

Chronological Framework of Ancient History. 4: Dating Creation and the Deluge

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Abstract

The authors survey the ancient chroniclers for durations to the Flood and to Creation. We find that the ancient chroniclers unanimously place the Flood in the twenty-fourth century BC. Several durations to Creation also agree with Ussher's date within ten years.

Keywords: Flood, Flood date, Creation, Kali Yuga

Chronological Framework of Ancient History

This paper is the fourth in the Chronological Framework of Ancient History (CFAH) series in which the authors attempt to build a model of ancient history using the durations recorded by the ancient chroniclers, with the goal of finding a result that is consistent with the biblical text. The methodology for this series was developed in the first paper Griffith and White (2022a).

In each paper as we triangulate the dates for events, we number them as anchor points, which are also recorded as a tab in the accompanying spreadsheet (available as the Supplementary material), and numbered in the form AP-X, where X is the number of the anchor point in the series. The "Anchor Points" tab lists the anchor points in the order they are determined for the first five papers, and lists the paper in this series as CFAH-X where X is the paper. You are currently reading CFAH-4. We will release updates to the CFAH data spreadsheet as the series progresses. Previous papers in the series are available at the *Answers Research Journal* website.

Introduction

When reviewing the widest range of sources for durations to the Flood and to Creation, we were surprised to find how closely chroniclers from ancient nations agree with each other and the Ussher chronology. Not only are there precise durations to the Flood and Creation from several civilizations, but a considerable amount of history from the antediluvian era has been preserved, albeit now covered under layers of superstition and idolatry.

The Hindu texts preserve a great deal of chronological and historical data, which has been overlaid and interpreted through the lens of much later gnosticism. The Hindu word buddha originally meant a sage or prophet, millennia before it came to mean a particular god (Hamilton 1820, 289).

The oldest Hindu texts describe Adam, Enoch, and Noah as buddhas, which originally meant prophets (Hamilton 1820, 114–120). However, they also refer to the first ten generations of prediluvian patriarchs as "avatars" or incarnations of God, (Hamilton 1820, 10) which we obviously reject.

The Chinese remember the first ten patriarchs as legendary emperors, and also preserve surprisingly detailed chronological details about some of them, as well the history of Noah's post-Flood career.

Though we cite pagan sources we wish to reiterate that the authors are creedally orthodox Christians who reject ecumenism, syncretism, gnosticism, reincarnation, astrology, and other superstitions that have been encrusted over the kernel of truth preserved in these traditions. We encourage historical study of these sources with the caution that the reader must be vigilant against spiritual deception.

We have used two primary creationist sources from the eighteenth and nineteenth centuries who attempted to decipher and reconcile the oriental writings with the scriptures. These were Alexander Hamilton (1820) and Samuel Bosanquet (1880). Of the two, Bosanquet is far easier to read, and does not stray into ecumenism.

This paper has three sections.

First, we will work through about 20 durations to the Flood and Creation, which some may find tedious, but must be done.

This will be followed by analysis of astronomical durations related to the Flood, of which we found three.

And finally, we will examine evidence that the corrupted chronogeneologies of the Samaritan and Septuagint manuscripts were deliberately altered in order to match astronomical durations to the Flood made using an inaccurate value for the rate of precession.

Durations to the Flood and Creation

In the interest of being comprehensive, let us begin with less precise durations. All the durations below are charted in fig. 1.

Imprecise Durations

Stellar Observations: Chinese and Babylonian sources seem to indicate that the earliest astronomical observations after the Flood date back to 2295B.C. (Spineto 1845, 404). The Shû King records that Emperor Yâo ordered the construction of four observatories as the first priority after the Flood. In Griffith and White (2023), we calculated the date of Yâo’s reign as having begun in 2347B.C. Some Chinese scholars calculate it as 2357B.C.

In Legge’s introduction to the Shû King (1879, 15) he cites Yâo’s instructions to his astronomers as proving the document dated to an era when the knowledge of astronomy was higher than that of most of Chinese ancient history.

the directions of Yâo to his astronomers, telling them how to determine the equinoxes and solstices, by means of the stars culminating at dusk in those seasons, could not be the inventions of a later age. The reader will find this subject discussed in the next chapter, where it is shown how those culminating stars may be employed to ascertain the era of

Yâo. No compiler, ignorant of the precession of the equinoxes, which was not known in China till about the middle of our fourth century, could have framed Yâo’s directions with such an adjustment to the time assigned to him in chronology.

Certainly, if the Flood had visibly changed the motions of the heavens, then Noah could be expected to have begun making astronomical observations as soon as possible. In a world with more pronounced seasons, knowing when the seasons began was critically important to survival.

Chinese: Alexander Hamilton states: “the Chinese annalists...place the deluge of Yau in the same year that the Hebrews place the flood of Noah...” (Hamilton 1820, 345). This calculation was based on the reigns of the first three post-Flood dynasties, as opposed to astronomical calculations.

Hindu Astrological: “the year 2352 was obtained by the Hindus from a purely astronomical calculation...for this implies their opinion that the history of the world went back no further” (Browne 1844, 567). The Flood generally marks the beginning of known world history, as the Hindus considered the era before the Flood as the reign of the gods. Browne suggests this calculation was made in 204B.C., which happens to be when the vernal equinox was leaving Aries. If so, this suggests the Hindus believed the

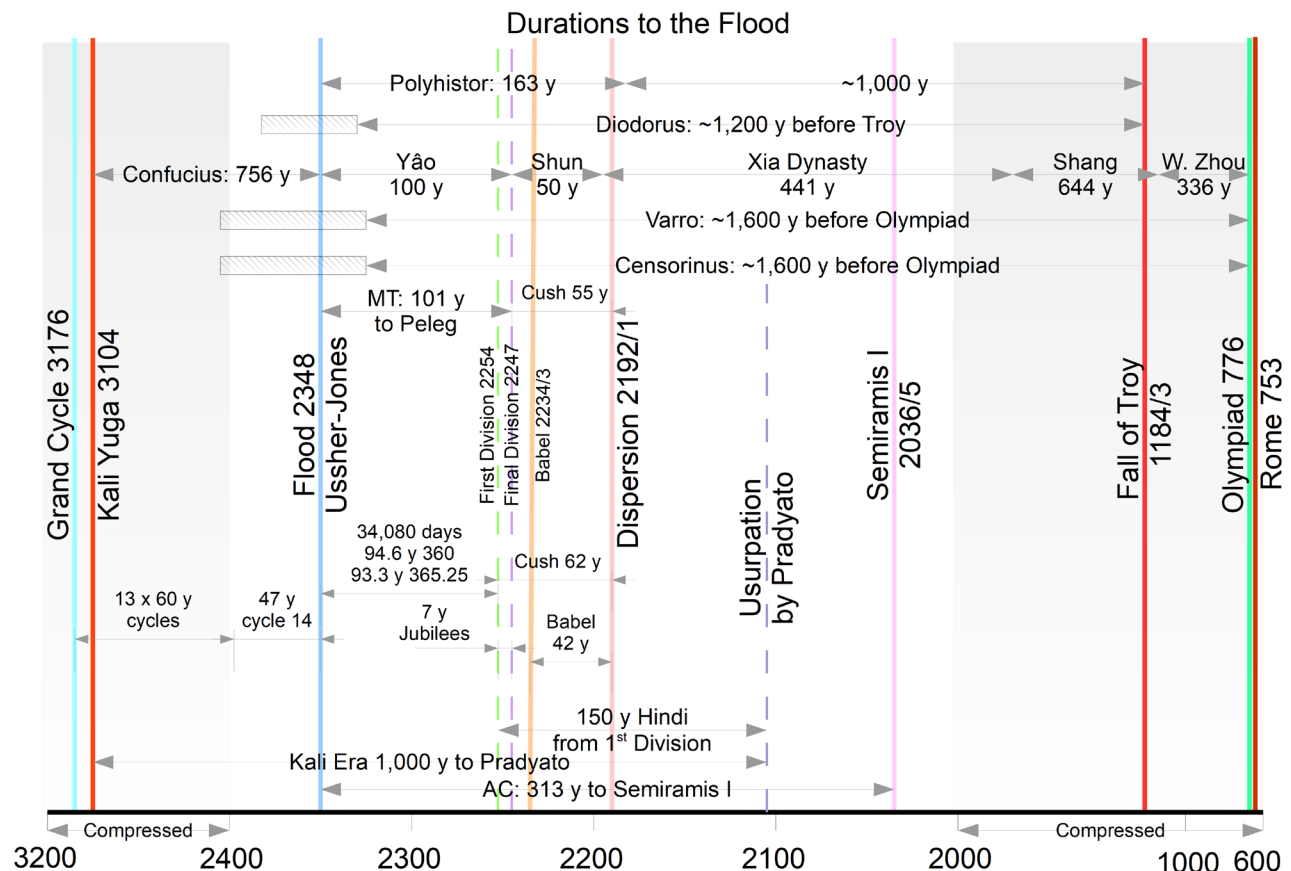


Fig. 1. Durations to the Flood

vernal equinox was in the cusp of Taurus at the time of the Flood. We will repeat what we believe this calculation to have been in the astronomical section of this paper.

Diodorus states that the Egyptian priests maintained that “when mankind first appeared on the earth [after the Flood];...but from the Trojan War, less than twelve hundred [years]” (*Diodorus* 1935, Book 1, §24.2). Since the Trojan war ended 1184/1183 B.C., less than 1,200 years yields a date below 2383 B.C. for the date of the Flood. Assuming *Diodorus* rounded to the nearest hundred, the Flood probably occurred between 2383 and 2333 B.C.

Eusebius cites *Varro* as computing that the Flood was 1,600 years before the Olympic aera, (*Eusebius* 2002, PrEv. 10.10) which yields 2376 B.C., plus or minus 50 years.

Censorinus dates the flood of *Ogyges* as less than 1,600 years before the first olympiad (*Williams* 1789, 250). He seems to have confused the much later flood of *Ogyges* with the Deluge, as several other Greek sources did with both the floods of *Ogyges* and *Deucalion*. This section is confusing; however, he gives values that sum up to between 1,400 to 1,514 years prior to the first Olympiad (*Censorinus* 2000, 30–31).

Bunsen quotes *Censorinus* as being more precise: “same year is referred to by *Censorinus*, about 238 A.D., who states, on the authority of *Varro*, ‘the most learned of the Romans,’ born 116 B.C., that the Flood took place about the year 2360” (*Bunsen* 2017, 11).

Precise Durations that do not Triangulate

“This *Nembrot* [*Nimrod*], says *Berosus*, built *Babylon* 130 years after the flood” (*Raleigh* 1829, chapter 8). One hundred and thirty years before 2233 B.C. yields 2363 B.C. However, he may be referring to the Dispersion, in which case, 2191 + 130 yields 2321 B.C.

We find that the sources who used *Berosus* to determine the date of the Flood measured 1,000 years before the Fall of *Troy*, and then added 163 years to the date of the Flood. $1184 + 1,000 + 163 = 2347$ B.C.

Nevertheless, 2363 B.C. is consistent with the testimonies of *Diodorus*, *Varro*, and *Censorinus*.

Polyhistor used this value also: “a kingdom at *Babylon*, 163 years after the flood, according to *Polyhistor*” (*Williams* 1789, 250).

Assuming that *Polyhistor* used 1,000 years before the Fall of *Troy* in 1183 B.C. as the date for the first kingdom in *Babylon*, then 163 years before 2184 B.C. yields 2347 B.C., matching *Ussher’s* date for the end of the Flood.

However, according to our triangulations from *Griffith* and *White* (2023), the first kingdom in

Babylon after the Dispersion started in 2192/2191 B.C., yielding 2354 B.C. for the Flood using this 163 year duration.

Precise Durations that Triangulate

756 Years after the Kali Yuga: *Confucius* dated the Flood as occurring in the 757th year of the *Kali Yuga* (*Hamilton* 1820, 316). This value is given as 3,267,000 ages from the *Kali Yuga*, which, divided by the 4,320-cipher of the *Hindus* and *Chinese*, yields 756.25 years (*Hamilton* 1820, 332). The *Hindus* calculated time before the Flood in double-hours, reported as “years.”

We demonstrated that the astronomical date for the *Kali Yuga* was 3104 B.C. in *Griffith* and *White* (2023), by counting from three different events: the *Hijrah*, the birth of *Moses*, and the *Usurpation* of *Pradyato*, all of which occurred after the Flood. Counting 756 whole years from 3104 B.C. gives 2348 B.C. for the Flood, agreeing exactly with *Ussher*.

The Deluge occurred in the 47th year of a Grand Cycle: “the world by the *Hindus* and *Chinese*, and the commencement of their cycles agree, each placing the deluge in the 47th year of a cycle” (*Hamilton* 1820, vol. 1, 332). The year 2349/8 was the forty-seventh year of the fourteenth sixty-year cycle from the start of the *Grand Cycle* in 3176 B.C. (*Griffith* and *White* 2023, 151).

Cush’s Reigns: 62/55/42 years: *Belus*, whom we believe to have been *Cush*, ruled *Babel* until 2192/2191 B.C., and is said to have reigned 62 years (*Russell* 1865, 379) by *Scaliger* and 55 years by *Syncellus* quoting *Africanus* (*Clinton* 1824, vol. 1, 267), all three of whom were redactors of *Ctesias*. We believe both values refer to events in the reign of *Cush*, called *Belus*, or *Bel Marduk*.

Cush could only have ruled in the city of *Babel* from the time it was founded in 2234/2233 B.C. until the Dispersion in 2192/2191 B.C. or 42/43 years, since, “At the end of forty two years after the building of the *Tower*, *Ninus* son of *Belus* took the kingship of the world” (*Macalister* 1941, §13).

However, the *Babel* project must have been the result of many years of planning and organization. This is evidenced by its founding on the conjunction of the *New Moon* with the *Vernal Equinox* in 2233 B.C. (*Cullimore* 1833, 167, 180). This suggests they anticipated this conjunction and deliberately waited for this date to found the city or its temple. Therefore, it is not unreasonable to postulate that *Belus/Cush* began to rule in some fashion a decade or more before the city was founded.

Cullimore (1833, 165) states “The building of this tower is by profane writers uniformly ascribed to *Belus*.” *Cush’s* rule over his tribe would have started earlier when the land was divided around the time of *Peleg’s* birth. The two longer durations for his length

of reign, which predate the founding of Babel, may be explained by two divisions of territory as reported in the *Book of Jubilees* (Charles 1913, Jubilees 8.8-10).

AP-27: First Territorial Division: 2254/2253 B.C.

Berossus gives 34,080 days, which is 93.3 Julian years, or 94.6 years of 360 days then used by ancient Babylon, from the Flood until the first dynasty of Babylon, when by inference, Belus/Cush began to rule. 94.6 plus 62 is 156.6 years; 156 years before the Dispersion in 2192/2191 B.C. yields 2348/2347 B.C. for the Flood, and 2254/2253 B.C. for the First Territorial Division.

The Hindu records give 150 years from the Division of the Earth until the Usurpation of Pradyato (Hamilton 1820, 124). Pradyato was a Cushite who conquered the nascent Indus civilization and took over the government. This Usurpation was also given as 1,000 years after the Kali Yuga. Subtracting 756 years to the Flood from the Kali Yuga, as well as the 150 years of self rule by the Hindus, we find that the division of the world was 94 years after the Flood began, which is 93 years after the end of the Flood. This triangulates, confirming that our interpretation of the 34,080 days is correct.

AP-28: Second/Final Territorial Division: 2247 B.C.

Syncellus cites Africanus in his epitome of Ctesias who gives the reign of Belus, whom we consider to have been Cush, as 55 years (Clinton 1824, 267), which by our reckoning would be from the birth of Peleg in 2247 BC (Ussher 2005, 21, §47) to the Dispersion in 2192/2191 B.C. Thus, it appears territorial division may have been a seven year process which began in 2254 B.C. and was finalized in 2247 B.C., both confirming the Flood was in 2348/2347 B.C. Adding 101 years from the Flood to Peleg in the MT to the 55 years of Belus gives 156 years from the end of the Flood to the Dispersion, again triangulating 2348/2347 B.C. for the Flood.

Semiramis I: 312/313 years: The Annals of Clonmacnoise state that Semiramis' rule started 313 years after the Great Flood. "Ireland long time after the flood lay waste untill...after the flood 313 years...in the 1st year of the Raigne of Semiramis then monarches of the world in Assiria" (McGeoghagan 1896, 12–13). *The Irish Annals of Clonmacnoise* state that Semiramis began to rule 312 years after the Flood (Percy 1823, 270).

2036/2035 BC, AP-21 Reign of Semiramis I; plus,
313 years; gives:
2349/2348 BC for the Flood

Emperor Yâo's Reign 2347 BC: We found in a previous paper (Griffith and White 2022b, 422) that

Yu of the Xia Dynasty of China began to reign in 2197 B.C. His predecessors Yâo and Shun reigned for a total of 150 years. Emperor Yâo's reign was said to have begun when the Flood had ended.

2197 B.C., AP-4 Reign of Yu/Xia; plus,
150 years of Yâo and Shun; gives:
2347 B.C. end of Flood

Durations to Creation

Durations to Creation are charted in fig. 2.

Semiramis I 1969 Years from Creation: "Ireland long time after the flood lay waste until about the Year after the Creation of the World 1969 and after the flood 313 yeares in the 21 year of the age of the Patriarck" (McGeoghegan 1896, 12). As noted in the previous duration, Partholan's colonization of Ireland was dated to the first year of Semiramis, 313 years after the Flood.

The Annals of Clonmacnoise use the Vulgate chronogeneologies but assume that Abram was born when Terah was 70 rather than 130 years of age, as per Ussher and Saint Paul. Thus, 313 years after the Flood was, by their calculation, the twenty-first year of Abraham.

If we correct their date for the Flood to 2348 BC, then the adjusted date for Creation was 2348–313+1969=4004 B.C..

The source, the *Annals of Clonmacnoise*, was compiled about 250 years before Ussher's *Annals of the World*, and the monastery itself dates back to the sixth century.

Lotus Creation 5,788 years before A.D.1788; and 5,817 years prior to A.D.1815: "[The birth of Adam, the first Menu]...is accurately traced to the year BC 4002; or...according to Sir William Jones to 5788 years before the year of Christ 1788" (Hamilton 1820, 54–55). "I embrace with pleasure the task of convincing you, that the Hindu dates correspond with the Hebrew text of our Scripture, and that they date the Lotus creation five thousand eight hundred and seventeen years from the present time [A.D.1815]" (Hamilton 1820, 3).

The First Four Ages 900 years before Kali Yuga: According to Hamilton's decipherment of the four divine Hindu ages, the first three of these lasted successively four centuries, three centuries, and two centuries before the Kali Yuga (Griffith and White 2023, 148). Nine centuries prior to 3104 B.C. is 4004 B.C.

The Chinese Patriarchs: The Chinese names for the first three patriarch-emperors are Fo-hi, Shin-nang, and Huang-di. Table 1 shows Hamilton's values for the years of the deaths of the first three patriarchs in the Bible, Chinese, and Hindu records after the creation of the first man (Hamilton 1820, 320–321).

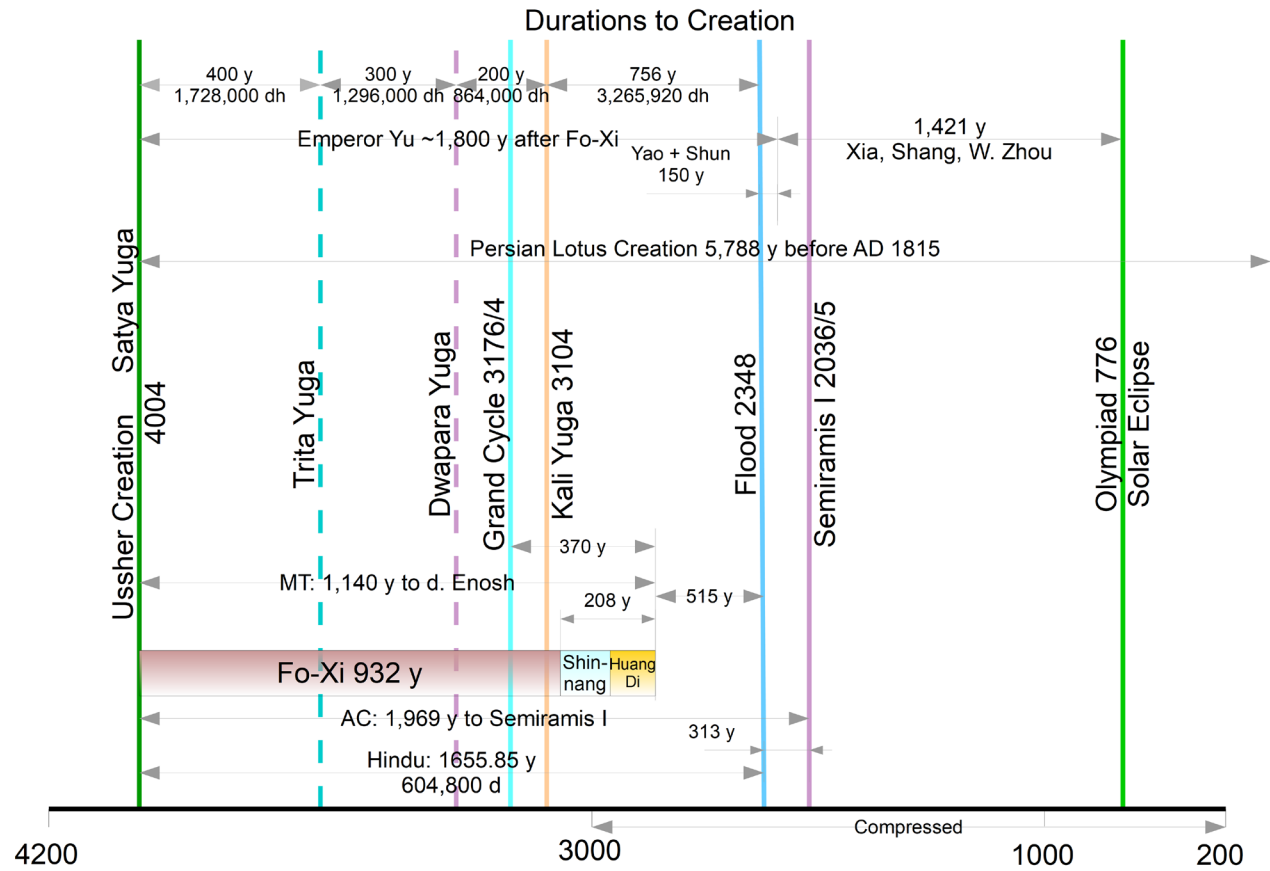


Fig. 2. Durations to Creation.

Table 1. Chinese Patriarchs.

Chinese Patriarchs			
Name	Bible	Chinese	Hindu
Adam/Fo-hi	930	932	931
Seth / Shin-nang	112	108	112
Enosh / Huang Di	98	100	98
Year of Enosh's Death	1140	1140	1141

As can be seen, all three records agree that Adam died at the age of 930–932 years, and Enosh died 1,140–1,141 years after the creation of Adam.

Nao the Great, one of the ministers of the Emperor Huang Di, the biblical Enosh, is credited as the author of the Chinese Grand Cycle. The death of Huang Di is given as 515 years before the Deluge (Hamilton 1820, 319) and also as the tenth year of the sixth cycle, (Hamilton 1820, 338) using 3174 B.C. as the start of the cycle instead of 3176. Calculating by the cycle, this would place the death of Huang Di in the year 3174–309=2805 B.C. One thousand, one hundred and forty years before 2805 B.C. yields 4005 B.C. Counting 515 years before the Flood, and then adding 1,140 gives 4003 B.C.

The Translation of Enoch in Kali 88: In the Hindu records we find that the third buddha, “son of Maya,” whom Hamilton and Bosanquet both identify as

Enoch, was translated in the eighty-eighth year of the Kali Era (Hamilton 1820, 81).

Summing the Hebrew chrono-genealogy from Adam to Enoch’s translation yields A.M. 987 for the translation of Enoch. Subtracting 87 full years from the Kali Era in 3104 B.C., and adding 987 gives 4004 B.C. for the creation of Adam, confirming that Enoch was the person remembered as the Buddha, son of Maya, by the Hindus.

Emperor Yu ruled 1800 years after Fo-hi: “not until the time of Confucius, that this book was fully deciphered, and as they record that a prince who lived 1800 years after Fo-hi, by the changes which he made in these lines, gave an account of the reciprocal transmutations of the eight original figures, we may suppose that the prince who reigned 1800 years after Fo-hi, was the person who first ruled in China; that being the year in which Yu” (Hamilton 1820, 394).

As shown in Griffith and White (2023), Emperor Yu is calculated to have begun to reign around 2197 B.C. One thousand, eight hundred years appears to be a rounded number, which could be ± five years or ± 50 years. Adding 1,800 to 2,197 gives 3997 B.C. ± 50 years for the time of Fo-hi.

1,680 prophetic years Creation to Flood: The Hindus have preserved a count of 604,800 days from Creation to the Flood. Converting to Julian years

gives 1655.85 years for the same period. This value appears to have been back calculated after the Flood by someone who understood the prediluvian year to be 360 days and the post-Flood year to be 365.25 days. Though it appears that the inventor of that system reversed the numbers. The duration should have been 1,656 years of 360 pre-Flood days, which is 596,160 days.

This calculation is also tied to the notion that the entire period of time from Creation to the Flood was a symbolic seven days, and the time from the prophecy foretelling the Flood was seven half days, or half the entire period. Bosanquet (1880, 27) concurs.

The actual transformation they used to convert 1,655.85 years before the Flood into 120 “times” was as follows:

$$1,655.85 \text{ years} \times 365.25 \text{ days} = 604,800 \text{ days}$$

$$604,800 / 360 \text{ days} = 1,680 \text{ years}$$

$$1,680 / 14 \text{ half-days (7 days and 7 nights)} = 120 \text{ “weeks” or times.}$$

Hamilton (1820, 81) interprets both the seven days prophecy and the 120 years prophecy as referring to a period of 828 years using the same Hindu cipher for time. Thus, according to Hamilton, the prophecy of the Flood was given 828 years before the Deluge occurred.

While Hamilton’s calculation is a bit too esoteric to be considered as a duration for our data set, we do note that 828 years before the 2348B.C. Deluge was 3176B.C., which we have previously identified as the Saptarshi Era and the start of the Grand Cycle, which was exactly halfway between Adam’s creation and the Flood. Hamilton postulates that the prophecy of the Flood was first given in that year, though it precedes Noah’s birth by over two centuries.

The Babylonian compression of the first ten patriarchs into 120 *saroi*, or decades, seems to be a device of similar nature regarding the interpretation of Genesis 6:3.

This suggests that both the Sumerians and the Hindus were aware of Genesis 6:3 very early after the Flood, perhaps so early that the human lifespan had not yet fallen to 120 years. Most scholars since Moses have interpreted Genesis 6:3 as referring either to 120 years from the prophecy to the Flood, or to the reduction of human lifespan to 120 years.

Both cultures interpreted Genesis 6:3 as referring to the duration from Adam to the Flood, and then tried different ways of manipulating the numbers to get 120 “times.” The Hindu value of 604,800 days appears to preserve the MT value of 1,656 Julian Years from Adam to the Flood.

Conclusions from Historical Durations

The earliest and latest dates for the Flood based on historical durations are 2386 and 2316B.C. (table 2). This is a much narrower range than one might expect. We have found no support from the ancient chroniclers for a date prior to 3000B.C., as required by LXX chronologies. Likewise, the historical durations give a range for Creation from 4007 to 3997B.C. (fig. 3).

Several of the more precise durations converge on 2348B.C. for the Flood and 4004B.C. for Creation. We get the most precise date for Creation when using the astronomically-corrected date for the Kali Yuga (3104B.C.) and add the previous three Hindu ages, which sum to nine hundred years, yielding 4004B.C. as the date of creation in the Chinese, Hindu, and

Table 2. Flood dates from the ancient chroniclers.

Flood Dates from the Ancient Chroniclers		
Date (BC)	Duration (years)	Source
2376	1,600	Varro
2376	1,600	Censorinus
<2383	<1,200	Diodorus
about 2360	Censorinus	Varro
2363	130	Berosus
2316	1,563	Bucholzerus
2357 to 2347	2,160	Precession of Equinox
2352	Astrological	Hindu
>2337 or > 2295	1st Observation	Chinese
2357	Date of Yáo	Chinese
2347 BC	163	Polyhistor
2348/2347	93/94 + 62 + 2192	Berosus
2348	312/313	Irish Annals
2348	Masoretic Text	Ussherian
2348/2347	Universal Key	Cullimore
2348	757th year of Kali Yuga	Confucius

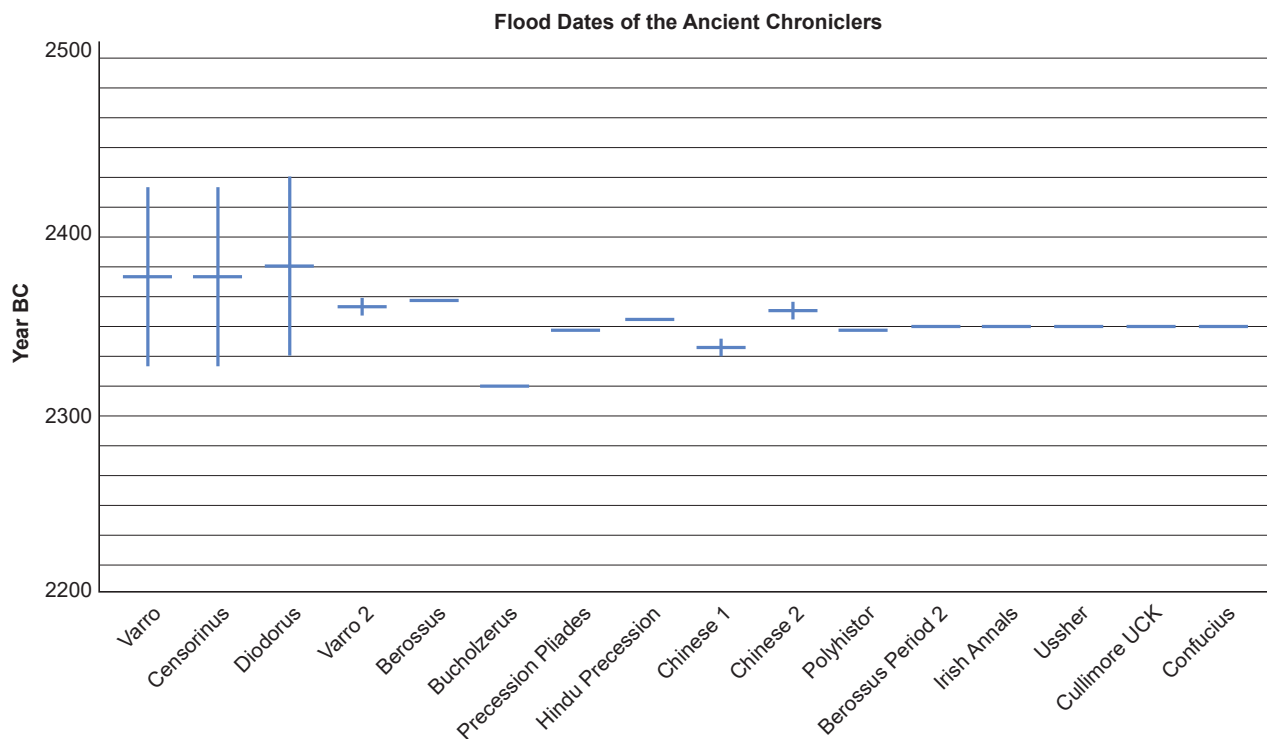


Fig. 3. Flood dates of the ancient chroniclers.

Persian records, thus affirming Ussher's biblical chronology.

Astronomical Evidence

Astro-chronological schemes

Astro-chronological schemes are based on intercalating cycles of the heavenly bodies, that are then back calculated to a beginning point that is often far beyond the beginning of known history. Examples of astro-chronological schemes include the Julian Day, the Mayan Long-Count, the Hermaic Cycle, and the Babylonian age of 36,000 years used by Berossus.

Walt Brown proposes a three-part astronomical scheme of cometary alignment to date the Flood. Beginning with his hypothesis that the comets in the solar system were made of material ejected from earth in the Flood, (Brown 2020a) he calculates that the two most "clocklike" comets, Haley's Comet and Swift-Tuttle, can be found to have both been near earth in 3290 ± 100 B.C., and assumed that their orbits were not disturbed by interactions with the major planets or the solar wind.

Assuming 3390–3190 B.C. to be the correct date range for the Flood, Brown then used components of other biblical chronologies to roll his own, placing the Flood near 3290 B.C. To achieve this he selected the LXX chronogeneologies, with Terah at the age of 130 when he sired Abraham, the Long Sojourn, and an inexplicably short Judges, as he accepts both Mahoney's 1450 B.C. Exodus and Ussher's Divided

Kingdom date for Solomon's death in 976 B.C. (Brown 2020b).

Similar to the logic of ABR in choosing a biblical chronology that fits Joseph to an assumed Sothic date for Senusret III (Petrovich 2019, 37), Brown cherry picks the data by beginning with the most speculative and untestable assumption imaginable and then chooses a biblical chronology that seems to support it, instead of vice versa.

In addition to the conjunction at the start of the Kali Yuga, we have found three ancient astronomical records for the year of the Flood. We do not accept any astro-chronological date unless it is confirmed by historical durations and multiple triangulations from known dates. That being said, let's see what can be determined from these three records.

1. The Culminating Stars of Yâo

The most comprehensive record of the solstices and equinoxes from the time of the Flood is found in the Shu King. The first priority of Emperor Yâo after the Flood was to set up four observatories to measure the points, and specifying which Chinese constellations were at culmination just after sunset for each point, as listed in table 3 (Legge 1879, 20–26). In astronomy, the "culmination" is the highest point that a star reaches in its visible arc, which is on the meridian (a line between due south and directly overhead). Noon is defined as the culmination of the sun. The culminating stars at sunset on the equinox are found 90° ahead of the sun along the ecliptic.

Table 3. Yáo's culminating stars.

Yáo's Culminating Stars			
Point	Chinese Star Name	Modern Star Name	Range (BC)
Vernal Equinox	Hsing in Niáo	α Hydrae	2275–2203
Summer Solstice	Hwo	β and δ Scorpio	2635–2491
Autumn Equinox	Hsü	β Aquarii	1987–1771
Winter Solstice	Mão	Pleiades	2419–2275
Average Year			2257

Several astronomers of the nineteenth century attempted to calculate the dates matching these observations. Legge relates: (1879, 25–26)

Bunsen tells us that Ideler, computing the places of the constellations backwards, fixed the accession of Yáo at B.C. 2163, and that Freret was of the opinion that the observations left an uncertainty of 3°, leaving a margin of 210 years. On the other hand, J. B. Biot found in the directions a sufficient confirmation of the received date for Yáo's accession,—B.C. 2357.

We have not been able to find any published research since 1900 repeating these calculations, so we have replicated them using Skymap Pro (table 3). Method: we drew a line perpendicular to the ecliptic for each of the four stars, and measured the years for which it was within 1° of 90° ahead of the relevant equinoctial point it was related to. Our results are found in the Range column. The full range of the observations went from 2635 to 1771 B.C. We found that there was no year that exactly matched the positions for all four of the asterisms given by Legge. Averaging all four ranges gives 2257 B.C. \pm 72 years, confirming Biot's result.

This rough estimate of where the equinoxes and solstices should be is what one might expect Yáo to have had after only a decade of observations. It is sufficient to inform us that the Chinese chronology for Yáo is consistent with the era of the astronomical observations he recorded, but insufficient to pinpoint the year of the Flood.

2. Aztecs: World Destroyed When Pleiades Culminated at Midnight

From the Aztecs (Allan 1899, 399)

[The Pleiades] were a well-known object in... Mexico, for Cortez heard there, in 1519, a very ancient tradition of the destruction of the world in some past age at their midnight culmination.

The culmination of Pleiades within an hour of midnight allows 30° on either side of the meridian. At the rate of 1° in 71.58 years, Pleiades would be in that zone for 4,300 years. Therefore, this observation is more useful for pinpointing the day of the Flood in the year, rather than the year of the Flood.

If we take it as a precise observation, given the historical durations that have already placed the

Flood in 2348 B.C., the Pleiades culminated exactly at midnight on October 22 of that year.

All Hallows Eve, or Halloween, has been associated with mourning the dead who were killed in the Flood since remote antiquity (Hodge 2013). The last observation Noah could have made was seven days before the Flood waters burst out (Genesis 7:4). If this Aztec memory was precise, then the Flood probably began on October 29th, give or take a couple of days, which is surprisingly close to Halloween.

3. Vernal Equinox in Pleiades

If modern civilization moved entirely to the use of digital clocks such as phones and electronic devices to tell time, one might suppose that in a few centuries the use of a clock face might be forgotten. Later archaeologists digging up clock faces would need to determine two things in order to understand how they worked. First they would need to decipher the symbols, in most cases Roman numerals, I–XII, but sometimes written as Arabic numerals, 1–12. Which number meant noon and which one meant midnight? The answer to both would be 12. Second, they would need to determine the meaning of the hands which point to the hour, minute, and second.

The ancient understanding of the precession of the solstices and equinoxes through the zodiac presents a similar problem to us. The clock we wish to decipher has 12 symbols, or star signs, each 30° along the ecliptic, through which the sun, moon, planets, and equinoctial points move. Unlike a typical clock whose second, minute, and hour hands all move in the same clockwise direction, the zodiac has two hands, the sun and moon, which move counterclockwise through constellations. But the equinoctial points move very slowly in the opposite direction, hence the name “precession” rather than “procession.”

The precession of the equinoxes through the zodiac was important and well known to the ancients. A new zodiac age occurs every 2,147 years as the equinox passes into a new sign, such as the “Age of Aquarius.”

If the ancients recorded the position of the equinox in the year of the Flood or shortly afterwards, then later scholars, ourselves included, could back-calculate the date of the Flood by measuring the number of degrees of precession of the equinox since

then, and multiplying by the number of years per degree. The result would be the number of years which had elapsed since the Flood.

In the next section of this paper, we will examine evidence that the rabbis who translated the Septuagint did precisely that. But first, we need to determine if midnight on the zodiac was recorded by the ancients.

Finding Midnight on the Zodiac

Here is what the ancients recorded about the beginning of the zodiac.

The Arabians and Persians reckon[ed] Taurus... their first sign. (Higgins 1874, 273)

According to Allan (1899, 413):

Taurus, the Bull... everywhere was one of the earliest and most noted constellations, perhaps the first established, because it marked the vernal equinox from about 4000 to 1700 B.C., in the golden age of archaic astronomy; in all ancient zodiacs preserved to us it began the year. It is to this that Vergil alluded in the much quoted lines from the 1st *Georgic*, which May rendered:

When with his golden homes bright Taurus opes,
The yeare; and downward the crosse Dog-starre stoopes.

Taurus in Egypt:

Still *this constellation is said to have begun the zodiacal series* on the walls of a sepulchral chamber in the Ramesseum; and, whatever may have been its title, its stars certainly were made much of throughout all Egyptian history and religion, not only from its then containing the vernal equinox, but from the belief that *the human race was created when the sun was here*. (Allen 1899, 381. Emphasis added)

Its position in the Hebrew alphabet also indicates the first:

As first in the early Hebrew zodiac it was designated by A or Aleph, the first letter of that alphabet. (Allen 1899, 381)

The constellation Taurus is then the first of the signs on the most ancient Zodiacs, however, Aries replaced it in later calendars. We might suspect Taurus to be the zodiacal midnight which may indicate either Creation or the Flood. However, given that Taurus spans 30° along the ecliptic, and it takes the equinox 2,147 years to traverse it, we require a narrower point to define the zodiacal midnight. Fortunately, the ancient memories provide one.

Taurus is made up of two star clusters called the Hyades and the Pleiades. Both of them are associated with rain and destruction of the world. There are two specific references to the positions of the Pleiades with regard to the Deluge which can be tested. The legends of the Jews relate that Pleiades was associated with the Flood.

The flood was produced by a union of the male waters, which are above the firmament, and the female waters issuing from the earth. The upper waters rushed through the space left when God removed two stars *out of the constellation Pleiades*. (Ginzberg 2001, vol. IV, 38–40. Emphasis added)

The Chinese divide the zodiac into 24 constellations instead of 12. According to Biruni, the lunar constellation with the Pleiades is their first, indicating it is midnight on the Chinese calendar:

And their beginning the astronomical year gave rise to the title “the Great Year of the Pleiades” for the cycle of precession of about 25,900 years. (Allen 1899, 343)

And more specifically:

In enumerating the Nujūm-al’akhdh, i.e. the Lunar Stations, the Arabs commenced with Alsharaṭān, since in their time they stood in the first part of Aries. *Other nations begin with the Pleiades*. I do not know whether they do this because the Pleiades are more easily and clearly visible without any study or research than the other Stations, or because, as *I have found in some books of Hermes, the vernal equinox coincides with the rising of the Pleiades. This statement must have been made about three thousand and more years before Alexander*. God knows best what they intended! (Biruni 1879, 342. Emphasis added)

The fact that Biruni calculated the vernal equinox was in the Pleiades over 3,000 years before the time of Alexander indicates that he was still using the Greek value of 1° of precession per century as late as A.D. 1000. His testimony suggests that the Vernal Equinox in Pleiades was midnight on the Zodiac clock.

The Pleiades are seen on the border between Taurus and Aries. We offer the hypothesis that a line drawn from the brightest star of the Pleiades, named Alcyone, or η Taurus, to the star λ Taurus, forms the “cusp of Taurus” which is midnight on the clock of the equinoctial zodiac, and the dividing line between Aries and Taurus. The sun appearing to be about 1° wide, this line narrows the date of the Flood to within 36 years, if the measurement of the equinox truly began immediately after the Flood. The star α Leo is exactly 90° ahead of η Taurus, making an accurate measurement at sunset simple for Noah.

Since we have already computed the year 2348 B.C. for the Flood from the biblical text, supported by many historical durations, let’s look at the vernal equinox from the year 2347 B.C., which would be about a week after the Ark came to rest. Fig. 4 was generated using SkymapPro for the moment of the vernal equinox on the Julian day of April, 10 2347 B.C. at coordinates: 37°42’43.42”N 37°42’43.42”N.

We can see that the new moon was in conjunction with the equinox, and the sun was bisected by an imaginary line between Alcyone and the star λ Taurus.

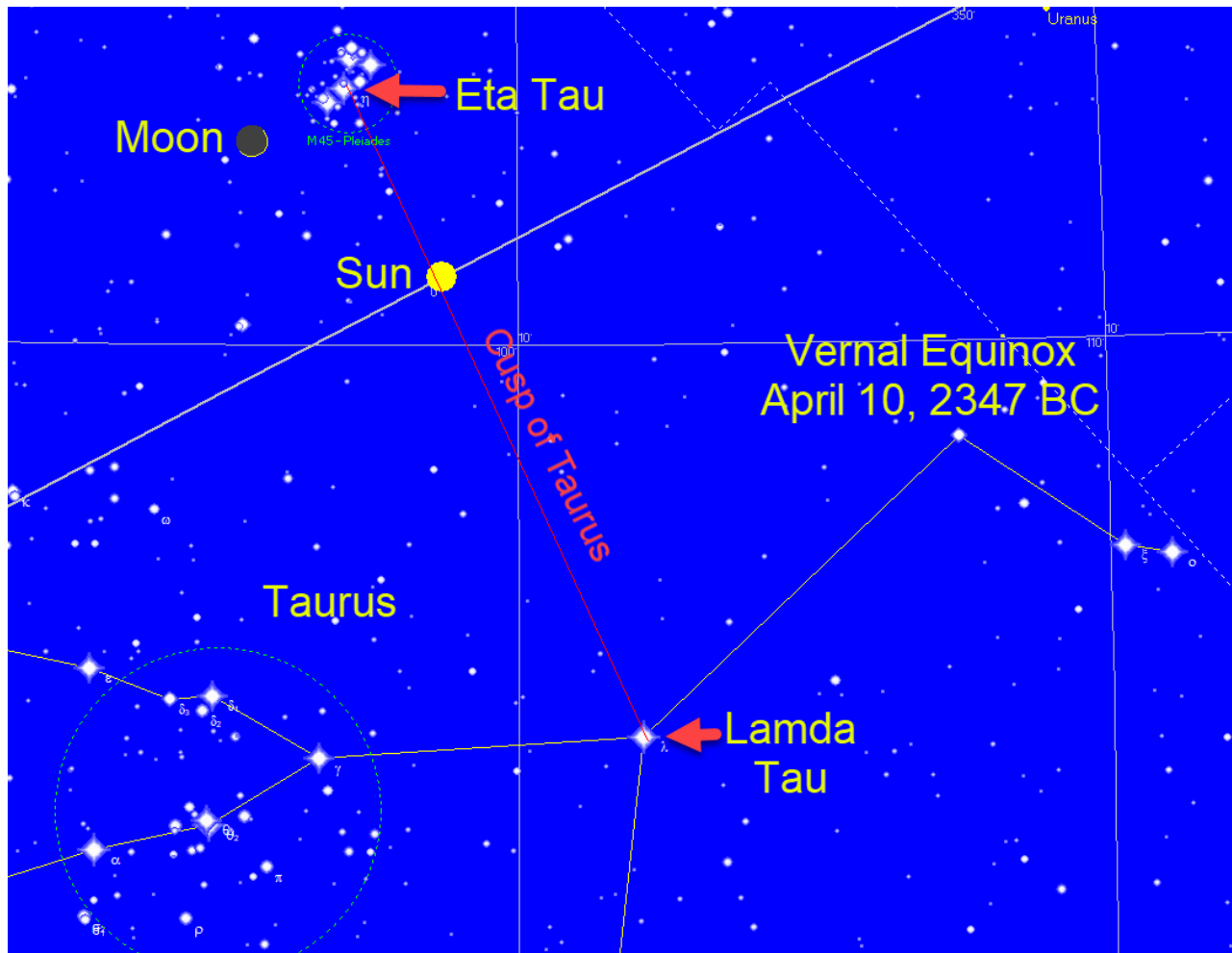


Fig. 4. Vernal equinox 10 April, 2347 B.C.

According to Biruni (1879, 67–68) and the Midrash, (Ginzberg 2001, vol. IV, 41) Noah was unable to see the sun or the moon for a period of about six months during the Flood. Therefore, the vernal equinox of 2347 B.C. would not have been visible to him, as it occurred well before the tenth month when the mountains were finally seen. However, since the rate of precession is only 1° in 72 years, the vernal equinoxes of the next 36 years would give very nearly the same result as the year of the Flood.

We also find that the new moon in conjunction with the vernal equinox of 2347 was part of a Saros Series which saw new moons recur in conjunction with the equinox every 19 years until 2233 B.C., when Babel was founded (Griffith and White 2022b, 422).

Calculating the Date of the Flood by Precession

In the current year (A.D. 2022) the vernal equinox occurred in Pisces just above the star *iota cetus*. The star Alcyone in Pleiades is about 61° from that point on the ecliptic. Multiplying 61° by the precession estimate of 71.5 years per degree, according to the science of our time, we find that 4,361 years have

elapsed since the equinox was on the cusp of Taurus, yielding 2340 B.C. for the Flood.

However, using the most accurate science of our day, the true rate of precession is 50.29 seconds per year. (McNally 2001) $3600/50.29$ gives 71.585 years per degree. Revising our rate of precession for the calculation yields 4,366 years before this year, or 2344 B.C. Thus, we see that to get an accurate result for this calculation we must have both a measure of the precession from the astronomical event with an accuracy of one minute, and an estimate of the rate of precession with an accuracy of one second.

There is evidence that the translators of the Septuagint and the editor of the Samaritan Text made this very same calculation. However, they used a much less accurate estimate for the rate of precession.

Cullimore's Universal Chronological Key (UCK)

This brings us to a most interesting segment of this study. We have reviewed the evidence that the ancients marked "midnight" when the Flood occurred on the zodiacal clock at the Pleiades on the cusp between the constellations Aries and Taurus.

Table 4. Flood dates from various sacred texts.

Flood Dates from Manuscripts of the Old Testament		
Flood Date (BC)	Source	Source Date
2104	Modern Jewish	AD 813
2348/2347	Masoretic Text	1571–404 BC
2697	Hermetic Scrolls	1509 BC
3097	Jewish	465 BC
3145	Samaritan—Hebrew	345 BC
3166	Septuagint—Vaticanus A	296 BC
3177	Septuagint—Alexandrinus B	265 BC
3226	Samaritan—Greek	141 BC
3239	Traditional Numbers	109 BC
3328	Clementine	AD 114

Repeating our estimate of the date of the Flood using degrees of precession multiplied by the estimated rate of precession at the time the variant manuscripts were compiled suggests that the extra years were added to the Samaritan Text and LXX in order to accommodate the best science of the day.

Hipparchus estimated the rate of precession to be one degree per century. While he is credited as the discoverer of precession, recently several of the calculations and observations attributed by Ptolemy to Hipparchus have been found on much older Babylonian tablets. This indicates that Hipparchus probably obtained most of his information from the Babylonians (Toomer 1988).

The Babylonians themselves used a 36,000 year great cycle, which Berossus encoded into his dynasties of Babylon (Rawlinson 1875, 422). Thirty-six thousand years is how long it would take for the equinox to precede through the entire zodiac if the rate of precession was 1° per century. It was also ten *saroi*, as well as a century of 360-day years. There were many reasons for the Babylonians to love the number 36,000.

The Babylonian precession of one century per degree would add an error of about 39 years per elapsed century to estimates of the time since the Flood. So, in the days of Ptolemy I in 296 B.C., which was 2,052 years after the Flood, we would expect they overestimated the duration to the Flood by $2,052 * 39/100$, which gives 800 years, which is very nearly the number of years by which Septuagint numbers exceed those of the Masoretic Text.

Using Cullimore’s table of ten manuscripts (1831) with their Flood dates, (table 4) including one that he computed from Manetho, we added two control points to show the expected Flood dates if the calculation above was made using a rate of precession of 1° per century. We also added one data point for Biruni who estimated that the Vernal Equinox in Pleiades occurred “more than three thousand years before Alexander.” “More than 3,000” would be 3,000 to 3,500 years, therefore we added a point for Biruni in the middle at 3550 B.C., with 5% error bars (table 5).

Fig. 5 plots the manuscript Flood dates versus the date of the manuscript in blue, with the control

Table 5. Cullimore’s precession data for the sacred texts.

Source	Source Date	Flood Year	Control Points	MT Control
Control	-2348		2348	2348
Masoretic Text	-1450	2348		
Hermetic Scrolls	-1510	2697		
Early Jewish Josephus	-466	3098		
Samaritan Hebrew	-346	3144		
LXX—Vaticanus A	-280	3166		
LXX—Alexandricus B	-266	3177		
Samaritan Greek	-142	3226		
Traditional Numbers	-110	3239		
Clementine	114	3328		
Modern Jewish	813	2104		
Biruni	1000	3550		
Control	1000		3654	2348

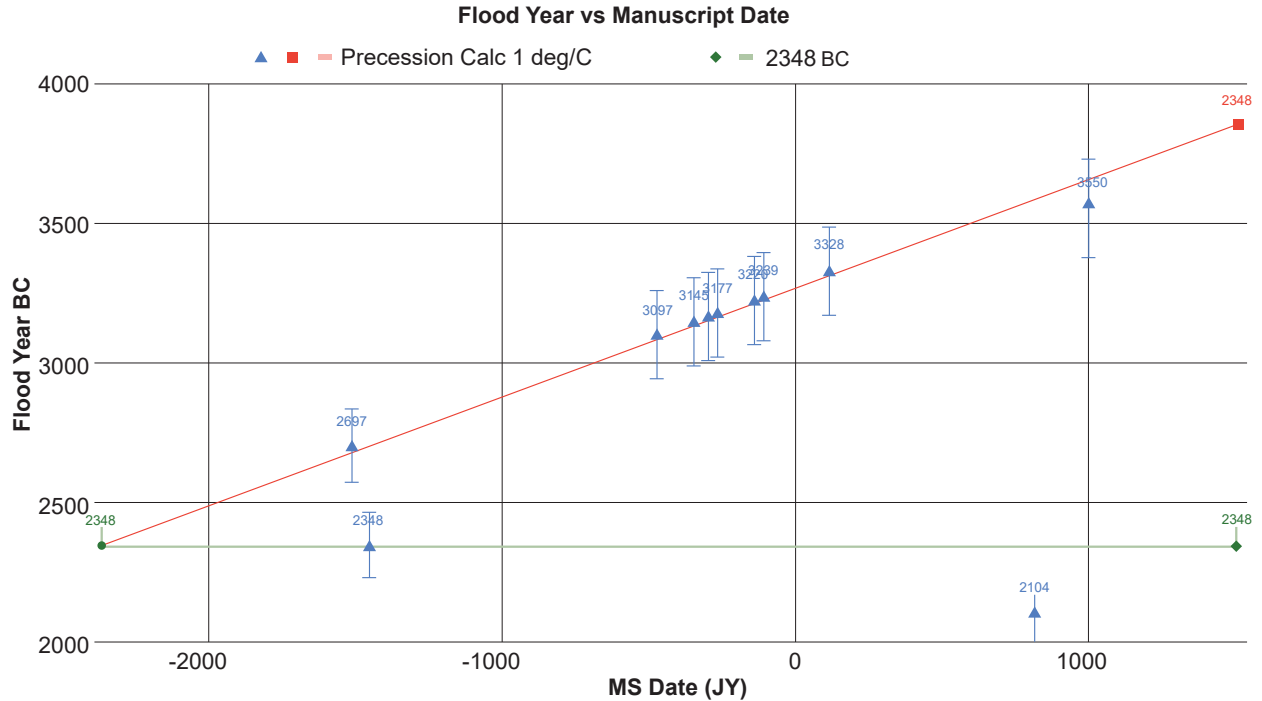


Fig. 5. Flood year vs. source date.

points in red, and Ussher’s year of the Flood in green. As can be seen, the only manuscripts in the series that do not fall on the predicted line are the Masoretic Text and the modern Jewish chronology dating from A.D. 813. It stands to reason that all of the manuscripts falling on the red line had deliberately altered their chronologies to match the computed precession back to the Flood, using 1° per century as the rate of precession.

The chart of the data gives a very strong appearance that the rabbis, following the best science of their day, calculated that the chronology of the sacred text was six to ten centuries too short to reach back to the Flood, depending on when that calculation was made. This is a very similar problem to churchmen seeking to interpret the Bible to accommodate the long ages of geology, which represent the “best science” of our own time.

We have identified a motive, means, and opportunities for the corruptions of the numbers in the biblical text by ancient scholars who thought their science was superior to the testimony of Scripture. The evidence strongly points to the LXX and ST as the corrupted texts.

Triangulations

Having reviewed the historical durations and astronomical proofs that the ancients measured the date of the Flood from the position of the vernal equinox in Pleiades, let’s assemble the triangulations to Creation and the Flood.

AP-29: The Flood: 2348–2347 B.C.

Five triangulations give 2348/2347 B.C. for the Flood:

4003 B.C. Persian Lotus Creation; minus, 400 years of Satya Yuga (AP-24); minus, 300 years of Trita Yuga; minus, 200 years of Dwapara Yuga; minus, 757th year of the Kali Yuga (AP-23); plus 1 for ordinal number; gives **2347 B.C. Flood**

3176 B.C., Saptarshi Cycle (AP-25); minus, 72 years, to Kali Yuga (AP-23); minus, 756 years to Flood via Confucius; gives, **2348 B.C. Flood**

2191, the year of the Dispersion; plus, 62 years of Cush’s reign; plus, 94.6, 34,080 days from Flood to Cush; gives, **2347.6 B.C. for the Flood**

776 B.C., solar eclipse near end of Western Zhou; plus, 1,421 years from Yu of Xia to end of W. Zhou; plus, 50 years sole-reign of Shun; plus, 100 years reign of Yao; gives, **2347 B.C. for end of Flood**

2347 B.C. Vernal Equinox bisected by line between Pleiades Alcyone and Lambda Tau

In summary, there is a five-fold triangulation

showing that the chroniclers of the ancient nations agree with Ussher that 2348–2347 B.C. was the year of the Flood, even if the Persians, Chinese, and Hindus deny its universality.

AP-30: Creation: 4004 B.C.

2197 B.C. Emperor Yu deciphers symbols of Fo-xi; plus,

1,800 years from Fo-xi to Yu; gives:
3997 B.C. ±50 years for Fo-xi/Adam

3104 B.C., Kali Yuga (AP-23); plus,
900 years of three prior ages; gives,
4004 B.C. for Creation of Adam

3176 B.C. Saptarshi Cycle; minus,
311 Years (12th year 6th cycle) to death of Huang Di/Enosh; plus,
1,140 years from Fo-hi to death of Huang Di; gives,
4005 B.C. Creation of Adam/Fo-hi

2036/2035 B.C. reign of Semiramis I; plus,
1,969 years from creation; gives,
4005/4004 B.C.

2348 B.C. Flood; plus,
1655.85, or 604,854 days from Creation to the Flood; gives:
4003.85 B.C. creation

4003 B.C. Persian Lotus Creation

AP-31: Death of Huang Di/Enosh: 2865/2864 B.C.
Hebrew numbers:

4004 B.C. Creation of Adam (AP-30); minus,
130 age of Adam at Seth's birth; minus, (Genesis 5:2)
105 age of Seth at birth of Enosh; minus, (Genesis 5:6)
905 age of Enosh at death; gives: (Genesis 5:11)
2864 B.C. for death of Enosh

Chinese numbers:

Huang Di, the third patriarch, called the Yellow Emperor, whose minister Nao was the inventor of the Chinese calendar. Hwang Di is said to have died in the eleventh year of the sixth cycle (Hamilton 1820, vol. 1, 338). We use the older founding date of 3176 B.C. for the Grand Cycle, rather than 2637 B.C. as commonly assumed.

3176 B.C. first year of Grand Cycle (Griffith and White 2023, 151); minus,
310 years [5×60]+11; gives:
2865 B.C. death of Huang Di

The Chinese also record the reigns of the first

three emperors, arriving at nearly the same result.
4004 B.C. Crita Yuga (Griffith and White 2023, 150), Birth of Fo-xi (Adam); minus,
115 years, age at which Fo-xi began to rule; minus,

817 year reign of Fo-xi; minus,
108 year reign of Shin-nang; minus,
100 year reign of Huang Di; gives:
2864 B.C. death of Huang Di

Objections to the 2348 B.C. Flood

Ice Age Flooding—Anne Habermehl

Habermehl tries to set chronological limits on the duration from the Flood to the founding of Babel and Egypt based on geological arguments combined with the LXX chronology. She assumes that the Ice Age occurred immediately after the Flood, and that it had to have lasted five centuries (Habermehl 2013). She states that Egypt could not have been founded until after the Ice Age, because of the “Wild Nile” floods that she presumes occurred as the African glaciers melted at the end of the Ice Age. She makes a similar argument for lower Mesopotamia (Habermehl 2011, 31–33). Given that the earliest extra-biblical records of the activities of Noah (Legge 1899), Belus, and Menes involved flood control projects, and that Egyptian civilization revolved around the flooding of the Nile, we are unpersuaded that flooding of the Nile presents a chronological limitation for the founding of Egypt.

Dating Methods

Radiocarbon, dendrochronology, potassium argon, and thermoluminescent dating are all brought to bear by academic archaeologists and historians to say that neolithic man lived thousands of years before our date for the Flood, and therefore the Flood could not have been global. The problem is not that these methods are not good proxies for measuring the ages of things. The problem in nearly every case is that the methods were calibrated to assumed dates, and thus represent circular reasoning (Hebert, Snelling, and Clarey 2016). With recalibration using materials of known ages from the era after 747 B.C., we expect that these dating methods could be salvaged.

Summary and Conclusions

Jewish rabbis after the exile repeatedly revised sacred chronology to fit the best science of their day. Clement brought this practice into the Christian Church. These adjustments to chronology corrupted the sacred texts.

Seeing that the ancient chroniclers of history unanimously agree on the century of the Flood, we can accept Cullimore's Universal Chronological Key to correct the corruptions, showing that 2348/2347 B.C. was the original date preserved in the sacred text.

Those who relied upon durations rather than astronomical calculations, such as the Masoretic text, Diodorus, Berossus, Varro, Polyhistor, and others, are consistent in declaring that the Flood occurred between 2380 and 2316 B.C. Synchronization with the reigns of Semiramis I, Belus/Cush, Yào and Shun, Confucius, and the Kali Yuga, establishes 2348/2347 B.C. as a triangulated date for the Flood. Additional triangulations from the Kali and Saptarshi Eras confirm the Creation of Adam in 4004 B.C., known as the Lotus Creation and the Satya Yuga according to the Persians, Hindus, and Chinese.

The Septuagint numbers give a date for the Flood in the century before 3000 B.C.; yet there is no historical support for this date, other than mistaken conflation of the Kali Yuga with the Flood itself. We would not be surprised if proponents of the LXX chronology recruit the Kali Yuga as the date of the Flood in order to salvage their Egyptian chronology. However, we have shown from the sources themselves that while the Kali Yuga was the era of the Flood, the Flood itself occurred in the seven hundred and fifty-seventh year of the Kali Yuga, which was 2348 B.C.

The testimonies of the ancient chroniclers match the biblical model of history, and particularly the chronology of Ussher-Jones, which places the Deluge in the year 2348/2347 and Creation in 4004 B.C.

Some might assert that we sought durations that fit what we already believed. However, due to the quantity of durations given, it appears impossible to find significant triangulations at any other dates. We do not have the power to adjust any of these dates more than a year or two at the most.

Now that we have fixed the “far edge” of the historical puzzle with reasonable certainty, we can begin to solve for the chronologies of the ancient kingdoms of Babylonia, Egypt, and Assyria in the remaining papers of this series.

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Supplementary Material

CFAH Data Spreadsheet with listed Anchor Points.

