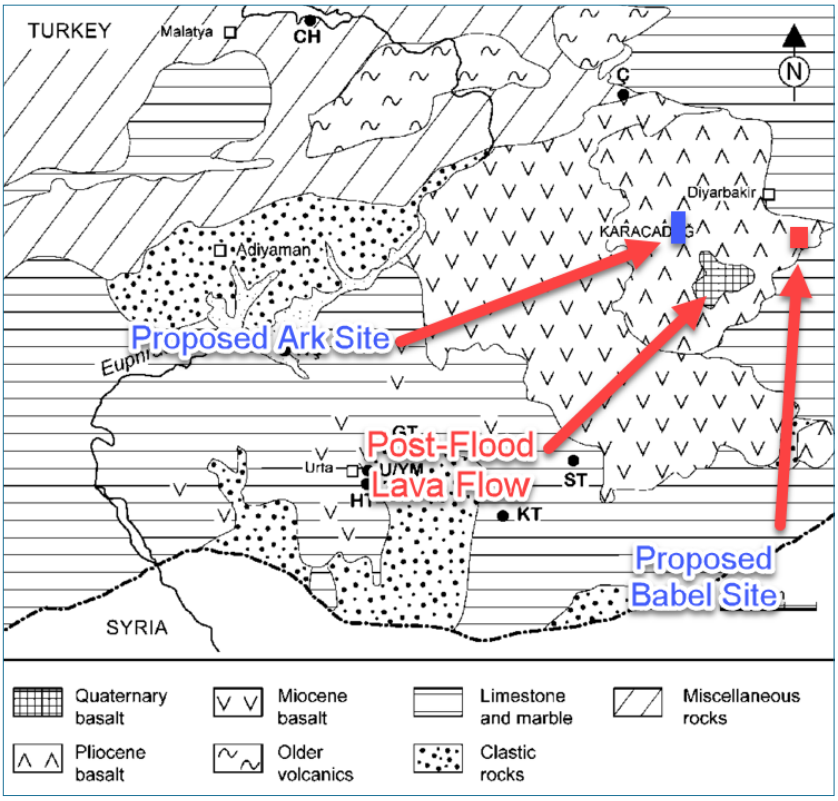

Figure 1. Geological map of Karaca Dag showing Pliocene Basalt (after figure 4 in Haldorsen *et al.*[1])

Image: Bjoertvedt/Wikimedia, CC-BY-SA-3.0

Figure 2. Prepottery Neolithic A distribution excludes Kagazman Ridge

lived and developed on its flanks. In our view, the only post-Flood eruption of Karaca Dag was the small cone on the east flank labelled as Quaternary basalt in figure 1.

The Ark itself should have left an archaeological signature. That signature would be the thousands of containers that carried the fresh water and food supplies not only for a family of 8, but for all of the animals (Genesis 6:21). Those containers would have been useful and valuable in a post-Flood world with no industry to make new ones. They would be passed down for at least a few generations, and thus carried outward from the site as the tribes migrated. The nearly indestructible remains of those containers should demarcate the region where humanity began after the Flood.

The Prepottery Neolithic A appears to be just such a signature. For some reason our ancestors learned how to farm, build stone houses, and make mud bricks; but they chose to use jars of stone instead of clay. These stone jars vary greatly in quality, but the best of them are as thin as cardstock and are made of materials as hard as diorite, well beyond the manufacturing capabilities of neolithic farmers. The smaller and more valuable the jars were, the further they would be expected to have travelled from the point of origin. Kagizman Ridge (figure 2) is outside the region of PPNA sites.

We agree it would not make sense to spend the time and energy on such a difficult task as cutting the Ark into sections unless there was something of great value inside that could not simply be removed by cutting a hole in the hull. That part of our hypothesis may be mistaken, and the layout of the site may suggest evidence of temples or other buildings built at a later time.

Our idea that the Ark remains lie under the school is the part of our thesis most likely to be wrong and is the easiest to test. However, a massive weight of historical, biological, and archaeological data points to the mountain Karaca Dag as the point of origin for post-Flood humanity.

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References

1. Haldorsen, S., Akan, H., Çelik, B., and Heun, M., The climate of the Younger Dryas as a boundary for Einkorn domestication, *Vegetation History and Archaeobotany* **20**(4):305–318, July 2011 | doi.org/10.1007/s00334-011-0291-5.