The thesis and conclusions nor the research methodology presented in this article do not reflect the methods or views of the American Journal of Biblical Theology. However, the idea is offered to add a viewpoint to the discussion. Dr. Jack Carter, Publisher, AJBT

Planetary realignments at the time of Noah's Flood and its effect on the Biblical Lifespan of Man

by

Pallant Ramsundar

July, 2015

1 Abstract

The change in the average lifespan of man, from almost a thousand years in preflood times to the present day norm of seventy years, is explained by earth orbital changes, triggered by events in the solar system, at the time of Noah's flood. These changes also provide answers for the mechanics of the flood and presage even more dramatic realignments of the solar system at the return of Christ.

2 Introduction

The pre-flood lifespan of man of nearly one thousand years is a legitimate source for skepticism when compared to a present day lifespan of about seventy years. Yet the verity of the biblical record is supported because it does show the progressive decline in lifespan to the current norm of seventy years. Two principal theories advanced to explain the dramatic decline in lifespan are genetic and environmental changes initiated at the time of the Noah's flood¹. This paper discusses another possibility by examining how planetary realignments in the solar system can explain the perceived changes in lifespan, after the flood.

3 Questions on the pre-flood environment

All recorded history on post-flood lifespans shows that very few exceed an age of 100 years, while mortality for many cultures falls well below the present day norm for industrialized countries of about 70 years². It is no wonder then that the pre-flood lifespan of more than 900 years seems unrealistic by present day experience.

Figure 1³ extracts from the Bible the variation of lifespan from creation to the time beyond Noah's flood when average lifespans stabilized.

¹ Ross, Hugh, Rana, Fazale and Deem, Richard. Long Life Spans: "Adam Lived 930 Years and Then He Died". Reasons to believe. [Online] Jan 1, 2001. http://www.reasons.org/articles/long-life-spans-adam-lived-930-years-and-then-he-died.

² Editor. Mortality. Encyclopædia Britannica Online. [Online] Encyclopædia Britannica, May 7, 2015. http://www.britannica.com/EBchecked/topic/393100/mortality.

³ Temporal changes in the ageing of biblical patriarchs. López, Raúl Erlando. 13, 2000, Journal of Creation, Vol. 14, pp. 109 - 117.



Figure 1: Lifespan variation with time

Not considering the premature terms of Lemech and Enoch, the pre-flood lifespan averaged 929 years. After the flood, lifespans plummeted and then declined steadily. Within one thousand years of the flood, lifespans were reported by Moses to be around 70 years (Ps 90:10).

Another unusual statistic of the pre-flood period is the age at which families had their first child. Figure 2¹ shows the biblical record on the ages of fathers at the time their first son was born.

Pre-flood, the earliest age at which a man had a male child was at 65 years old. This dropped quickly after the flood to a minimum procreation age of 29 years and continued to decline further. To date, the youngest father on record is Karl Corr of Ireland at 7 years old².

¹ The Alleged Genesis Flood. [Online] Brethren in Christ (Christadelphian) Church. http://www.one-gospel.org/thebible/i_thebible_02.htm.

² Editor. Guinness World Records. Answers. [Online] 2015. http://dawaex.com/?Q/FAQ/4559.



Figure 2: Age to 1st Child

The pattern we can observe is that life events took a much longer time during the pre-flood period. Comparing the lowest procreation age of today (7 years) with the same pre-flood metric (65 years), we get a ratio of 65/7 = 9.29. Applying this ratio to a pre-flood lifespan of 929 years, we see that it corresponds to a current lifespan of 100 years. To get a correlation more representative of the current state of longevity, we can use a factor of 8 so that a pre-flood male reaching a procreation age at 65 years, corresponds to an 8 year old today and a 1000 year pre-flood lifespan corresponds to 125 years today.

Another factor to consider is the size of the family. Even though pre-flood inhabitants lived for hundreds of years, their family size is of the same order as at present (Gen 10).

The data shows that life events that took 8 years in pre-flood times are accomplished in 1 post-flood year. A natural explanation is that there were no significant genetic or environmental changes from pre to post flood times but rather that the length of the year did change dramatically by a factor of 8. The biblical use of the term 'year' (Hebrew 'shaw-neh, shaw-naw')¹ means a revolution of time and represents a single

¹ Meyers, Rick. ESword Strong's Dictionary. 2015.

orbit of a planet around the center of orbit. Thus pre-flood, in the time equivalent to one of our present years, the earth made 8 orbits.

4 Planetary changes to effect an eightfold increase in the orbital period of the earth

The present orbital period of the earth is 365.2 days¹. If 8 pre-flood years are to equal 1 current year, the pre-flood orbital period required is 365.2/8 or 45.65 days. From the Newton Orbit Equation,

$$v^2 R = GM$$
 Equation 1

Where v = mean orbit velocity; R = mean orbit radius; G = gravitational constant (6.67384E-11 m³/kgs²); M= Mass of object being orbited and

$$P = \frac{2\pi R}{v}$$
 Equation 2

Where P = orbital period,

an earth orbital period of 45.65 days around the sun is achieved with a mean radius of 3.74E+10 m. This is closer to the sun than Mercury, which has a mean orbit radius of 5.79E+10 m.

However this solution is not feasible with the sun at its current intensity, as the temperatures on earth will be in excess of $250^{\circ}C^{2}$, which is far too high to maintain life. (The current distance of the earth from the sun is 1.496E+11 m and provides a mean surface temperature of $15^{\circ}C$.)

Perhaps the only other possibility to obtain the required earth orbital period of 45.65 days and maintain habitable conditions on earth is to have earth orbit Jupiter. In this case the earth orbital period of 45.65 days will be achieved with a mean radius around Jupiter of 3.68E+9 m.

Some critical changes to the planetary dispositions are also necessary. Principal among these, Jupiter must be closer to the sun to be able to provide sufficient heat

¹ Williams, David. Planetary Fact Sheet - Metric. [Online] April 25, 2014. http://nssdc.gsfc.nasa.gov/planetary/factsheet/.

² Strobel, Nick. Astronomy Notes. 2013. This calculated temperature assumes no change in the greenhouse effect.

to the earth for maintaining its biosphere. A Jupiter orbit close to the sun has long been theorized by planetary scientists¹. Kevin Walsh et al² have explained the low mass of Mars by the movement of Jupiter inward to the sun, followed by a subsequent outward movement due to the pull of Saturn. Their model was based on natural processes taking a long time but the events of Noah's flood necessitate dramatic intervention in the solar system to bring about the orbital changes very quickly. Noah was in the Ark for about one pre-flood year (Gen 7:11, 13; 8:13, 14) which is equivalent to about two present day months. Arphaxad, Shelah and Eber, who were born within 67 years of the flood, lived 438, 433 and 464 years respectively (Gen 11:12 ~ 16). Based on the lifespan comparison discussed in section 3, this gives an orbital ratio where 4 years immediately after the flood corresponding to a present day year. Peleg, who was born 101 years after the flood, lived 239 years (Gen 11:16 ~ 19) which gives an orbital ratio of approximately 2 of his years corresponding to a present day year.

For earth to achieve an orbital of period of 4 years while orbiting the sun, earth must be at an average distance from the sun of 5.94E+10 m, which is inside the orbit of Venus and estimated to have a steady state temperature of 180°C. For an orbital period for earth of 2 years around the sun the distance from the sun is estimated at 9.42E+10 m (also within Venus' orbit) resulting in an estimated steady state temperature of 100°C. Since these temperatures are still too high for human survivability, the indication is that up to some time after Peleg was born, earth's continued to orbit Jupiter, but at increasing distance to effect longer orbit times. For earth's biosphere to be preserved, transference of earth from Jovian to solar orbit only became possible in Peleg's lifetime with the earth eventually settling into its current orbit.

Figure 3 gives a simplified picture of the pre-flood planetary dispositions and Figure 4 shows the present day solar system. Drawings are not to scale and are for illustrative purposes only.

¹ Young Solar System's Fifth Giant Planet. Nesvorny, David. 2, s.l. : The Astrophysical Journal Letters , 2011, Vol. 742.

² A low mass for Mars from Jupiter's early gas-driven migration.". Kevin Walsh, A. Morbidelli, S. N. Raymond, A. M. Mandell. 7355, s.l. : Nature, 2011, Nature, Vol. 475, pp. 206-209.



Figure 3: Pre-Flood Planetary Layout (Not to scale)



Figure 4: Present Planetary Layout (Not to scale)

The pre-flood layout shows Jupiter closer to the sun and with Earth, Venus and Mars orbiting it. There is evidence of this as these three terrestrial planets have orbital

planes closer to Jupiter's than with the sun. Note that the disposition of Earth, Venus and Mars around Jupiter is here presented arbitrarily and would require further analysis for a stable solution. The only certainty we have to work with is an earth orbital period of about 45.65 days. The physical properties and disposition of all the planets would also likely see some modification in the pre-flood layout.

The transition scenario at Noah's flood begins with the earth and possibly Venus and Mars orbiting Jupiter. A precipitating event causes the Earth, Venus and Mars to orbit Jupiter at increasing distances. Venus and/or Mars interact with the earth to trigger and subsequently relieve Noah's flood. Venus and/or Mars may at this time also migrate to a solar orbit. After about 300 years after Noah's flood, earth transitions to a solar orbit and Jupiter moves outward. The earth settles to its current orbit in the solar system in another 300 years. It is not the purpose of this paper to determine the specific astronomical interchange, but various irregular phenomena in the solar system may be helpful in resolving the sequence of events. Some of these are the retrograde rotation of Venus and other planets, the offset of the orbital plane of Pluto, the position of an asteroid belt in the Titius-Bode predicted position for a planet, while Neptune is not in a predicted Titius-Bode orbit, and the large number of moons orbiting Jupiter and Saturn.

5 Biblical evidence of planetary rearrangements causing earth orbit changes

The theses advanced in this paper are firstly, that the supposed changes in lifespan of man pre and post flood are explained by changes in the orbital period of earth and secondly, that the orbit changes result from the earth transitioning from a Jovian to solar orbit. Indications supporting these positions are hinted at in the Bible.

In Job 38:31 ~ 33; Job 9:6 ~ 9 and Amos 5:8, the translators used familiar constellation names of Pleiades, Orion, Mazzaroth and Arcturus instead of the original Hebrew words. We know today that constellations, for the most part, are unconnected stars from different systems. The use of names of the constellations is therefore meaningless in understanding the original Hebrew. Since the relevant discussions in both Job and Amos were all speaking on topics relating to earth, it is reasonable to assume that the original Hebrew names refer to planetary phenomenon that the authors could relate to and real events of significance to earth.

Indeed, in the aforementioned scriptures, the bible was highlighting God's power in intervening in cosmic events to change the natural order, presumably for the benefit of earth and His plan for mankind.

Pleiades (Hebrew 'kee-maw' meaning 'cluster of stars')¹ is likely the collective name for the solar system, while Orion (Hebrew 'kes-eel' meaning 'burly' or 'fat one') is likely Jupiter. Mazzaroth (Hebrew 'maz-zaw-raw' meaning 'set aside' and related to raining), also called 'chambers of the south' in Job 9:9, perhaps refer to Venus and its role in relieving the flooding of the earth at the time of Noah. Arcturus (Hebrew 'ah'-yish, awsh' meaning 'assemble') is likely Mars with its 'sons' or moons.

Job 38:31 – 33 therefore tells of the loosing from Jupiter and setting the planets of the solar system in its new order as well as the role of Mars and Venus during its realignment. Job 9:6 – 9 speaks of taking the earth out of its place, while Amos 5:8 confirm God's authorship of the solar system and speak of pouring water over all the earth.

Jewish legends also tell of water rushing through space: 'The upper waters rushed through the space left when God removed two stars out of the constellation Pleiades'².

Gen 10:25 tells of the earth 'divided' (KJV) in the days of Peleg. This is repeated in ICh 1:19. 'Divided' comes from the Hebrew 'paw-lag'', which means 'divide' or 'split'. This corresponds to the predicted transition of the earth from a Jovan to solar orbit based on the lifespan changes. Dan 2:21 confirms that God does change the times and seasons.

6 Planetary realignments at Genesis

Planetary realignments have not previously been considered in understanding biblical events because they are perhaps too dramatic for human imagination. The specter of earth orbit changes being responsible for the perceived changes in

¹ Meyers, Rick. e-Sword Strong's Dictionary. 2015.

² Constellations: Legacy of the dispersion from Babel. Henry, Jonathan. 3, s.l. : Journal of Creation, 2000, Vol. 22.

lifespans pre and post Noah's flood, however, paves the way for consideration of planetary realignments in other situations.

In Gen 1:2 the creation account is described from a time when the earth is dark and completely covered by liquid. It is only on the third day afterward that land appears (Gen 1:9 \sim 13). It is commonly assumed that the darkness on earth in Gen 1:2 is attributable to water vapor or other effluents in the atmosphere such as volcanic ash. Once we can consider the planetary position as a variable, the darkness on the earth is an exact description of the earth in an orbit much further out than at present, so that it is not illuminated by sunlight or light reflected from other planets. The bringing of light to the earth would be effected by moving it closer to the sun and/or to another planetary body with a high intensity of light. Based on our previous discussion of lifespan variation, the bringing of light to earth can be explained by the earth being captured by Jupiter and Jupiter moving closer to the sun, thus increasing the light levels on earth.

Another significant creation event that can be explained by planetary realignments is the reduction of the liquid levels to expose land. Gen 1:6, 8 describes the process as a division of waters below the heavens, from above the heavens. The heavens is also referred to as the 'firmament' which comes from the Hebrew 'raw-kee'-ah' meaning expanse, and corresponds to the earth atmosphere in this context. A movement of earth into a Jupiter orbit will have the effect described in Gen 1:6 with a loss of water into space, likely forming icy moons in orbit around the earth, with possibly some loss to Jupiter.

7 Answers on Noah's flood

A thorny issue in explaining Noah's flood is the source of the water to flood the earth. If all the ice on earth today is melted, sea levels are estimated to rise approximately 65 m, which is far short of the levels required to cover the highest mountain^{1,2}. From our discussion in section 6, the water lost at the time of the Genesis account was

¹ Editor. How much water is there on, in and above the earth? [Online] 1984. https://water.usgs.gov/edu/earthhowmuch.html.

² Editor. Rising Seas. [Online] National Geographic, 2015. http://ngm.nationalgeographic.com/2013/09/rising-seas/if-ice-melted-map?rptr.

largely stored in icy moons. The precipitating event for Noah's flood which increases the orbit of the earth around Jupiter also causes the icy moons to be dragged back down to earth. Changes to the orbits of the other planets and moons orbiting Jupiter during that event may also contribute to the deluge as well as to the recapturing of the water soon after, to abate the flood. Mars topography does indeed show that it suffered recent loss of its surface water, while Venus, called 'chambers of the south' in Job 9:9, imply a role in both supply and recapture of the water.

In Gen 7:11, 13; 8:13, 14, Noah with his family and the creatures were one year (preflood) in the ark. We see from our previous discussions that this is really a period of less than 2 months of our current time¹. This renders moot questions on the logistics of feeding the animals as well as the viability of life in an enclosed, darkened environment in the ark. Vegetation on earth which were covered in the flood would be under water for much shorter periods that the aforementioned 2 months and a fair amount will survive the flood².

8 Implications for the millennium

The thousand year government to be set up by Jesus Christ at His return (Rev 20:1 \sim 4) raises some questions that harken back to pre-flood timeframes. If conditions are as they exist today, with lifespans of about 70 years, a thousand years will see multiple generations, most of whom would have had no testing against Satan because he is bound at the start of the millennium. In such a situation the only generation to be purified by overcoming Satan is the last generation of the millennium, many of whom fail (Rev 20:7 \sim 9). If however, timeframes revert to the pre-flood arrangement, all those born in the millennium will be alive at the close of the millennium to be exposed to Satan. Thus the dilemma of a generation not being tried by Satan does not arise.

¹ Time Dilation effects are such that though an observer on earth sees a similar earth orbiting Jupiter in one and a half months, the inhabitants of the earth orbiting Jupiter perceive and experience a 360 day year during that orbit. Note that the time dilation effect for the planetary events described here is attributable to gravitational field effects on the speed of light and not primarily due to the insignificant Einstein's relativity effects (19).

² *Effects of Flooding on Trees.* **Iles, Jeff.** 18, s.l. : ISU Horticulture and HomePest News, 1993, Vol. 465.

Interestingly, the Bible gives a number of indications that before the return of Jesus Christ, God will be making some substantive changes to the orbit of the earth, possibly to re-establish pre-flood orbital timeframes.

Just at the second coming of Christ, Rev 6:12 indicates that the sun was darkened and the moon became the color of blood. This description is echoed in other scriptures like Joel 2:30; Is 13:10 and Acts 2:20. This could possibly describe the earth orbiting around Jupiter with the optics of a darkened sun (in reality Jupiter) and a moon red as blood. The use of the word 'sun' in the scriptures however, presents another fearful astronomical possibility with a precipitous change in the sun so it does indeed go dark. If this is accompanied by a movement of earth closer to the sun as detailed in section 4 to enable a faster orbiting period, the biblical disturbances predicted will also be satisfied, as a lower temperature sun would permit a hospitable biosphere on earth.

Rev 6:13 ~ 14 describes the heavenly vista as changing as well as there being terrible earthquakes on earth. Is 34:4; 13:13; 24:20 says much the same and emphasizes that the earth shall move out of her place, be terribly shaken and shake like a drunkard. Both Hag 2:6 and Heb 12:26 points out that this will be a <u>second</u> and possibly third shaking of the earth and heavens.

9 Post millennial astronomical disturbances.

Earth's traipsing through the solar system does not end with the pre-millennial events. The millennium is followed by a hundred year judgement period (Is 65:20; Rev 20:12), during which all who lived will be resurrected, re-educated and tested before transformation to an immortal constitution. This judgment period is followed by a worldwide conflagration (IIPet $3:10 \sim 12$). Whether this is accomplished by a solar event or a Jovian one (in the case of an earth returned to orbit around Jupiter) can be speculated on, but it signals a new chapter in mankind's appointment with its creator.

10 Conclusion

In our human framework, the celestial movement of earth from Jovian to solar orbit and vice versa is a gargantuan exercise and seems like an impossible fantasy. To God however, these events are like child's play. In the biblical record, two incidents bear witness of God's absolute power over the heavenly bodies. In Joshua 10:13, the sun and moon was stayed for a whole day, while in IIKings 20:11, the sun was turned back 10 degrees. Both these events can be accomplished with no significant trauma to the earth by forcing an off-track orbital sub-loop. In these examples there were no indications that God used any natural phenomena to effect the miracles. This does not preclude however, the use of precipitating astronomical events to bring about the orbital changes discussed in this paper.

Many predictions place the return of Christ in the near future¹, which would place the pre-millennial astronomical events in the lifetimes of this or the next generation.

This paper shows that the changing lifespan of man from a pre-flood average of a thousand years to the current norms is explained by a migration of earth from a Jovian to a solar orbit with an eight-fold change in orbital period and measurement standard of a 'year'. Planetary movements also account for the source of water during Noah's flood, as coming from icy moons created when earth was prepared for life as related in Genesis 1. The 'year' that Noah, his family and the creatures spent on the ark is equivalent to about 2 months today and explains the viability of its passengers as well as earth's vegetation covered in the flood. The biblical predictions on the environment at the return of Jesus Christ, and after the judgment period following the millennium, are also satisfied by orbital changes in the solar system and are likely to be much more substantive than a few cosmetic meteor showers.

¹ Llani, Ofri. Father of modern science calculated: World to end in 2060. s.l. : Haaretz, 2007.

Ansley, Gabriel. Undeniable Biblical proof Jesus Christ will return exactly 2,000 years after the year of his death. s.l. : Mill Ciy Press, Inc., 2010. ISBN-13: 978-1936107445

11 Bibliography

1. *Temporal changes in the ageing of biblical patriarchs.* López, Raúl Erlando. 13, 2000, Journal of Creation, Vol. 14, pp. 109 - 117.

2. Ross, Hugh, Rana, Fazale and Deem, Richard. Long Life Spans: "Adam Lived 930 Years and Then He Died". *Reasons to believe*. [Online] Jan 1, 2001. http://www.reasons.org/articles/long-life-spans-adam-lived-930-years-and-then-he-died.

3. Editor. Mortality. *Encyclopædia Britannica Online*. [Online] Encyclopædia Britannica, May 7, 2015. http://www.britannica.com/EBchecked/topic/393100/mortality.

4. The Alleged Genesis Flood. [Online] Brethren in Christ (Christadelphian) Church . http://www.one-gospel.org/thebible/i_thebible_02.htm.

5. Editor. Guinness World Records. *Answers.* [Online] 2015. http://dawaex.com/?Q/FAQ/4559.

6. Williams, David. Planetary Fact Sheet - Metric. [Online] April 25, 2014. http://nssdc.gsfc.nasa.gov/planetary/factsheet/.

7. Editor. *Testing the Bible Scientifically.* [Online] Brethren in Christ (Christadelphian) Church, May 5, 2015. http://www.one-gospel.org/thebible/i_thebible_02.htm.

8. *A low mass for Mars from Jupiter's early gas-driven migration.".* Kevin Walsh, A. Morbidelli, S. N. Raymond, A. M. Mandell. 7355, s.l. : Nature, 2011, Nature, Vol. 475, pp. 206-209.

9. *Legends of the Jews vol. 1.* L. Ginzberg, L. Szold, H. (tr.), Legends of the Jews vol. 1, Jewish Publication. s.l. : Jewish Publication Society of America, 1968, p. 162.

10. *Constellations: Legacy of the dispersion from Babel.* Henry, Jonathan. 3, s.l. : Journal of Creation, 2000, Vol. 22.

11. Llani, Ofri. *Father of modern science calculated: World to end in 2060.* s.l. : Haaretz, 2007.

12. Ansley, Gabriel. *Undeniable Biblical proof Jesus Christ will return exactly 2,000 years after the year of his death.* s.l. : Mill Ciy Press, Inc., 2010. ISBN-13: 978-1936107445.

13. *Young Solar System's Fifth Giant Planet.* Nesvorny, David. 2, s.l. : The Astrophysical Journal Letters , 2011, Vol. 742.

14. Strobel, Nick. Astronomy Notes. 2013.

15. *Effects of Flooding on Trees.* Iles, Jeff. 18, s.l. : ISU Horticulture and HomePest News, 1993, Vol. 465.

16. Meyers, Rick. e-Sword Strong's Dictionary. 2015.

17. Editor. How much water is there on, in and above the earth? [Online] 1984. https://water.usgs.gov/edu/earthhowmuch.html.

18. —. Rising Seas. [Online] National Geographic, 2015. http://ngm.nationalgeographic.com/2013/09/rising-seas/if-ice-melted-map?rptr.

19. Ramsundar, Pallant. Effect of gravity field density on the speed of light. 2015.

-----End-----