Paper 6. Chronology

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6   Chronology

Several details need to be established before fitting the theoretical lengths of the Great Pyramid passages and chambers to biblical chronology as follows: 1ˢᵗ Low Passage

- What is the Biblical period of interest?
- What period does the Pyramid support?
- How does time flow along the passages and through the chambers?
- How long is a year or month, and how should variations in this be handled?

What is the Biblical Period of Interest?

The period of interest is God′s plan for redemption. It is defined herein from the point in time at which Adam lost eternal life until those souls descended from him, and whose names are in the Book of Life, have been resurrected. The length of time is about 7000 years, which is divided into six millennia, followed by a final millennium.

Adam began to age once he had sinned, and he died 930 years later. If Adam had not sinned, the history of the world would have been much different. There would have been no need for a plan of redemption, and hence, there would have been no need for the Pyramid to be built to be a witness to God′s plan. Therefore, Adam′s sin is the place to start the chronology, as there are no chronological details before this time.

It is argued that the world was created in six 24-hour days, including the forming of Adam and the making of Eve. However, periods in the Bible do not necessarily have to be of equal duration. In ′The Holy Bible in Modern English″ Ferrar Fenton translates the Hebrew word for the days of creation, in Genesis, as ″Headships″, which concept does not require periods to be equal. His footnote in Genesis chapter 1 explains why he translated the way he did.

[1] *Literally " By Headships." It is curious that all translators from the Septuagint have rendered this word* בראשׁית *B′RESHITH, into the singular, although it is plural in the Hebrew. So I render it accurately.- -F. F.*

Fenton then translates ″in the beginning″, in Genesis 1:1, as ″By periods″ and instead of the traditional ″days″ of Genesis he uses ″ages″.

Dividing periods into ratios of 6 to 1 is common in the bible. The following are examples of this concept.

- God created the world in 6 days and rested on the seventh, Gen 1.
- The week is divided into seven days, the seventh being the Sabbath which is the day of rest, Ex 31:15
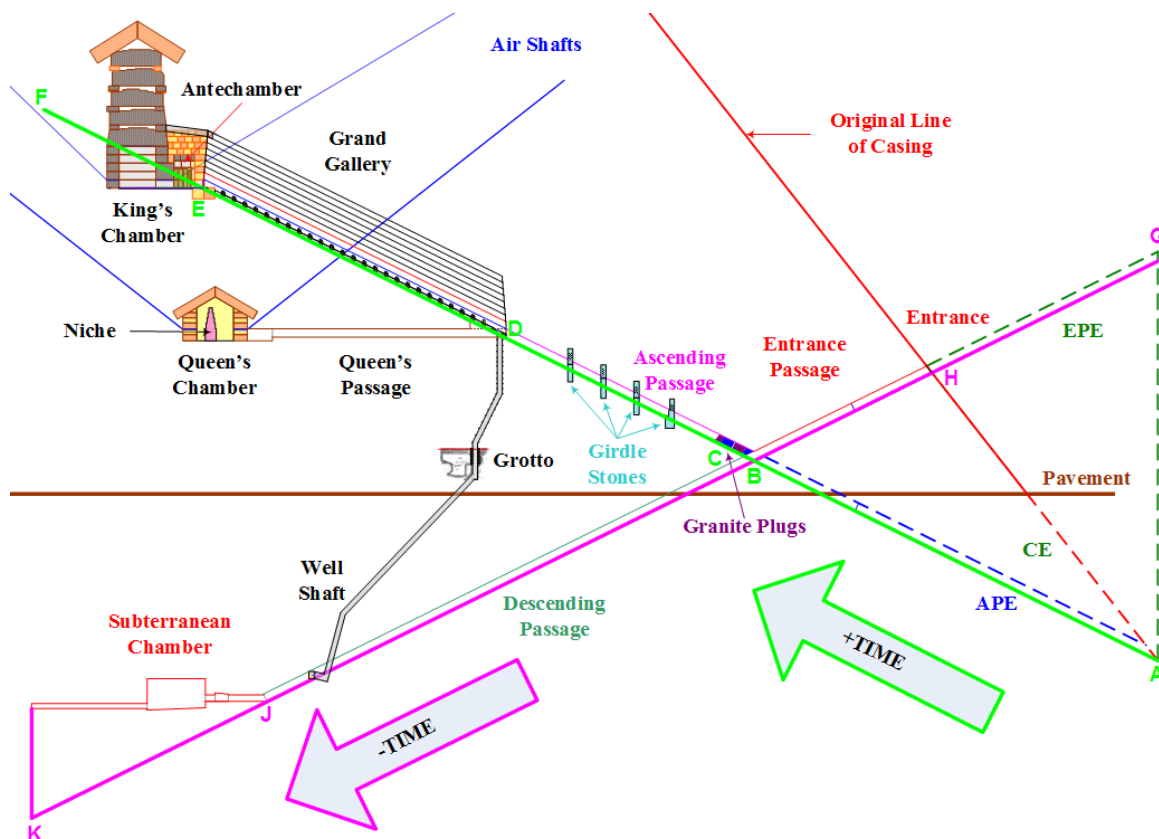
However, a day is not always literal for as Peter says in **2 Peter 3:8 (KJV)**

^{8} But, beloved, be not ignorant of this one thing, that one day *is* with the Lord as a thousand years, and a thousand years as one day.

This verse implies that days could be considered, in certain circumstances, to be 1000 years long, which is true when we look at the history of mankind. There were about 2000 years, or two of Peter's days, from the birth of Adam to the birth of Abraham. There were also about 2000 years from the birth of Abraham to the birth of Jesus, and there have been about 2000 years since then. Notice that these are only approximate periods expressed as multiples of 1000 years. It would appear that we are due for the final millennium about now, as described in Revelation 20:2-7. The Pyramid shows that the millennium began in 1845 at the Great Step, and nearly 175 years have elapsed since then. It appears that the bridegroom tarries, Mt 25:1-12.

Does The Pyramid support 7000 Years?

The current analysis provides a timescale value, 0.9932″/Year, which can be used in the same manner as earlier studies, which used 1.001″/Year, to produce chronological paths through the Pyramids passages and chambers. However, only one of these is the primary path, as shown by the upward sloping green line labeled ABCDEF in the following figure:

The green upward sloping arrow, +TIME, which is positive time, flows along this path. To identify a 7000-year path, point A is chosen as the start. Point A is where the downward

extension of the Ascending Passage meets the downward extension of the casing. Point G is equivalent to point A in that the length GB equals the length AB, by symmetry. From there, the path proceeds upwards at the passage slope of 26.3027°. It continues until it reaches point E, where the upward slope meets the horizontal floor of the King′s Chamber passages. This total length is calculated by summing the individual lengths, as shown in the table below:

Upward Sloping Passage	Theoretical Length (″)	Cumulative Length (″)	Convert to Years (0.9932008″/Yr.)
EPE (GH)	1409.867	1409.867	1419.518
EP (HB)	1110.903	2520.770	2538.026
APE = EPE + EP (AB)	2520.770	2520.770	2538.026
AP (BD)	1547.346	4068.116	4095.966
GG (DE)	1884.518	5952.634	5993.384
Sloping Length of Pathway through 1st Low Passage (1LPs)	15.053	5967.687	6008.540

From the table above, it can be seen that the total floor length of the upward sloping passages is slightly less than 6009 years, which is a reasonable fit if it represents the first six millennia of God′s Plan.

The following table converts the lengths of the King′s Chamber system to years, firstly along a horizontal line, and then secondly projected onto a line with the same slope as the passage.

King′s Chamber System	Theoretical Length (″)	Cumulative Length (″)	Convert to Years (0.9932008 ″/Yr.)	Convert to Years Along Slope (/cosP)
1st Low Passage Horizontal (1LPh)	38.684	38.684	38.949	43.447
AC (Diameter of year circle B″)	116.263	154.947	156.008	174.025
2nd Low Passage (2LP = Y-2*Ys-Yc/2)	101.048	255.995	257.748	287.516
Half KC width (5RC)	103.035	359.030	361.488	403.237
KC length - 2 RC	370.926	729.957	734.954	819.835

The table above shows that if the timescale, 0.9932008″/Year is applied horizontally, then 735 years can be added to the previously calculated 6009 years along the slope for a total of 6744 years.
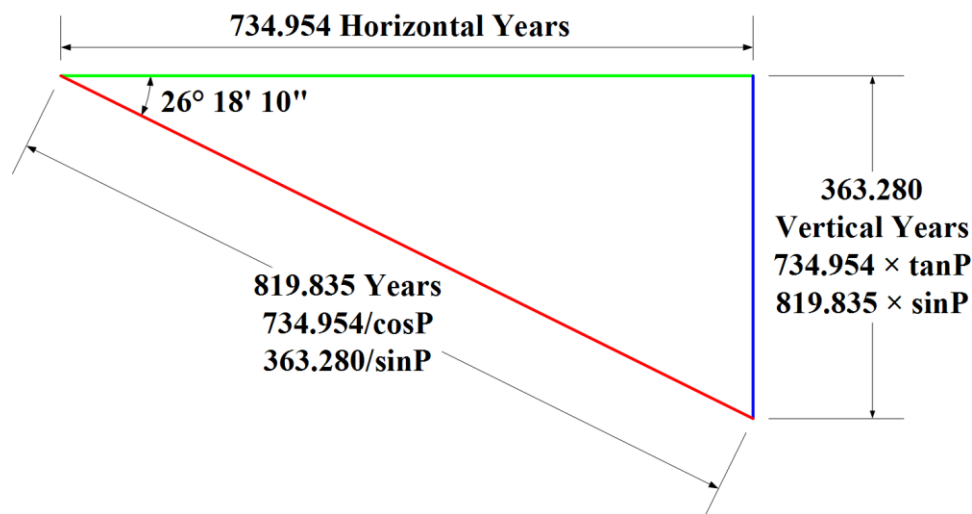
The projection concept in the fifth column above was part of a ″what if″ scenario aimed at arriving at a timeline that was as close to 7000 years as possible. It was achieved by dividing the horizontal lengths of the King′s Chamber System by the cosine of the Passage Angle. It can be

seen that this brings the timeline to 6009 + 820 = 6829 years, which is closer to 7000 years but not close enough.

The following discussion shows how and why the horizontal passage lengths should be projected onto the sloping pathway:

It was noted, in Paper 5, that when Petrie measured the cumulative lengths of the passages, he only included the horizontal or sloping dimensions but ignored vertical distances, such as the downward steps in the Subterranean Chamber and the Queen's Chamber Passage. Also, he did not include the height of the Great Step or the small step into the King's Chamber, which was the concept used in Paper 5 to derive the length equations.

So ignoring vertical steps, the horizontal length of the King's Chamber System pathway, 729.957″, translates to 734.954 years when divided by the timescale value of 0.9932″/Year. The green line in the figure below represents the cumulative length of the King's Chamber System laid out as a single straight line, with no right angle at the point where it changes direction at the midpoint of the King's Chamber. The horizontal line is projected onto the red sloping line by dividing its length by the cosine of the Passage Angle, cosP. So one horizontal year divided by cosP equals 1.1155 sloping years.

Similarly, the 363.280 vertical years, in blue, can be projected onto the red sloping line by dividing by the sine of the Passage Angle, sinP. So one vertical year divided by sinP equals 2.2568 sloping years.
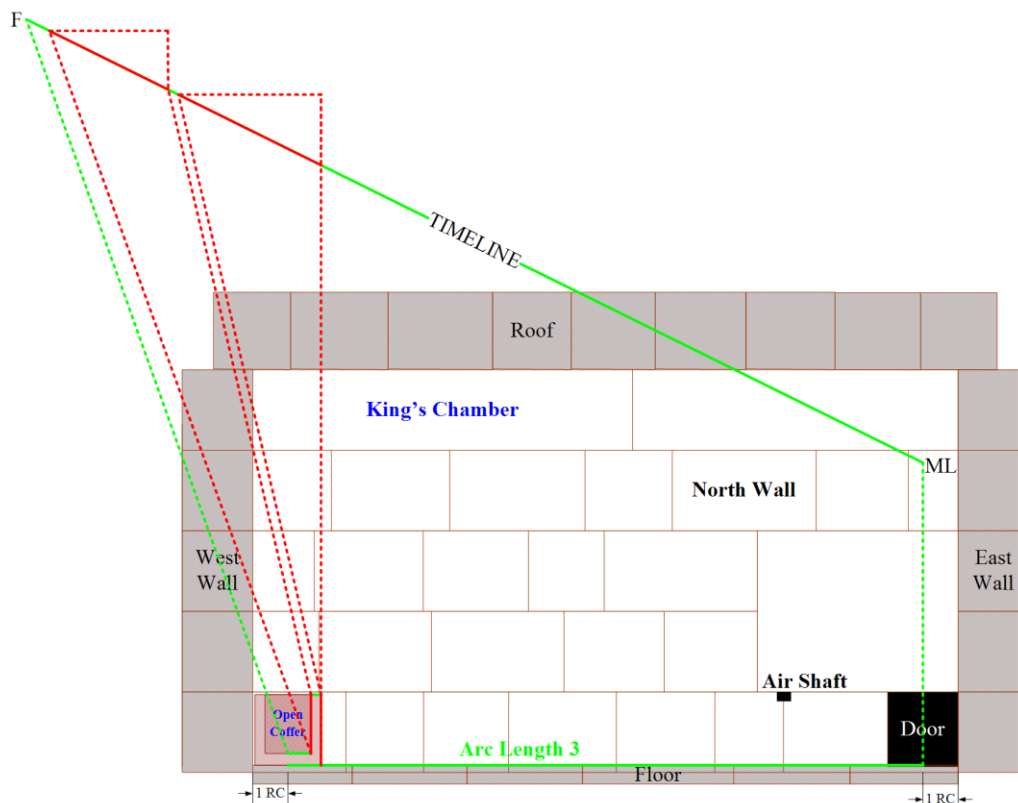
Projecting horizontal or vertical years onto the sloping timescale, we have two sets of three timescales as follows:

Timescale	″/Year (+TIME)	″/Year (-TIME)
Sloping	+0.9932	-0.9932
Horizontal	+0.8904	-0.8904
Vertical	+0.4401	-0.4401

The impact of this is to make a vertical face, such as the Great Step, indicate the same date at the top and bottom of its riser, which is represented by the blue line in the above figure. However, the projection concept allows the conversion of vertical and horizontal lengths to a common sloping timeline. As noted, though, the projection of the horizontal floors of the King's Chamber System onto a continuation of the sloping line falls short of the 7000 years.

It was stated above that the vertical steps are not added to path lengths, and also they are not added to the timeline either. Assume that there is an exception to this rule that says any intended vertical face that is not embedded in the Pyramid structure can be added to the timeline only. There are two vertical faces in the coffer, which are not embedded, which happen to fall across the timeline, which can be added to determine if they can extend to match the sought after 7000 years. The blue vertical line in the above figure shows how a vertical face can be projected onto the sloping timeline.

The following figure shows how the outside and inside vertical heights of the Coffer are added to the Timeline.

Arc Length three, shown as a horizontal solid green line in the figure, aided the theoretical reconstruction of the interior of the Pyramid. The portion of this Arc Length begins one cubit (RC) west of the east wall, in the center of the door opening, and runs west 18 cubits to end one cubit east of the west wall. The endpoint was also assumed to be the center of the base of the Coffer.

In the figure above it can be seen how the red vertical surfaces of the Coffer are added to the timeline. The Timeline begins at the height it reached at the mid-line (ML) of the King′s Chamber before it turned west. The Timeline is the solid green sloping line that continues to rise above Arc Length three until it reaches the outside face of the Coffer. The height of the face is projected vertically onto the sloping Timeline in red. The small green portion on top of the Coffer wall is projected horizontally onto the Timeline, in green, and then the inside face is also projected vertically, in red. Finally, the horizontal portion of the path, from the bottom of the inside face to the center of the Coffer, is projected horizontally onto the Timeline.

Petrie (P59) measured the height of the outside wall of the Coffer as 41.31″ and the height of the inside wall as 34.42″. By Inductive Metrology, it can be taken that these two dimensions were intended to be 2 RC (41.214″) and 5/3 RC (34.345″), respectively. The following table converts the height of the coffer walls to years for the horizontal and sloping cases.

King′s Chamber System	Theoretical Length (″)	Cumulative Length (″)	Convert to Years (0.9932008″/Yr.)	Convert to Years Along Slope (/sinP)
Coffer outer wall height	41.214	41.214	41.496	93.647
Coffer inner wall height	34.345	75.559	76.076	171.686

If the bottom cell in the fifth column is added to the values from above, we have 6828.375 + 171.686 = 7000.061 years for the upward sloping timeline. The result is quite gratifying since a period of about 7000 years was sought.

As will be seen later, the length calculated above also ends at a date that is relevant to the purpose of God′s Plan. Since the dates along this chronological path are accurate and sensible, it is taken as the prime timeline. The above rule for unembedded vertical faces is therefore adopted.

Initially, in conjunction with the first figure, the timeline was chosen to commence at the junction of the downward extension of the AP and the downward extension of the casing, this was only necessary to simplify the path lengths so that they could be understood more easily. A more appropriate start point would be point G, which is vertically above point A. By symmetry, the length AB is the same as GB, and there is potentially more wall detail to be seen by traversing the EP, so this will be taken as the intended timeline.

Point G is taken to be the point when Adam lost eternal life. When traversing the virtual slope GH, which is at the passage angle, H is the only point of interest as it is the junction of the EP and the casing. The path transitions from being virtual, i.e., having no substance, to being real which is taken to be the time at which the Pyramid was finished, 17:49, Thursday, 23rd September 2661 BC ± 2 hours, as stated in Paper 1. Introduction. After H there are joints between the stones of the walls, floor, and roof of the EP, which may or may not match up with the chronology of the Bible. An attempt was made to match them without much success, but a complete assessment was not carried out.

The prime chronological path turns upward at point B, which is the junction of the floors of the EP and AP. The joints of the stones do continue down the DP beyond this point for about as many inches as is taken up by the granite plugs in the AP, so there may be something of interest that can be achieved by a more detailed study. A study of the walls of the AP would also be of interest. The only notable joint in the AP, at this time, is the southern end of the second Girdle Stone, which represents, within 0.25″, the halfway point of the chronology of the Pyramid.

The chronological path then continues up the AP, the GG, and through the King′s chambers and passages to the center of the Coffer.

The downward path beyond point B does not provide much detail beyond the stone joints mentioned above. The following table shows the lengths and years of the downward slope from point G to point J, which is where the Subterranean System timeline becomes horizontal

Downward Sloping Passage	Theoretical Length (″)	Cumulative Length (″)	Convert to Years (0.9932008 Yrs/″)
EPE	1409.867	1409.867	1419.518
EP	1110.903	2520.770	2538.026
DP	3036.986	5557.756	5595.803

The downward sloping passages represent 5596 years from G to J.

The horizontal path lengths of the Subterranean system can be added to the above, and to be consistent with the approach in the King′s system, they should be converted to years along the slope, as shown in the table below.

Subterranean System	Theoretical Length (″)	Cumulative Length (″)	Convert to Years (0.9932008 Yrs/″)	Convert to Years Along Slope (/cosP)
nSP1	218.571	218.571	220.067	245.483
Recess	72.857	291.427	293.422	327.310
nSP2	54.643	346.070	348.439	388.681
SC	326.163	672.233	676.835	755.004
sSP	645.997	1318.230	1327.255	1480.542

Summing the downward sloping periods with the horizontal periods projected onto the slope, from the Subterranean system, results in 5595.803 + 1480.542 = 7076.345 years.

The dimensions of the path from the north end of the GG to the center of the Queen's Chamber and their conversions to years are shown in the following table.

King's Chamber System	Theoretical Length (″)	Cumulative Length (″)	Convert to Years (0.9932008″/Yr.)	Convert to Years Along Slope (/cosP)
QPL	1307.182	1307.182	1316.131	1468.133
QPH	216.686	1523.868	1534.300	1711.499
Half QC width	103.035	1626.903	1638.041	1827.221
Half KC length – 1 RC	92.732	1719.635	1731.407	1931.370

All years in the above table should be added to the date of the north end of the Grand Gallery.

How does time flow along the passages and through the chambers?

From the analysis above, time flows through the Pyramid, either upwards or downwards at the passage angle, which is in the positive direction for the upward sloping passages, +TIME, and the Queen's and King's Chamber systems, when projected onto the slope. It is in the negative direction for the downward sloping passages and Subterranean system -TIME.

How Long is a Year or Month, and How Should Variations in These be Handled?

Davidson defines the length of 100 years, paragraph 154, as follows:

Now the external geometrical base circuit, as defined, is 36,524.2465 P″, representing, to the scale defined, a good average value for the Solar year for a long period of history from ancient to modern times.

Smyth's view, ″Our Inheritance in the Great Pyramid″ p29, is as follows, and the Edgars share this view.

We now know, by modern science, that the exact number of these day-steps in the natural year is 365.2422 + an almost endless fraction of unascertained length ; though practically, and for the ordinary purposes of life, all civilised nations now use 365 even ; except in leap-year, when they do, evenly also, make their year to consist of 366 days.

Smyth, being the Astronomer Royal of Scotland, used astronomy that was modern to him. I am sure that he would have been delighted in the way in which that discipline has advanced so much through terrestrial and space exploration. Today we can accurately define historical dates by using eclipses, for example, and create accurate calendars using equinoxes and lunar events.

A significant reason why the length of the year varies is that the tidal force between the Earth and the Moon causes friction, which slows the rotation of the Earth. Using Solex 12 astronomical software, a set of vernal equinoxes was generated for the 30,000 years from -13000 to 17000. The time between each equinox was averaged over successive 500-year periods, and the chart below shows how the average length of the year varies, according to Solex.

[Wikipedia Tropical Year](#) provides the following table, which shows how the length of the tropical year has changed over the last 2000 years.

	The Year 0 (Days)	The year 2000 (Days)
Between two Northward equinoxes	365.242137	365.242374
Between two Northern solstices	365.241726	365.241626
Between two Southward equinoxes	365.242496	365.242018
Between two Southern solstices	365.242883	365.242740
Mean tropical year (Laskar's expression)	365.242310	365.242189

The difference in the average length of tropical years, from astronomical year 0 to the year 2000, is 0.000121 years or 0.044 days.

In addition to the slowing of the rotational rate of the Earth, due to tidal friction, there are factors, which cause it to speed up. Astronomers have devised a method to take the variations, shown by the above chart, into account.

The basis of the method is to compute the positions of the bodies in the solar system using a very stable time reference, based on atomic clocks, which is called Ephemeris time (ET), or its successor, Terrestrial Dynamical Time (TDT or TD), or its modern successor, Terrestrial Time

(TT). The positions of the center of the bodies are calculated in a variety of ways using Newton′s or Kepler′s laws. Using the center of the Earth as a reference point for the positions is called geocentric, and using the center of the Sun is called heliocentric.

It is often necessary to know the position of an observer on the surface of the Earth so that, for example, a calendar can be created. Using the observer′s position as a reference point is called topocentric. The rotation rate of the Earth about its axis is not used in geocentric and heliocentric computations, but it is necessary to take it into account for topocentric computations.

The rotation of the Earth used to be assumed to be stable, but, as can be seen above, it is not. Astronomers have studied historical records of eclipses and other astronomical events and have created a set of mathematically derived curves, which define the ″departure of the Earth′s rotation period from the fixed-length day of atomic time″ Wikipedia Delta T. Here we see the relationship between ΔT and TT is:

ΔT = TT – UT

Where UT equals Universal Time, which is the successor to Greenwich Mean Time (GMT). An abbreviated chart of ΔT is shown below:

ΔT = TT − UT

Plot of ΔT = TT − UT as a function of time. This plot combines the data sets Historic Delta T and LOD (1657.0 – 1973.0) and Monthly determinations of Delta T (from 1973-02-01 onwards) from the IERS Rapid Service/Prediction Center. Musashiaharon - Own work

A useful adjunct to this method of defining UT, which is the time used when recording history, is that the scientists who created the mathematical curves defining ΔT also provided an understanding of the uncertainty of the calculation of time over a given time range. ″Paper 8. The Date of the Exodus″ successfully determines the date of the Exodus biblically and astronomically. The paper examines uncertainty to determine how far in the past, or the future, it is possible to rely on astronomical calculations based on today′s scientific data. More details regarding ΔT and uncertainty are at:

https://eclipse.gsfc.nasa.gov/SEcat5/deltatpoly.html
https://eclipse.gsfc.nasa.gov/SEcat5/uncertainty.html

Astronomical software, based on TT, UT, ΔT, and the 365.25 days/year, 86400 seconds/day method is available and was used to calculate a 7000-year calendar for this project. For greatest accuracy, the Pyramid, whose time for understanding is now, in this technological age, should use this method too. The time along the passages and through the chambers is TT, the highly stable, atomic clock based time reference. The time at which an astronomical event occurs, TT, is converted to UT plus an offset based on the position of the observer on the Earth′s surface relative to Greenwich. The difference between them is ΔT + Offset, as defined above. The polynomials defined by NASA have been incorporated as algorithms within various Excel spreadsheets used in this project so that TT and UT can be calculated correctly.

The following table shows the extreme ends of the range of the calendar that was computed in Excel for this project. ΔT starts in the year -4099 at 112088 seconds, which is 31 hours and 8 minutes and finishes in 2999 at 4434 seconds, which is 1 hour and 14 minutes. Uncertainty starts at ±17126 seconds, which is 4 hours and 46 minutes and finishes at ±1884 seconds, which is 31 minutes.

JD (+2:21) (Jerusalem Time)	Day	Useful Data		Date and Time	
		Delta T (s)	Std Dv (s)	Universal Time (UT)	
223911.219774	17:16:28	Wed	112087.9	17126	-4099/01/13	14:55:32
2816697.242814	17:49:39	Wed	4433.7	1884	2999/10/02	15:28:43

In this astronomical method, the passage and chamber lengths are calculated and then converted to Terrestrial Time, not shown, and thence to Universal Time and finally to Jerusalem time, JD (+2:21 hours). The method was tested against Bible chronology, and it is shown later that the fit, over 7000 years, is within a fraction of a day in most places and a few minutes in others. This approach avoids the need to determine a single value for the number of days in the year, such as 365.2422, like Smyth and Davidson had to, which has small errors at the ends of the 7000 years.

The simple value of 365.25 days per year, for TT, and then converted to UT. The resulting errors, over 7000 years, are even smaller than previous approaches, being less than ±5 hours, as shown by Std Dev, in the above chart. One result of choosing 365.25 for the number of days in a year, for example, is that the exterior of the Pyramid can be defined in terms of 365.25, π, and Newton′s value of the sacred cubit, 24.83″, which value can be extracted from the dimensions of the Pyramid.

Variations in the value of ΔT during the seven millennia are calculated based on astronomers′ findings, and through the equation above, they are applied continuously along the passages and chambers. The ″Std Dv″ column above shows that each point in ancient times would be no more than ±4 hours and 46 minutes different from the time it represents and much less in the present.

Calendar

An accurate chronology requires an accurate calendar. Researching the internet leads to many different methods of creating a ″sacred″ calendar. There appears to be significant agreement that the Israelites used a lunisolar calendar where the month is related to the Moon and the year to the Sun and that this is based on God′s command in **Genesis 1:14 (KJV)**

¹⁴ And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years:

There also seems to be general agreement that a month begins at the first visible crescent of the new Moon, which observance occurs just after sunset. The new month was calculated by the Sanhedrin, who then sanctioned it when they had several witnesses to confirm it.

The Sanhedrin also defined and sanctioned the new year based on the growth of the barley crop and the state of the roads and bridges since the Israelites had to travel to Jerusalem in the Spring for the feast of unleavened bread. However, Genesis 1:14 requires years and seasons to be defined by the Sun and the Moon

Today the Jews compute their calendar based on the definition provided by Hillel II, which has been modified over the centuries, and it is less accurate because some of its rules override the observational method. Many websites describe the sacred calendar, but please see Bible Research New Moon and http://www.torahcalendar.com/ for more information.

In either case, there are no records that stretch back to Adam that tell us when the months and the years began, and the only way to arrive at an accurate calendar is to base it on Genesis 1:14, using the accuracy of modern-day astronomy. God does not provide a complete definition in the Bible of how the calendar should be mechanized. The only real instructions are that the month Abib should be the first month of the year, Ex 12:12 and that it should be in the Spring, Dt 16:1, and the Israelites were to celebrate the New Moons with offerings, 2 Chronicles 2:4. However, the fact that God required His Holy days to occur on specific days of specific months makes it

very important that the Calendar is as accurate as possible so that we can obey His commandments correctly. The implementation was left up to Moses and those who sit in his seat, which is why the Sanhedrin came to be the arbiters of the calendar.

It is possible to recreate the positions of the Sun, Earth, and Moon in an accurate manner, using astronomical software, going back many thousands of years. The relative positions of all three bodies at a particular time of the day will tell us, theoretically, if the crescent of the moon was visible just after sunset or not. The Alcyone software Planetary, Lunar, and Stellar Visibility computes the beginning of each new Moon for any definable year between -3999 and 2999. The documentation for this software says
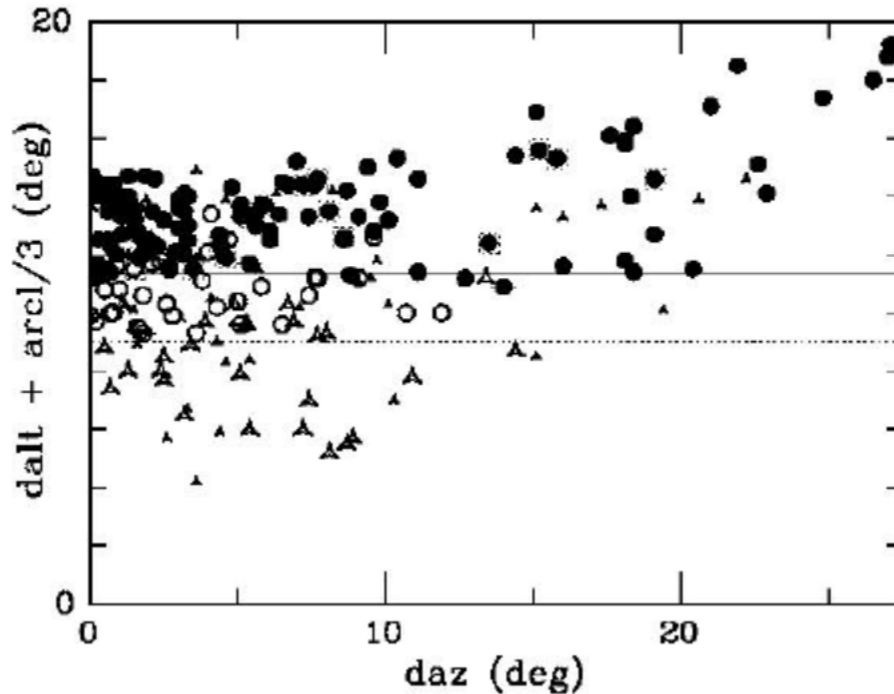
"Lunar visibility is one of the oldest problems in astronomy to be treated computationally, by the Babylonians, as in true lunar calendars the month begins with the true first visibility of the moon. Schematic lunar calendars, as the Jewish calendar, use cycles for the date of first visibility, and the Islamic calendar uses both cycles and true first visibility. Our concern here is true first and last visibility, which depend upon the true motions of the moon and sun and the geographical location of the observer.

There are several ways of computing lunar visibility. The Babylonians used (1) the interval of time between sun rise/set and moon rise/set; if this is over a certain amount, the moon is considered visible, otherwise not. Other criteria are: (2) the age of the moon, that is, the interval of time before or after conjunction, at sun rise/set, (3) the altitude of the moon and the difference of azimuth of the sun and moon at sun rise/set; if these are over a certain amount, the moon is considered visible, otherwise not. A discussion of various criteria can be found in SAAO (South African Astronomical Observatory) Lunar Crescent Visibility: "First Visibility of the Lunar Crescent: A Discussion of Principles" by John A. R. Caldwell and C. David Laney and "Crescent Visibility Observations, 1859-2000" by C. David Laney. We have used a remarkably simple relation described in their analysis, namely, that the moon is probably visible if at sun rise/set:

[the] *altitude of lower limb of moon + 1/3 distance between centers of moon and sun >= 11.3°,*

Where 11.3°, which we call the visibility arc, is a lower limit for possible visibility, the probability of which increases with larger values. This appears to work as well as any other method—no method is perfect—in distinguishing visible from invisible; a few first visibilities have been seen at lower values and a few not seen at higher values. Note that the moon may not be visible at sun rise/set but at some time in the interval between sun rise/set and moon rise/set."

The formula is derived from Figure 3 within the SAAO document, which is shown below:

"Successful sightings by naked eye observers (class A) are represented by large filled circles."

It can be seen that most of the filled circles, lie above the solid line at which dalt + arcl/3 equals 11.3 and the few that do not lie close below the line. The approach is preferred because the data distribution lies mostly within the defined equation, because it is easy to implement, and because it can be tested against the Planetary, Lunar, and Stellar Visibility (PLSV) software. The first of two reasons that the PLSV software is not used is that the ability to set the altitude of the observer does not appear to work, which impacts the calculation of sunset. Secondly, it has periodic omissions of some dates. Solex 12 computes sunset to be up to 8 minutes later than at sea level due to the altitude of the Temple Mount at Jerusalem, which is 746 m above sea level.

The range of the calendar was determined to be within -4099 to 2999 in astronomical years, which allows for a few decades at each end of God′s Plan. Since I am not a software engineer, I would have preferred that commercial software existed to create the calendar. Since it does not exist, a mix of existing software and spreadsheets was used to determine the first visibility of the lunar crescent to find the beginning of each month.

Solex 120 was used to compute the time of the sunset at the Temple Mount every day over the required range of years. The coordinates of the Temple Mount are Latitude = 31.778° N, Longitude = 35.235° E, and altitude = 746 m.

The resulting times were converted to fractional Julian days and fed into the Alcyone Ephemeris software, which computed the positions of the Sun and Moon at sunset. The results were

exported to an Excel spreadsheet where the equality dalt + arcl/3 = 11.3 was tested for each day, and the first day of a new month was declared the first time the equality was exceeded.

The Alcyone Ephemeris software only has a range of astronomical years from -2999 to 2999. An attempt was made to use Solex 12.0 to compute the position of the Sun and Moon for the astronomical years -4099 to 3000 by feeding the Solex generated sunset times back into Solex using Auto Hot Key, one date at a time. The approach was mostly successful, but a few correctable errors occurred, However, this cast doubt on the calendar from -4099 to -3000. Fortunately, apart from needing to know the start date of the chronology, which can be manually computed, accurate knowledge of the calendar is not required during this period.

The exercise resulted in the identification of the first day of each of the 87800 months over the astronomical years -4099 to 2999.

The next action was to determine the start month of each year. When searching for the beginning of each month, a search was made to find credible evidence of the date of the first visible crescent of the Moon. When searching for the beginning of the year, the same philosophy should be used for consistency. That is, credible evidence has to be found that the vernal equinox has occurred. Physically this could have been as simple as planting a stick vertically in the ground and observing its shadow at least three times a day in the days around when the vernal equinox was expected. When the concavity of the curve between the measured points switches from pointing north to pointing south, then a northward or vernal equinox has occurred. The next first day of a month is then the first day of the year.

Using the state of the crops or the roads in Israel was not used for this calendar as continuous data, over 7000 years, is not available.

Solex 12.0 generated the fractional Julian day of each vernal equinox, which was then sorted chronologically with the dates of the first day of each month. The first new month after the vernal equinox was then identified as the first month of the year, which, therefore, can be from the day of the equinox to 30 days later. In this manner, the spreadsheet mathematics automatically inserts an intercalary month whenever necessary. Hillel′s method forces the intercalary month to be regular within a Metonic cycle, and as such, the start of the year can be a whole month in error.

An alternate method for identifying the start of the year is to select the first day of the month that is closest to the equinox. However, this method is dependent upon knowing the exact date and time at which the equinox will occur in the future, and was not known accurately in ancient Israel. Today we know the movements of the Sun and Earth much more precisely and can predict the time of the equinox with the required precision. However, to be consistent with the method used 3500 years ago, it is necessary that the equinox is detected before declaring the New Year.

A Predictive Calendar (For Information Only)

The benefit of the above mathematical calendar is that it is not affected by the weather as clouds, dust or rain do no obscure the mathematical position of the Moon. However, a calendar based on observation is subject to the weather, and to limit the impact of this, the length of a month is limited to 30 days. Observations allowed the ancients to determine that the length of the synodic month was 29 days, 12 hours, and 793 halaqim, where a halaqim is 3 1/3 seconds or 1/18th of a minute. Today this is written as 29.530594 days.

If the weather was bad and the first visible crescent could not be seen after 29 days, then the month was allowed to stretch out to 30 days, which might cause the start of the next month to be in error by one day. There is always the risk that the first day of the month could be one day in error for other reasons, such as the visual acuity of the observers. It is not reported how the months were determined if the weather obscured the Moon for two or more months in a row. If each successive month, of say four months in a severe winter, was allowed to slip to 30 days, then the calendar could be in error anywhere from 1 to 4 days. The calendar shows that sometimes, the number of days in successive months can be 29 for up to 4 months.

Therefore, through no fault of theirs, the Israelites of old could have calendrical errors. To avoid these errors to the greatest extent possible a study was conducted to see if a predictive calendar is possible and there is one. The following table shows its accuracy compared with the computed calendar. However, there is no evidence that the method was ever known or used.

Days in Error	Number of Occurrences	Percentage of Total Occurrences
-2	83	0.09
-1	13391	15.25
0	54832	62.45
1	19393	22.09
2	101	0.12

The number of occurrences where the predicted day equals the calculated theoretical day is 62.5%. The number of occurrences where the predicted day is equal to or within one day of the theoretical day is 99.8%, and the remaining number of occurrences that are within two days of the theoretical day is 0.2%. The method is quite remarkable as it allows the start of months to be predicted accurately and consistently, almost all within one day, without having to worry about the weather, or knowing advanced mathematics or modern astronomy. If God had wanted us to use this calendar he could have provided Adam with the method. Observations would be required to make sure the calculations, which are simple additions, are being done correctly.

The method is based on the fact that there are almost 2894 days in 98 synodic cycles. The precise number is 2893.997622 days, which is a difference of one part in one million compared to 2894. The method requires occasional tweaks.

Three columns are required to calculate the prediction.

The first column assigns a number to the current month, from 1 to 98, which repeats between tweaks. The first 98-month cycle begins on the 14th of October -4097. The first tweak occurs on the 17th of April -1481 and could have been done by Moses if the scheme was in use. The transition is from 10, in the previous month, to 68. The second tweak is the 15th August 752, where the transition is from 54 in the previous month to 34. The third tweak is 2nd February 1139, where the transition is from 11 to 44.

The second column is just alternating numbers starting at 29 and then 30, which are a tentative and loosely averaged prediction of the number of days in the month based on the number of days in the synodic cycle, 29.53. At the 33rd, 66th, and 98th months, the value of one is added to that month if there is 29 in the second column of that month. Otherwise, one is added to the previous month if it has 29 in the second column.

The new number of days in the month is recorded in the third column. All other months that do not have a day added to them copy the number of days in the second column to the third column.

Months with 31 Days

When researching the Hebrew, Jewish, or Sacred calendar, this author was struck by the fact that most people consider a month comprises 29 or 30 days. The calendar that was created for this project shows that there are 58 months in the 7000 years period, which comprise 31 days. Note that the Planetary, Lunar, and Stellar Visibility software (3.1.0) from Alcyone also reveals at least one month comprising 31 days, which is the month of October/November of the year -2425. Most likely, there are other months like this that the PLSV software will find.

The calendar shows that there were more occurrences of 31 days earlier in the 7000 years, and the number is tailing off. For example, between the years -4100 and -4000, five months contained 31 days. Before 2019 the previous occurrence was in 1059, and the next will be 2342. This rate of occurrence of 31 day months is slowing down, and this is likely due to tidal friction as days are getting longer.

Were There 30 Days Per Month at the Time of the Flood?

The impact of there being 31 days in a few months raises the question as to whether there were 30 days per month, as some claim, at the time of the flood. This claim is partly based on **Genesis 7:24 (KJV)**

[24] And the waters prevailed upon the earth an hundred and fifty days.

and **Genesis 7:11 (KJV)**

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.

and **Genesis 8:4 (KJV)**

[4] And the ark rested in the seventh month, on the seventeenth day of the month, upon the mountains of Ararat.

The claimed import of these verses is that the water prevailed upon the Earth for 150 days from the 17th day of the second month to the 17th day of the 7th month. In other words, five months comprised 150 days, and so one month was 30 days. However, if there was one month of 31 days and another of 29 days arranged thus 30, 29, 30, 31, 30, then that could account for the 150 days without the need for months of exactly 30 days.

It is also evident that the period from the 17th of the second month to the 17th day of the 7th month is not five months but five months and one day when applying the concept of inclusivity found in the Bible. For example, Jesus, talking of Herod, says in **Luke 13:32 (KJV)**

[32] And he said unto them, Go ye, and tell that fox, Behold, I cast out devils, and I do cures to day and to morrow, and the third *day* I shall be perfected.

Say that today is the 10th day of the month. Based on this verse, tomorrow is the 11[th,] and the third day is the 12th. Inclusively this is three days, but if one subtracts the start date from the end date, which is 12 – 10, the result is two days. On this basis, the verses in Genesis regarding the five months of the flood mean that there was one day less than 150 between the 17th of the second month and the 17th of the 7th month, which is 149 days, which does not allow for precisely 30 days per month.

The flood story does show us that the number of days in the year at that time was 365. The flood began on the 17th day of the second month, Gn 7:11, Noah, and his family went into the ark that day. The Earth had dried by the 27th day of the second month a year later, Gn 8:14. In a typical year with no intercalated month, there are six months of 29 days and six of 30 days for a total of 354 days. The Earth was dry on the 27th day of the second month, which, inclusively, is 11 days, and Noah and his family left the ark. Therefore, the total time between when the flood was upon the Earth and when Noah and his family left the ark, was 354 + 11 = 365 days.

So for these reasons, an occasional 31 days in a month, inclusivity reducing five months to 149 days, and the flood lasting 365 days it is considered unlikely that the number of days in a month, at the time of the flood, was significantly different from any other time in history but certainly not 30 days. The knowledge presented above is essential in establishing that the orbits of the objects in the solar system do not vary in any significant manner, and the calculation of the calendar can be trusted.

Which Bible Chronology?

When studying Bible chronology, it can be seen that there are significant differences between the manuscripts upon which different translations are based as shown by the following table:

Name	Reference	MT KJV Began/ Begat	AM Born	Samaritan Sigalov Began/ Begat	AM Born	LXX Thompson Began/ Begat	AM Born	LXX Brenton Began/ Begat	AM Born	Flavius Josephus Began/ Begat	AM Born
Adam	Ge 5:1-5	130	0	130	0	230	0	230	0	230	0
Seth	Ge 5:6-8	105	130	105	130	205	230	205	230	205	230
Enos	Ge 5:9-11	90	235	90	235	190	435	190	435	190	435
Cainan	Ge 5:12-14	70	325	70	325	170	625	170	625	170	625
Mahalaleel	Ge 5:15-17	65	395	65	395	165	795	165	795	165	795
Jared	Ge 5:18-20	162	460	62	460	162	960	162	960	162	960
Enoch	Ge 5:21-24	65	622	65	522	165	1122	165	1122	165	1122
Methuseleh	Ge 5:25-27	187	687	67	587	187	1287	167	1287	187	1287
Lamech	Ge 5:28-31	182	874	53	654	188	1474	188	1454	182	1474
Noah	Ge 5:21-27 (500) Ge 11:10 (2) Ge 9:29 (950)	502	1056	502	707	502	1662	502	1642	500	1656
Noah to Flood	Ge 7:17 - 8:15 Ge 7:11	600	1656	600	1307	600	2262	600	2242	600	2256
Shem	Ge 11:10-11	100	1558	100	1209	100	2164	100	2144	12	2156
Arphaxad	Ge 11:12-13	35	1658	135	1309	135	2264	135	2244	135	2268
Cainan	Ge 11:12-13					130	2399	130	2379		
Salah	Ge 11:14-15	30	1693	130	1444	130	2529	130	2509	130	2403
Eber	Ge 11:16-17	34	1723	134	1574	134	2659	134	2639	134	2533
Peleg	Ge 11:18-19	30	1757	130	1708	130	2793	130	2773	130	2667
Reu	Ge 11:20-21	32	1787	132	1838	132	2923	132	2903	130	2797
Serug	Ge 11:22-23	30	1819	130	1970	130	3055	130	3035	132	2927
Nahor	Ge 11:24-25	29	1849	79	2100	179	3185	179	3165	120	3059
Terah	Acts 7:4	**130**	1878	**130**	2179	**130**	3364	**130**	3344	**130**	3179
	Ge 11:26	(70)		(70)		(70)		(70)		(70)	
Abraham	Ge 21:5 (130) Ge 25:7 (175)	100	2008	100	2309	100	3494	100	3474	100	3309
Isaac	Ge 25:26 (60) Ge 35:28 (180)	60	2108	60	2409	60	3594	60	3574	60	3409
Jacob	Ex 12:40	**430**	2168	**430**	2469	**430**	3654	**430**	3634	**430**	3739
Exodus	Kings I (or III) 6:1	480	**2598**	480	**2899**	440	**4084**	440	**4064**	592	**4169**
Temple			3078		3379		4524		4504	Chpt 3	4761

There are five sources shown in the table as follows:

The Masoretic Text from which the KJV was translated.
The Samaritan Pentateuch translated to English by Alexsandr Sigalov
The Septuagint translated to English by Charles Thompson
The Septuagint translated to English by Sir Lancelot Benson
The Complete Works of Flavius Josephus translated to English by William Whiston

The first column references a person or an event, and the second column is the biblical reference for that person or event.

Each source column has sub-headings. The first is context-dependent and is ″Began/Begat″, which depends upon the event in the first column. For example, Adam ″begat″ Seth when he was 130 years old, but the Temple was ″begun″ in the 480th year after the Exodus. ″AM″ means Anno Mundi or the year of creation since, at this juncture, there is no defined Julian start date for the chronology. The year zero in this project is the year when Adam lost eternal life. ″Born″ is the cumulative year from zero when the person identified was born or when the Exodus occurred, or the Temple was begun.

The red 480 at the bottom of the Samaritan Pentateuch column is included because the Pentateuch is just the first five books of the Bible and so this source does not include the first book of Kings where the reference to the 480 years is found. The 480 years have been borrowed from the Masoretic text, but it could be borrowed from either of the two Septuagint sources, in which case it would be 440 years or Flavius Josephus, in which case it would be 592 years.

The 130 in red in each source column is an extension of the 70 years found in Genesis for when Terah begat Abram **Genesis 11:26 (KJV)**

[26] And Terah lived seventy years, and begat Abram, Nahor, and Haran.

It can be seen from other verses that deductions are necessary to determine the actual birth of some characters in the Bible. For example, **Genesis 5:32 (KJV)** says

[32] And Noah was five hundred years old: and Noah begat Shem, Ham, and Japheth.

The three sons were not born in the order above because, in Gn 9:24, it is seen see that Ham is the youngest and, in Gn 10:2, that Japheth is the eldest. Shem is, therefore, the middle child, but his name is put first because he is the most important as the bloodline passed through him and not the other two. Also in **Genesis 11:10 (KJV)**

[10] These *are* the generations of Shem: Shem *was* an hundred years old, and begat Arphaxad two years after the flood:

Shem was therefore born 98 years before the flood but as Noah was 600 years old when the flood occurred, **Genesis 7:11 (KJV)**

So by deduction, Shem was born when Noah was 502 years old. It was Japheth who was born when Noah was 500 years old, and it is not possible to deduce when Ham was born.

So coming back to Abram, we see something similar. **Genesis 11:27 (KJV)**

[27] Now these *are* the generations of Terah: Terah begat Abram, Nahor, and Haran; and Haran begat Lot.

Abram is put first because the bloodline passed through him, but as we saw in the case of Shem, that does not necessarily make him the eldest.

Genesis 12:4 (KJV) tells us that Abram departed out of Haran (Charran) when he was 75 years old, but Acts 7:2-4 tells us that his father died just before that. Gn 11:32 tells us that Terah died when he was 205 years old, so Abram must have been born when Terah was 130 years old. In this case, the Bible does not provide the information to deduce the ages of Nahor and Haran.

For this reason, Abram′s birth has been adjusted to 130 years after Terah for all five sources rather than the 70 years which would otherwise have applied.

The 430 years in green, in each Begat/Began column, is included because of **Exodus 12:40-41 (KJV)**

[40] Now the sojourning of the children of Israel, who dwelt in Egypt, *was* four hundred and thirty years.
[41] And it came to pass at the end of the four hundred and thirty years, even the selfsame day it came to pass, that all the hosts of the LORD went out from the land of Egypt.

Which is repeated in **Genesis 15:13 (KJV)**, but the period is 400 years:

[13] And he said unto Abram, Know of a surety that thy seed shall be a stranger in a land *that is* not theirs, and shall serve them; and they shall afflict them four hundred years;

and then Galatians 3:17 (KJV) refers to the 430 years to when the law was given:

[17] And this I say, *that* the covenant, that was confirmed before of God in Christ, the law, which was four hundred and thirty years after, cannot disannul, that it should make the promise of none effect.

Moreover, Acts 7:6 (KJV) refers to 400 years again:

[6] And God spake on this wise, That his seed should sojourn in a strange land; and that they should bring them into bondage, and entreat *them* evil four hundred years.

The end of the 400, or 430, years is after the affliction and at the time when the law was given, and the common point is the Exodus. Therefore, the questions are when did it start, and how can the difference between 400 and 430 years be reconciled?

Various answers are given such as it started when the promise was given to Abram at age 75 just before he left Haran, Gn 12:1-4.

Another answer is that the period began when Isaac was five years old because Hagar′s son Ishmael was tormenting him. **Genesis 21:8-9 (KJV)**

8 And the child grew, and was weaned: and Abraham made a great feast the *same* day that Isaac was weaned.
9 And Sarah saw the son of Hagar the Egyptian, which she had born unto Abraham, mocking.

Moreover, this is considered to be when the ″affliction″ in Genesis 15:13 began. However, the Bible does not tell us how old Isaac was when he was weaned, but estimates are that he was five, so Abraham would have been 105.

In the opinion of this author, the correct answer is that the 430 years commenced when Jacob was born. Exodus 12:40 says that it was the sojourning of the children of Isreal, who dwelt in Egypt, that was to last 430 years. The children of Israel who sojourned in Egypt were from Jacob to those who left Egypt with Moses at the Exodus.

Jacob was renamed Israel by God, but even so, he is one of the children of Israel because he is described as one of the children of Israel that came into Egypt **Genesis 46:8 (KJV)**:

8 And these *are* the names of the children of Israel, which came into Egypt, Jacob and his sons: Reuben, Jacob′s firstborn…

Since the promise did not apply to Abraham but to his seed, and since Isaac never went to Egypt, then the 430 years must have begun with Jacob.

Why at Jacob′s birth? The answer to that is provided by the periods of 400 and 430 years. In Israel, a man was considered old enough to commit to public service at age 30. Jesus began his ministry when he was ″about thirty′. Priests began their ministry at age 30, Numbers 4:3. Therefore, it can be seen that the period of 430 years begins with Jacob′s birth, and the 400 years begins when he is 30. The ″30 years old argument″ also helps to understand the ″about the space of 450 years″ of the Judges from Acts 13:20 (KJV), as will be seen later.

Paper 8 shows that the Exodus was the fifteenth day of the first month of 1482 BC, then Jacob′s birthday was the fifteenth day of the first Hebrew month of 1912 BC, which was JD (+2:21) 1023201.270, which was 16th May 1912 BC.

Fitting the Bible to the Pyramid Passages

The goal is to determine if one, or more, of these five Bible chronology sources, fits any of the cumulative periods along the passages and chambers of the Pyramid between major features. The cumulative lengths of the EPE, EP, AP, GP (Granite Plugs), and the GG can be calculated and then divided by the timescale, 0.9932″/Year, to convert to TT years.

The analysis subtracted the cumulative length of five points along the Pyramid passages from each of the 26 historical events. The start is point G, in the above figure, and the first point of interest is at the south end of the Entrance Passage extended, EPES (H). The second point is the south end of the Entrance Passage EPS (B), the third is the north end of the Granite Plugs, GPN (C), the fourth point is the north end of the Grand Gallery, GGN (D). The fifth point is the south end of the Grand Gallery GGS (E).

For each source, 26 × 5 comparisons were made. For five sources, this is a total of 650 comparisons. Ideally, there would be only one result and, it should be zero. The table below shows the lowest five results, and there is just one result close to zero. All others are nine years or more from an exact match.

The close match in the table is the result of the comparison, from the Masoretic Text, and the time from the beginning of Pyramid chronology to the Granite Plugs. The initial difference is just 0.4337 years or 158 days.

Bible			Pyramid		Difference
Point G to	Years	Source	Start to	Years	Years
Exodus	2598	Masoretic	GPN (C)	2598.434	**-0.434**
Birth of Salah	1444	Samaritan	EPES (H)	1419.518	24.482
Birth of Salah	2529	LXX (T)	EPS (B)	2538.026	-9.026
Exodus	4084	LXX (T)	GGN (D)	4095.966	-11.966
Birth of Salah	2509	LXX (B)	EPS (B)	2538.026	-29.026

Is it possible to adjust the chronology to within one day for events that occurred 3500 years ago? Several other details are available from the Bible to achieve this. The first is that the year of the Exodus is known to be 1482 BC based on the Bible/Astronomical study associated with this Pyramid Study, "Paper 8. The Date of the Exodus". The specific date is the 15th day of the first Hebrew month, Numbers 33:3, which is the 24 hours beginning at sunset, 18:23, Tuesday, 1st May 1482 BC. This knowledge provides a known year against which to fit the 2598.434 years.

The figure below shows how the 2598.434 (TT) years are divided between three passages, which are the virtual EPE, the EP, and part of the upward sloping floor of the AP to the roof of the EP. The Masoretic Text indicates 2598 Bible years. There is a wealth of detail in the Bible in Exodus 19, 32, 33, and 34, which potentially allow the Bible chronology to be lengthened by a few months to match the passage lengths. The question is what specific detail after the Exodus perfectly aligns the Bible and Pyramid chronologies if there is one?

The 2598.434 years comprise two primary but consecutive periods. The first starts at point G, which is when Adam lost eternal life, and ends at point B, 2538.026 years later. GHB is a straight line, and H is the junction of the casing on the north face of the Pyramid and the EP. GH is 1419.518 years, and HB is 1118.508 years. The second period lasts 60.407 years. It starts at point B and ends at point C, which is the junction of the roof of the EP and the floor of the AP.

Davidson and the Edgars both assign point B to the Exodus, and they both take the Granite Plugs to be the Mosaic law. By any analysis to date, the period from B to C is about sixty years, which is a problem if the Exodus is at point B since the law was given just months after the Exodus, not 60 years. So, it is more logical for the giving of the Law to have occurred right next to the Exodus, which is the case with this analysis. So what is the interpretation of the junction of the EP and the AP where God′s plan turns upwards in a positive direction?

The answer is found in **Exodus 7:7 (KJV)**

[7] And Moses *was* fourscore years old, and Aaron fourscore and three years old, when they spake unto Pharaoh.

If the Pyramid shows the Exodus just before the Granite Plugs, then about sixty years before that, Moses would have been 20 and Aaron 23. It would be significant, and most appropriate, if God chose the date on which Moses became eligible to go to war for his nation Israel, which would be his 20th birthday, just at the point at which His Plan begins to have a positive, i.e., uplifting, effect on Israel! The day and month of Moses′ birthday can be calculated, and since the year of the Exodus is shown in paper 8 to be 1482 BC, then it is known that his 20th birthday occurred on 6th Adar 1542 BC.

Moses 20th birthday is thus a single point in time from which the beginning and end of the 2598.434 years can be accurately dated as follows:

Moses′ date of birth is generally taken to be the 7th of Adar, which is the last month of the Hebrew year, either the 12th or the 13[th,] month in leap years. The 7th Adar is calculated from the following verses

Deuteronomy 31:1-2 (KJV)

[1] And Moses went and spake these words unto all Israel.
[2] And he said unto them, I *am* an hundred and twenty years old this day; I can no more go out and come in: also the LORD hath said unto me, Thou shalt not go over this Jordan.

Deuteronomy 34:8 (KJV)

[8] And the children of Israel wept for Moses in the plains of Moab thirty days: so the days of weeping *and* mourning for Moses were ended.

Joshua 1:10-11 (KJV)

[10] Then Joshua commanded the officers of the people, saying,

¹¹ Pass through the host, and command the people, saying, Prepare you victuals; for within three days ye shall pass over this Jordan, to go in to possess the land, which the LORD your God giveth you to possess it.

Joshua 4:19 (KJV)

¹⁹ And the people came up out of Jordan on the tenth *day* of the first month, and encamped in Gilgal, in the east border of Jericho.

Working backward through these verses it is seen that

The 10th day of the first month is "within three days" which therefore began on the 8th day of the first month

The 30th day of mourning for Moses was, therefore, the day before that which was the 7th day of the first month. Therefore there are seven days of mourning in the first month and 30 -7 days, or 23 days, of mourning in the month before, which is Adar. The Julian year was still 1442 BC, and in that year, the month of Adar comprised 30 days by the calendar created by this author.

Please note that in the Jewish calendar today, the months are no longer based directly on observations of the moon, and the month of Adar is assigned 29 days. In leap years, Adar is preceded by the month Adar Aleph which is assigned 30 days. For the record, based on the author's calendar, the Hebrew year in which Moses died contained an intercalary month for the preceding year.

So subtracting the 23 days of mourning from the 30 days of the month of Adar indicates that the first day of mourning was the 8th day of the month, which in turn implies that Moses died on the 7th day.

Moses says that he is 120 years old this day in Deuteronomy 31:1-2, so that was his birthday. Some commenters take Moses' death to have occurred on his birthday, and therefore they take the day of his birth, and death, to be the 7th Adar. However, it is not until **Deuteronomy 34:5 (KJV)** that Moses dies

⁵ So Moses the servant of the LORD died there in the land of Moab, according to the word of the LORD.

Between saying he was 120 years old and dying, he did the following:

He encourages the people – chapter 31
He delivers the law to the priests – chapter 31
He attends when God charges Joshua to bring the Israelites into the Promised Land – Chapter 31
He read his song to Israel – chapter 32

He blessed the 12 tribes and Israel – chapter 33
He went up Mount Nemo to view the Promised Land died there – chapter 34

The first five of these tasks could all be done at one meeting with all the people of Israel, but the journey up Mount Nemo would have taken some time since Moses was old and though his ″natural force″ was not abated, Dt 34:7, he could not ″go out or come in″, Dt 31:1, which means he had trouble getting around. It is probable, therefore, that the meeting with Israel took place on the 6th Adar, which was, therefore, Moses′ 120th birthday, followed the next day by the trip up Mount Nebo, which took place on the 7th.

However, the Megilla says, page 50, that Moses was born on the sixth of Adar not the seventh:

 "They cast Pur, that is the lot. A Tanna taught: When the lot fell on the month of Adar, he rejoiced greatly. saying, The lot has fallen for me on the month in which Moses died. He did not know, however, that Moses died on the seventh of Adar and was born on the sixth of Adar."

[Download 21 - Megillah - 2a-32a.pdf](#)

The quote above relates to Esther chapter 3, and the significance is that Haman cast lots (pur) to determine in which month all the Jews in the kingdom of Ahasuerus would be destroyed. Haman was happy that the cast selected the month of Adar because he felt that the Jews would be morose during the month celebrating Moses′ death. However, Haman did not realize that it was also the month of Moses′ birth, and that would nullify the negative feelings.

Therefore Moses′ 20th birthday was the 6th Adar 1542 BC, which was 05:45, Saturday, 29th March 1542 BC, and this, then, is the date of point B in the above figure. Moses′ date of birth was 6th Adar 1562 BC, which was Friday, 8th April 1562 BC. This Adar was also the 13th month of the leap year by the calendar used herein.

Since the lengths and periods of the passages from G to C are known, the dates at the various points along this path can be calculated. The table below provides these dates both in terms of TT, which is calculated from the linear pathway along the passages, and JD (+2:21), which represents the local time, without time zones or summertime, at Jerusalem. The table is provided so that the reader can see the relationships between events, in terms of their physical distances apart, their Terrestrial Time (TT) apart, and how that translates to an actual Julian Day at Jerusalem which, at longitude 35.235°, is 2 hours 20 minutes and 56 seconds ahead of UT. The Julian Day is shown and is rounded to 2:21 hours, which is shown as JD (+2:21). In all tables of this type, the last column shows the proleptic Julian date and time, before AD 1582, and after that, it shows the proleptic Gregorian date and time. However, that is not relevant to this table.

Event	Distance ″	Type	JD TT	JD (+2:21)	ΔT (s)	Julian Date (+2:21)
Point G - Adam lost eternal life (Floor of APE and Casing)	0.000	s	231280.897	231279.707	111326	04:57, Monday, 18th March 4080 BC
Point H - Junction of casing and EP floor	1409.867	s	749759.888	749759.243	64184	17:49, Thursday, 23rd September 2661 BC
Scored Lines EP	1891.213	s	926775.260	926774.767	51043	06:24, Thursday, 16th May 2176 BC
Point B – Junction of EP and AP floors	2520.770	s	1158295.060	1158294.740	36123	05:45, Saturday, 29th March 1542 BC
Point C – Junction of AP floor and EP roof	2580.766	s	1180358.788	1180358.483	34836	23:35, Friday, 24th August 1482 BC

The Event column describes five events between point G and point C. The ″Distance″ column defines the length between the start, point G, and each event which were mathematically defined in ″5 Passage Reconstruction″.

The ″Type″ column defines whether the length is along the slope, ″s,″ or needs to be projected onto the slope horizontally, ″h,″ or vertically, ″v,″ or if it is UT (+2:21). ″Type″ defines the timescale required and if the date resulting from any calculations needs to be converted from TT to UT or not. For example, the date of an equinox may be entered in terms of TT and will need to be converted to UT (+2:21). In the above case, all events are along the slope.

The time in the ″JD (TT)″ column is the astronomical time of each event expressed in Julian Days. The ″JD (+2:21)″ column is expressed as a Julian Day, which equals the Julian Date (+2:21). The ΔT column provides the difference between TT and UT (+2:21). The reader can see how ΔT impacts the actual date and time of an event. In the beginning, in 4080 BC, it causes a difference of over 28 hours, which is about 1.25 days and which can make a difference between an event occurring in the morning (TT) being seen as happening two nights earlier (UT). However, as time progresses towards the current epoch, the value of ΔT diminishes, and as of the year 2019, it is 71 seconds, which is negligible for Biblical chronology. ΔT increases as we look into the future, and as of now, it will be 3858 seconds or 1:04 hours in the year 2921.

Point G is the date on which Adam lost eternal life. Point H is when the virtual path of the EPE became real, at the EP, and is therefore assumed to be the date on which the Pyramid was completed. The date represented by the scored lines in the EP is included even though, at this juncture, it is believed that their existence is only to verify the use of M Circles when determining the height of the small step into the King′s Chamber. Point B is Moses′ 20th birthday.

Point C occurs a relatively short time after the Exodus. The date of the Exodus is the 15th day of the first month of 1482 BC, which began at sunset of JD (+2:21) 1180229.267 +14, i.e., 1180243.267. The date at the end of the 2598.434 years is identified at point C in the table

above, which is JD (+2:21) 1180358.370. Therefore, the difference between the sunset of the Exodus and the sunset at the end of the 2598.434 years is 115 days.

The following six-page table shows the activities of the Israelites from the beginning of the last month of the preceding Hebrew year before the Exodus until 165 days after. Blue rows signify the first day of a Hebrew month. Note this means that the first crescent of the moon was visible just after sunset on the day shown. Green rows represent the Sabbath, which is Saturday. Other colors highlight specific dates, which are more relevant than others.

Event	Hebrew Date	JD (+2:21)	Julian Date (1482 BC)	#
1st Visible Crescent of Moon Adar 1482BC	12/1	1180200.3	19th March	1
	12/2	1180201.3	20th March	2
	12/3	1180202.3	21st March	3
	12/4	1180203.3	22nd March	4
	12/5	1180204.3	23rd March	5
	12/6	1180205.3	24th March	6
	12/7	1180206.3	25th March	7
	12/8	1180207.3	26th March	8
	12/9	1180208.3	27th March	9
	12/10	1180209.3	28th March	10
	12/11	1180210.3	29th March	11
	12/12	1180211.3	30th March	12
	12/13	1180212.3	31st March	13
	12/14	1180213.3	1st April	14
	12/15	1180214.3	2nd April	15
	12/16	1180215.3	3rd April	16
Vernal Equinox	12/17	1180216.3	4th April	17
	12/18	1180217.3	5th April	18
	12/19	1180218.3	6th April	19
	12/20	1180219.3	7th April	20
	12/21	1180220.3	8th April	21
	12/22	1180221.3	9th April	22
	12/23	1180222.3	10th April	23
	12/24	1180223.3	11th April	24
	12/25	1180224.3	12th April	25
	12/26	1180225.3	13th April	26
	12/27	1180226.3	14th April	27
	12/28	1180227.3	15th April	28
	12/29	1180228.3	16th April	29
1st Visible Crescent of Moon & Beginning of Year	1/1	1180229.3	17th April	30

Event	Hebrew Date	JD (+2:21)	Julian Date (1482 BC)	#
	1/2	1180230.3	18th April	31
	1/3	1180231.3	19th April	32
	1/4	1180232.3	20th April	33
	1/5	1180233.3	21st April	34
	1/6	1180234.3	22nd April	35
	1/7	1180235.3	23rd April	36
	1/8	1180236.3	24th April	37
	1/9	1180237.3	25th April	38
Sacrificial Lamb Selected	1/10	1180238.3	26th April	39
	1/11	1180239.3	27th April	40
	1/12	1180240.3	28th April	41
	1/13	1180241.3	29th April	42
Sacrificial Lamb Slain	1/14	1180242.3	30th April	43
Exodus (Full Moon 21:05)	1/15	1180243.3	1st May	44
	1/16	1180244.3	2nd May	45
	1/17	1180245.3	3rd May	46
	1/18	1180246.3	4th May	47
	1/19	1180247.3	5th May	48
Wave Sheaf (1st day of the week after the Sabbath; Lev 23:11)	1/20	1180248.3	6th May	49
	1/21	1180249.3	7th May	50
	1/22	1180250.3	8th May	51
	1/23	1180251.3	9th May	52
	1/24	1180252.3	10th May	53
	1/25	1180253.3	11th May	54
	1/26	1180254.3	12th May	55
	1/27	1180255.3	13th May	56
	1/28	1180256.3	14th May	57
	1/29	1180257.3	15th May	58
	1/30	1180258.3	16th May	59
1st Visible Crescent of Moon	2/1	1180259.3	17th May	60
	2/2	1180260.3	18th May	61
	2/3	1180261.3	19th May	62
	2/4	1180262.3	20th May	63
	2/5	1180263.3	21st May	64
	2/6	1180264.3	22nd May	65
	2/7	1180265.3	23rd May	66
	2/8	1180266.3	24th May	67
	2/9	1180267.3	25th May	68

Event	Hebrew Date	JD (+2:21)	Julian Date (1482 BC)	#
	2/10	1180268.3	26th May	69
	2/11	1180269.3	27th May	70
	2/12	1180270.3	28th May	71
	2/13	1180271.3	29th May	72
	2/14	1180272.3	30th May	73
Came to Wilderness of Sin (Ex 16:1)	2/15	1180273.3	31st May	74
Murmuring of people & Moses speaks (Ex 16:2/)	2/16	1180274.3	1st June	75
Quail at even and manna the next morning	2/17	1180275.3	2nd June	76
	2/18	1180276.3	3rd June	77
	2/19	1180277.3	4th June	78
	2/20	1180278.3	5th June	79
	2/21	1180279.3	6th June	80
	2/22	1180280.3	7th June	81
	2/23	1180281.3	8th June	82
	2/24	1180282.3	9th June	83
	2/25	1180283.3	10th June	84
	2/26	1180284.3	11th June	85
	2/27	1180285.3	12th June	86
	2/28	1180286.3	13th June	87
	2/29	1180287.3	14th June	88
	2/30	1180288.3	15th June	89
1st Visible Crescent of Moon	3/1	1180289.3	16th June	90
	3/2	1180290.3	17th June	91
	3/3	1180291.3	18th June	92
	3/4	1180292.3	19th June	93
	3/5	1180293.3	20th June	94
	3/6	1180294.3	21st June	95
	3/7	1180295.3	22nd June	96
	3/8	1180296.3	23rd June	97
1st Pentecost	3/9	1180297.3	24th June	98
	3/10	1180298.3	25th June	99
	3/11	1180299.3	26th June	100
	3/12	1180300.3	27th June	101
	3/13	1180301.3	28th June	102
	3/14	1180302.3	29th June	103
Exodus 19_24 Arrive Wilderness of Sinai (Ex 19:1)	3/15	1180303.3	30th June	104
Moses up mount speaks to God then down mount	3/16	1180304.3	1st July	105
Moses speaks to Israel back, sanctifies people	3/17	1180305.3	2nd July	106

Event	Hebrew Date	JD (+2:21)	Julian Date (1482 BC)	#
People wash clothes (2nd day)	3/18	1180306.3	3rd July	107
God speaks to Israel	3/19	1180307.3	4th July	108
Moses writes Commandments (Ex 20-23)	3/20	1180308.3	5th July	109
Builds Altar	3/21	1180309.3	6th July	110
Reads Book of Covenant to Israel	3/22	1180310.3	7th July	111
Moses and Elders Up mount and cloud	3/23	1180311.3	8th July	112
Cloud	3/24	1180312.3	9th July	113
Cloud	3/25	1180313.3	10th July	114
Cloud	3/26	1180314.3	11th July	115
Cloud	3/27	1180315.3	12th July	116
Cloud	3/28	1180316.3	13th July	117
Cloud	3/29	1180317.3	14th July	118
Moses up mount day 1	4/1	1180318.3	15th July	119
Moses up mount day 2	4/2	1180319.3	16th July	120
Moses up mount day 3	4/3	1180320.3	17th July	121
Moses up mount day 4	4/4	1180321.3	18th July	122
Moses up mount day 5	4/5	1180322.3	19th July	123
Moses up mount day 6	4/6	1180323.3	20th July	124
Moses up mount day 7	4/7	1180324.3	21st July	125
Moses up mount day 8	4/8	1180325.3	22nd July	126
Moses up mount day 9	4/9	1180326.3	23rd July	127
Moses up mount day 10	4/10	1180327.3	24th July	128
Moses up mount day 11	4/11	1180328.3	25th July	129
Moses up mount day 12	4/12	1180329.3	26th July	130
Moses up mount day 13	4/13	1180330.3	27th July	131
Moses up mount day 14	4/14	1180331.3	28th July	132
Moses up mount day 15	4/15	1180332.3	29th July	133
Moses up mount day 16	4/16	1180333.3	30th July	134
Moses up mount day 17	4/17	1180334.3	31st July	135
Moses up mount day 18	4/18	1180335.3	1st August	136
Moses up mount day 19	4/19	1180336.3	2nd August	137
Moses up mount day 20	4/20	1180337.3	3rd August	138
Moses up mount day 21	4/21	1180338.3	4th August	139
Moses up mount day 22	4/22	1180339.3	5th August	140
Moses up mount day 23	4/23	1180340.3	6th August	141
Moses up mount day 24	4/24	1180341.3	7th August	142
Moses up mount day 25	4/25	1180342.3	8th August	143
Moses up mount day 26	4/26	1180343.3	9th August	144

Event	Hebrew Date	JD (+2:21)	Julian Date (1482 BC)	#
Moses up mount day 27	4/27	1180344.3	10th August	145
Moses up mount day 28	4/28	1180345.3	11th August	146
Moses up mount day 29	4/29	1180346.3	12th August	147
Moses up mount day 30	4/30	1180347.3	13th August	148
Moses up mount day 31	5/1	1180348.3	14th August	149
Moses up mount day 32	5/2	1180349.3	15th August	150
Moses up mount day 33	5/3	1180350.3	16th August	151
Moses up mount day 34	5/4	1180351.3	17th August	152
Moses up mount day 35	5/5	1180352.3	18th August	153
Moses up mount day 36	5/6	1180353.3	19th August	154
Moses up mount day 37	5/7	1180354.3	20th August	155
Moses up mount day 38	5/8	1180355.3	21st August	156
Moses up mount day 39	5/9	1180356.3	22nd August	157
Moses up mount day 40	5/10	1180357.3	23rd August	158
Moses returns and breaks tablets (Ex 32)	**5/11**	**1180358.3**	**24th August**	**159**
The slaying of those who are not with the Lord	5/12	1180359.3	25th August	160
Moses readies two new stones (Ex 34)	5/13	1180360.3	26th August	161
Moses up mount again day 1	5/14	1180361.3	27th August	162
Moses up mount again day 2	5/15	1180362.3	28th August	163
Moses up mount again day 3	5/16	1180363.3	29th August	164
Moses up mount again day 4	5/17	1180364.3	30th August	165
Moses up mount again day 5	5/18	1180365.3	31st August	166
Moses up mount again day 6	5/19	1180366.3	1st September	167
Moses up mount again day 7	5/20	1180367.3	2nd September	168
Moses up mount again day 8	5/21	1180368.3	3rd September	169
Moses up mount again day 9	5/22	1180369.3	4th September	170
Moses up mount again day 10	5/23	1180370.3	5th September	171
Moses up mount again day 11	5/24	1180371.3	6th September	172
Moses up mount again day 12	5/25	1180372.3	7th September	173
Moses up mount again day 13	5/26	1180373.3	8th September	174
Moses up mount again day 14	5/27	1180374.3	9th September	175
Moses up mount again day 15	5/28	1180375.3	10th September	176
Moses up mount again day 16	5/29	1180376.3	11th September	177
Moses up mount again day 17	5/30	1180377.3	12th September	178
Moses up mount again day 18	6/1	1180378.3	13th September	179
Moses up mount again day 19	6/2	1180379.2	14th September	180
Moses up mount again day 20	6/3	1180380.2	15th September	181
Moses up mount again day 21	6/4	1180381.2	16th September	182

Event	Hebrew Date	JD (+2:21)	Julian Date (1482 BC)	#
Moses up mount again day 22	6/5	1180382.1	17th September	183
Moses up mount again day 23	6/6	1180383.1	18th September	184
Moses up mount again day 24	6/7	1180384.1	19th September	185
Moses up mount again day 25	6/8	1180385.0	20th September	186
Moses up mount again day 26	6/9	1180386.0	21st September	187
Moses up mount again day 27	6/10	1180387.0	22nd September	188
Moses up mount again day 28	6/11	1180387.9	23rd September	189
Moses up mount again day 29	6/12	1180388.9	24th September	190
Moses up mount again day 30	6/13	1180389.9	25th September	191
Moses up mount again day 31	6/14	1180390.8	26th September	192
Moses up mount again day 32	6/15	1180391.8	27th September	193
Moses up mount again day 33	6/16	1180392.8	28th September	194
Moses up mount again day 34	6/17	1180393.7	29th September	195
Moses up mount again day 35	6/18	1180394.7	30th September	196
Moses up mount again day 36	6/19	1180395.7	1st October	197
Moses up mount again day 37	6/20	1180396.6	2nd October	198
Moses up mount again day 38	6/21	1180397.6	3rd October	199
Moses up mount again day 39	6/22	1180398.6	4th October	200
Moses up mount again day 40	6/23	1180399.5	5th October	201
	6/24	1180400.5	5th October	202
	6/25	1180401.5	6th October	203
	6/26	1180402.4	7th October	204
	6/27	1180403.4	8th October	205
	6/28	1180404.4	9th October	206
	6/29	1180405.3	10th October	207
	6/30	1180406.3	11th October	208
1st Visible Crescent of Moon (1st Feast of Trumpets)	7/1	1180407.2	12th October	209

The table shows, at row 159 which is 115 days after the Exodus, that the most likely activity that aligns with a significant feature of the Pyramid passages, which is point C, is the day when Moses returned from his first 40 days in the mount, Ex 32, and found the Israelites worshipping the golden calf. Moses threw the two stone tablets to the ground and broke them. The date is shown to be the eleventh day of the fifth Hebrew month, which was the 24th August 1482 BC.

From the earlier table Point C, the junction of the EP roof and AP floor, is also shown to indicate the 24th August 1482 BC in the Pyramid chronology. Here, then, is a wonder from God, because, at this point, one or more stones fell from the roof of the Entrance Passage and broke, thus symbolizing Moses breaking the two tablets. At this juncture, one might consider this purely coincidental, but this alignment is based on identifying point B, the start of the AP, as Moses′

20th birthday. It will be seen further along the passages that other alignments are equally or even more significant. At this point, it is fair to say that a stone, or stones, fell out of the roof and broke, and it aligns with the Bibles account of Moses breaking the stone tablets of the law.

Does the stone falling out of the Entrance Passage roof symbolize Moses throwing down the tablets? **Exodus 32:15-19 (KJV)** says:

¹⁵ And Moses turned, and went down from the mount, and the two tables of the testimony *were* in his hand: the tables *were* written on both their sides; on the one side and on the other *were* they written.
¹⁶ And the tables *were* the work of God, and the writing *was* the writing of God, graven upon the tables.
¹⁷ And when Joshua heard the noise of the people as they shouted, he said unto Moses, *There is* a noise of war in the camp.
¹⁸ And he said, *It is* not the voice of *them that* shout for mastery, neither *is it* the voice of *them that* cry for being overcome: *but* the noise of *them that* sing do I hear.
¹⁹ And it came to pass, as soon as he came nigh unto the camp, that he saw the calf, and the dancing: and Moses′ anger waxed hot, and he cast the tables out of his hands, and brake them beneath the mount.

Why was it necessary to add ″beneath the mount″ in verse 19? Is this to help us recognize what the mountainous Pyramid is telling us? Verse 15 already says that Moses ″went down from the mount″, so we knew where this event was happening, and so this repeats information we already have, and repetition in the Bible is used to emphasize a point.

Traditionally the falling of the stone, or stones, in the EP was caused by Caliph Al Mamoun digging his way into the Pyramid. Smyth′s indicated that Al Mamoun visited the Pyramid in 820 AD, but https://www.smithsonianmag.com/travel/inside-the-great-pyramid-75164298/ tells us that he visited only once and that was in 832 BC.
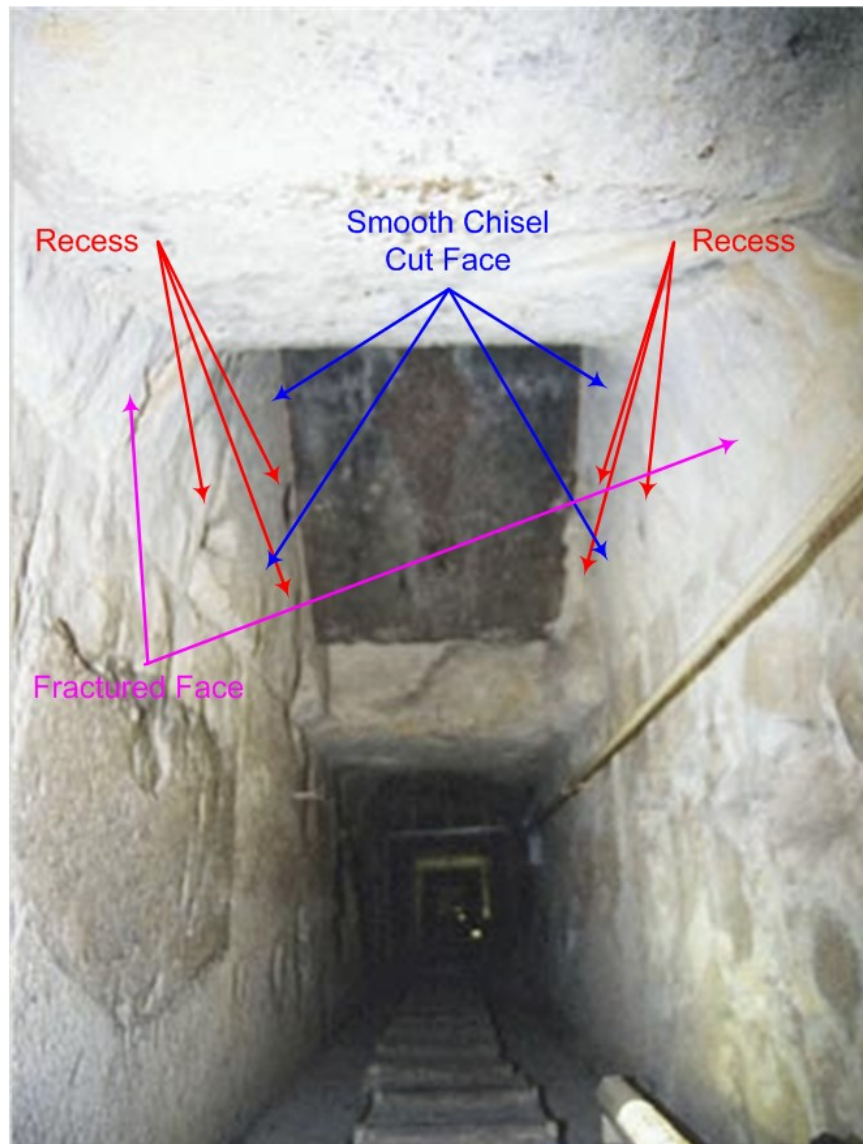
The reference above also questions whether it was Al Mamoun who breached the Pyramid at all – *″Al-Mas'udi attributes the breaching of the pyramid to Ma'mun's father, Haroun al-Rashid, a ruler best remembered as the caliph of the Thousand and One Nights—and he appears in a distinctly fabulous context.″*

However, the existence of the cavity below the Granite Plugs makes it clear that one or more stones fell from the roof of the Entrance Passage. There is no mention of the upper passages before Al Mamoun, and so this event could only have happened at or after his time as they could only have been found after the stone fell. The photo below shows the cavity.

It can be seen that whatever was in the cavity was not secured in a way that would prevent it from falling out given the right impetus. Notice that the stone here was not a lintel, i.e., it did not fit on top of the passage walls, as shown by the blue arrows pointing to the smooth cut sidewalls.

There also appears to be three small recesses cut into each sidewall, as shown by the red arrows. These can be seen more clearly on the left side of the photo. Whatever was positioned here could only have been retained if it had bosses that fit into the recesses. The magenta arrows show the collateral damage caused to the roof of the Entrance Passage when the stone, or stones, fell.

It seems likely that the stones that were in the cavity were designed to fall sometime, given these retention features. That time would have been when Al Mamoun was digging.

A new Pyramid lengths/dates table is presented below to help analyze why the Pyramid has 2598.434 years in its chronology versus the 2598 years from the Bible. At 365.25 days/year, the additional 0.434 years is 158.5 days. The 2598 Bible years are from Adam's loss of eternal life to the Exodus. From the preceding analysis and we see that 115 of these days are due to the time between the Exodus and the common point between the Bible and the Pyramid, which is when

Moses broke the tablets and so the balance of the 0.434 years that needs to be accounted for is 43.5 days.

Four dates have been entered into this table as type ″u″ which were created by the calendar spreadsheet. They are already expressed as JD (+2:21), and so no conversion, distance, or JD (TT) calculations are necessary. Adam′s loss of eternal life, which is type ″s,″ requires conversion as before.

The additional 43.5 days occurred before the start of the Hebrew year 4080 BC, as explained below. The second row of the table shows us that Adam lost eternal life on Julian Day 231279.594 based on the data from the Pyramid, which was the 18th March 4080 BC or the 16th day of the 11th Hebrew month of that year. The beginning of the next Hebrew year is JD 231323.261 (+2:21), so the number of days before the end of the year that Adam lost eternal life is the difference between these two, which is 43.67 days.

Event	Distance ″	Type	JD TT	JD (+2:21)	ΔT (s)	Julian Date (+2:21)
Start of 11th Month 4080 BC		u		231264.239	111328	17:43, Saturday, 2nd March 4080 BC
Point G - Adam lost eternal life (Floor of APE and Casing)	0.0000	s	231280.897	231279.707	111326	04:57, Monday, 18th March 4080 BC
Start of 12th Month 4080 BC		u		231294.251	111325	18:02, Monday, 1st April 4080 BC
Vernal Equinox 4080 BC		u		231317.379	111322	16:36, Tuesday, 23rd April 4080 BC
Start of first Month 4080 BC		u		231323.261	111322	18:16, Tuesday, 30th April 4080 BC

The Bible does not relate Adam′s loss of eternal life to any specific date, but **Exodus 12:1-2 (KJV)** says:

[1] And the LORD spake unto Moses and Aaron in the land of Egypt, saying,
[2] This month *shall be* unto you the beginning of months: it *shall be* the first month of the year to you.

which implies that God was changing the definition of the first day of the Hebrew year. In the absence of any definition from the Bible of what this change is, it can be reasonably assumed that previously, the year started on an equally significant event, such as the date when Adam lost eternal life. After the upward turn in God′s plan, He moved the start of the year nearly 44 days to the start of Abib, or Nisan, which is after the Vernal Equinox. The 44 days is calculated by subtracting the JD of point G from the JD of the start of the year, which is 231323.261 – 231279.707 = 43.555 days, which accounts for the 43.5 days computed earlier to fit the 2598.434 years.

If God's and Jewish Holy Days are taken into consideration, it is possible to see how the above 43.5 days are included in the Timeline.

Holy Days

In this study, many past, present, and future dates calculated along the passages are shown to be acceptable because they have been converted to Hebrew dates and then compared against God's, or ancient Jewish, Holy Days to determine if there are relevant matches.

For example, the date Adam's lost eternal life is shown above to be 18th March 4080 BC, which is the sixteenth day of the eleventh Hebrew month of that year. A relevant Jewish festival occurred twelve hours before on the fifteenth day of the eleventh month, which is the "New Year of the Trees" according to [Wikipedia Tu BiShvat](#) which says:

"Tu BiShvat appears in the [Mishnah](#) in [Tractate Rosh Hashanah](#) as one of the four new years in the Jewish calendar. The discussion of when the New Year occurs was a source of debate among the rabbis, who argued:[4][5][6]

The first of Nisan is the "new year for kings and festivals".

The first of Elul is the "new year for the tithe of cattle"; Rabbi Eleazar and Rabbi Shimon, however, place this on the first of Tishrei.

The first of Tishrei is the "new year for years" (calculation of the calendar), "for release years" (sabbatical years[citation needed]), jubilees, planting, and for the tithe of vegetables.

The first of Shevat is the "new year for trees" according to the school of Shammai; the school of Hillel, however, place this on the fifteenth of Shevat.

The rabbis ruled in favor of Hillel on this issue and the 15th of Shevat became the date for calculating the beginning of the agricultural cycle for the purpose of biblical tithes."

[Hillel and Shammai's Dispute about the Fruit Tree's New Year – A Still Small Voice.html](#) describes this dispute, which centers around the differences between the Tree of Life and the Tree of Knowledge of Good and Evil.

As the cosmic ilan [tree] *approaches its new year Hillel and Shammai debate which of its two trees (עצים but also עצות) should drive the cycle. Which will produce the greatest abundance of quality fruit? By counting the year from the 1st of Shvat, Shammai picks the Tree of Life, the Written Torah, the pure and holy source of all. On rosh chodesh the sun is in its glory while the moon (or ego-self) is barely a sliver*

Hillel starts the count from mid-month, Tu B'Shvat, when the moon is in its fullness, equal and opposite the sun. That is HaShem's goal: for the Shekhina and the Holy One to unite in consummate union—to meet and match from the crown of their heads to the souls of their feet. At

that point HaShem [G-d] *is one not only in essence, but also in revelation. The Tree of Knowledge of Good and Evil becomes, again, the Tree of Knowledge of Good (alone), for evil will have ceased.*

Since *"the rabbis ruled in favor of Hillel on this issue",* the Tree of Knowledge of Good and Evil drives the 15ᵗʰ Shevat date for Tu BiShvat and the customary eating of fruits.

From the calculations, it is shown that God′s Plan began on the sixteenth day of the eleventh month. Assume that the serpent beguiled Eve into eating the fruit of the Tree of Knowledge of Good and Evil on the fifteenth day, Tu BiShvat, and **Genesis 3:6-8 (KJV)**

[6] And when the woman saw that the tree *was* good for food, and that it *was* pleasant to the eyes, and a tree to be desired to make *one* wise, she took of the fruit thereof, and did eat, and gave also unto her husband with her; and he did eat.
[7] And the eyes of them both were opened, and they knew that they *were* naked; and they sewed fig leaves together, and made themselves aprons.
[8] And they heard the voice of the LORD God walking in the garden in the cool of the day: and Adam and his wife hid themselves from the presence of the LORD God amongst the trees of the garden.

The difference of half a day between the fifteenth and sixteenth of the month is accounted for as follows. God′s Plan only started when He found out that Adam and Eve had sinned and took everlasting life away from them by physically separating them from the Tree of Life. Most likely this occurred on the next day because Adam and Eve had to have some time to make themselves aprons since they now knew they were naked, **Genesis 3:22-23 (KJV)**

[22] And the LORD God said, Behold, the man is become as one of us, to know good and evil: and now, lest he put forth his hand, and take also of the tree of life, and eat, and live for ever:
[23] Therefore the LORD God sent him forth from the garden of Eden, to till the ground from whence he was taken.

So the Jewish Holy day, Tu BiShvat, is relevant to the events of the beginning of the Bible and Pyramid chronologies. Tu BiShvat occurs a second time in the chronology at the start of the granite floor in the Antechamber, and this is discussed later in this Paper.

Relevance such as this occurs in multiple places throughout the Pyramid chronology and provides the confidence necessary to believe that the Pyramid is, without doubt, a sign from God, **Isaiah 19:20 (KJV)**
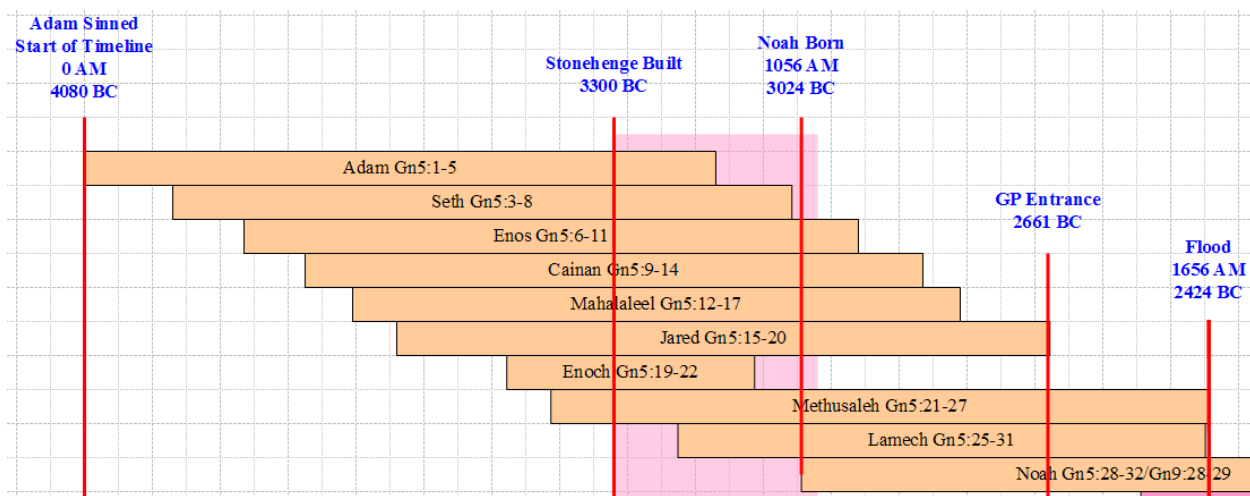
[20] And it shall be for a sign and for a witness unto the LORD of hosts in the land of Egypt: for they shall cry unto the LORD because of the oppressors, and he shall send them a saviour, and a great one, and he shall deliver them.

It is concluded from the above discussion, re Tu BiShvat, that the last 43.5 unaccounted days of the 2598.434 years occurred immediately before the beginning of the Hebrew year 4080 BC.

Based on the Masoretic Text the Biblical period, from when Adam lost eternal life to the time when Moses broke the tablets, exactly fits between points G, 18th March 4080 BC, and point C, 24th August 1482 BC, where point B is Moses 20th birthday, 29th March 1542 BC.
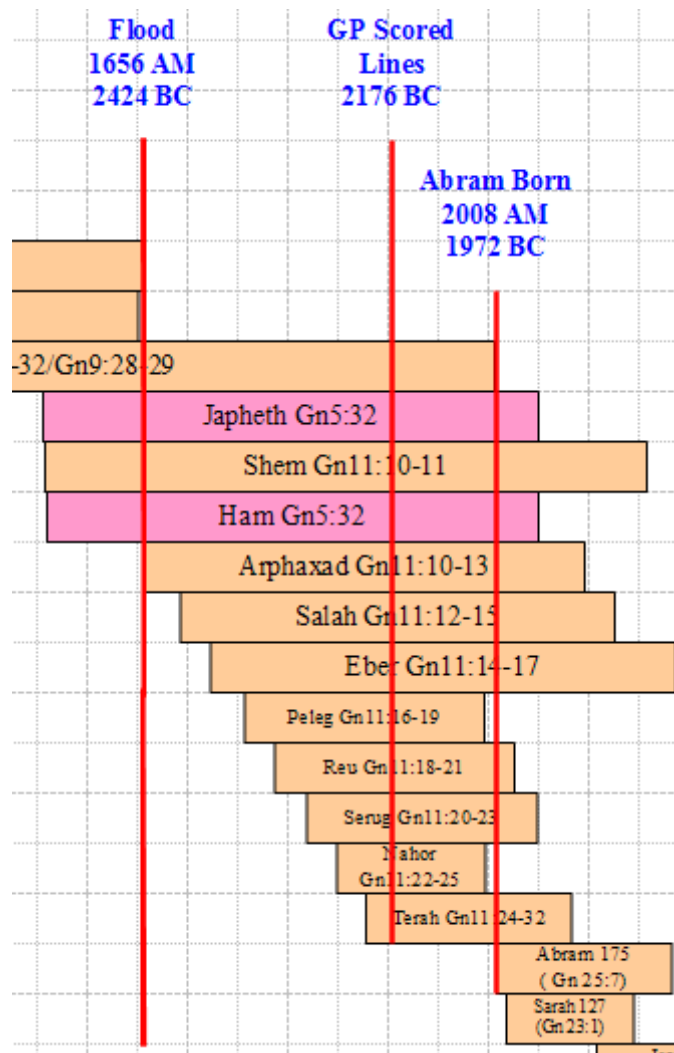
Detailed Early Bible Chronology

The following figures are a pictorial representation of the early chronology of the Bible and are also intended to show the relationships between the 400, 430, and 450 years mentioned earlier.
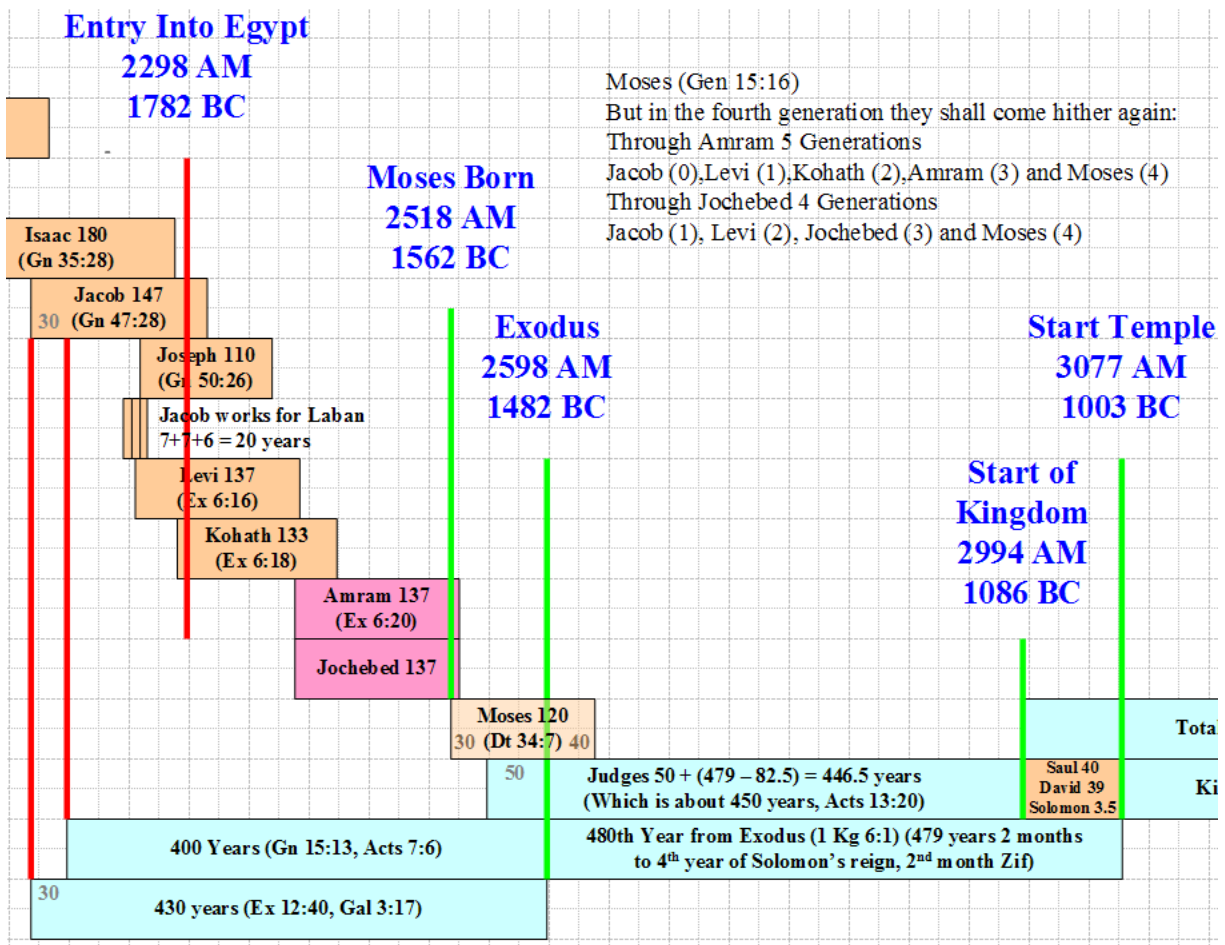

These representations are divided into several parts for clarity. Dates are shown as AM, Anno Mundi, or from creation, which I take to be the date of Adam′s loss of eternal life and BC. The above figure shows the chronology from Adam to the Flood, and the possible relationships between the patriarchs can be seen. Everyone but Noah could have known Adam. Stonehenge was started during Adam′s lifetime. Everyone but Noah and his sons and their wives died or walked with God before the flood. It is postulated elsewhere that one of the Patriarchs listed above built the Pyramid. If so, that could only have been Jared, Methuselah, Lamech, or Noah, as they were the only ones alive on the date indicated by the Entrance, which is assumed to indicate when it was built.

The next figure shows the post-flood patriarchs from Japeth, Shem, and Ham to Abram and Sara. Noah could have known everyone up to Terah, but he died two years before Abram was born.

Flood
1656 AM
2424 BC

GP Scored
Lines
2176 BC

Abram Born
2008 AM
1972 BC

-32/Gn9:28-29

Japheth Gn5:32

Shem Gn11:10-11

Ham Gn5:32

Arphaxad Gn11:10-13

Salah Gn11:12-15

Eber Gn11:14-17

Peleg Gn11:16-19

Reu Gn11:18-21

Serug Gn11:20-23

Nahor Gn11:22-25
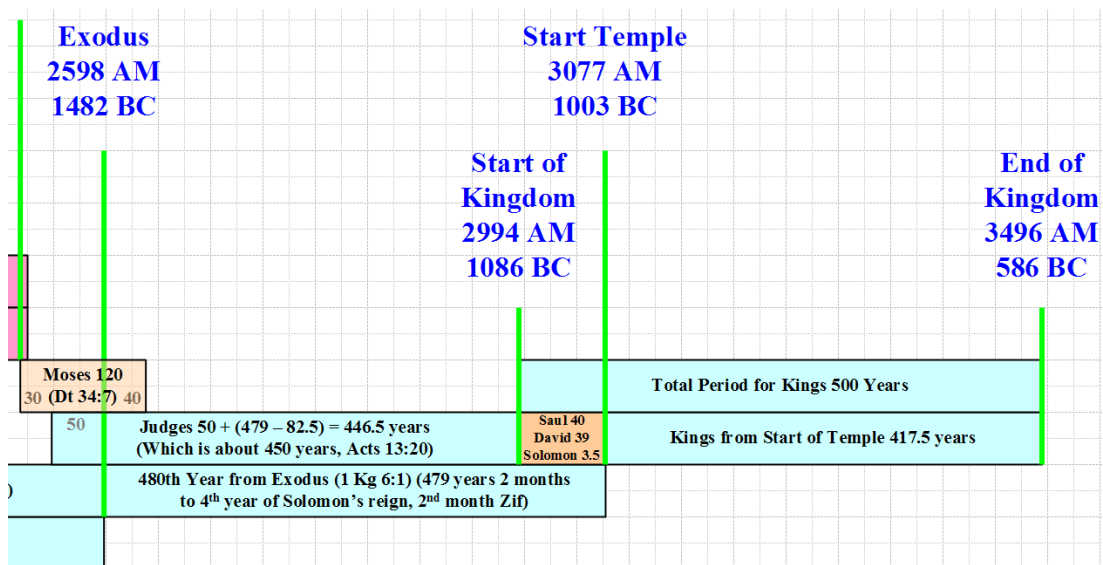
Terah Gn11:24-32

Abram 175 (Gn25:7)

Sarah 127 (Gn23:1)

The third figure shows from the birth of Isaac to the start of the Temple. Jacob was 130 when he went into Egypt, which was 300 years before the Exodus. The 430 years started at Jacob's birth, and the 400 years started when Jacob was aged 30. Both of these periods ended at the Exodus.

The figure also shows how Moses was considered to be the fourth generation depending upon whether Jacob is counted as generation 0 or 1. Moses' mother was Jochebed, whose age is not given in the Bible. She would have had to been born very much toward the end of her father Levi's life and lived as long as her husband Amram, who lived to be 137, according to Ex 6:20. Moses was the first judge over Israel. The period of the judges began when Moses was 30 and ended 446.5 years later when Saul became king, 82.5 years before the Temple was started, which is a period of "about 450 years".

Entry Into Egypt
2298 AM
1782 BC

Moses (Gen 15:16)
But in the fourth generation they shall come hither again:
Through Amram 5 Generations
Jacob (0),Levi (1),Kohath (2),Amram (3) and Moses (4)
Through Jochebed 4 Generations
Jacob (1), Levi (2), Jochebed (3) and Moses (4)

Moses Born
2518 AM
1562 BC

Isaac 180
(Gn 35:28)

Jacob 147
30 (Gn 47:28)

Joseph 110
(Gn 50:26)

Jacob works for Laban
7+7+6 = 20 years

Levi 137
(Ex 6:16)

Kohath 133
(Ex 6:18)

Amram 137
(Ex 6:20)

Jochebed 137

Exodus
2598 AM
1482 BC

Start Temple
3077 AM
1003 BC

**Start of
Kingdom
2994 AM
1086 BC**

Moses 120
30 (Dt 34:7) 40

50

Judges 50 + (479 – 82.5) = 446.5 years
(Which is about 450 years, Acts 13:20)

Saul 40
David 39
Solomon 3.5

Tota

Ki

400 Years (Gn 15:13, Acts 7:6)

480th Year from Exodus (1 Kg 6:1) (479 years 2 months
to 4th year of Solomon's reign, 2nd month Zif)

30

430 years (Ex 12:40, Gal 3:17)

The fourth figure below shows the period from Moses to the end of the kingdom.

**Exodus
2598 AM
1482 BC**

**Start Temple
3077 AM
1003 BC**

**Start of
Kingdom
2994 AM
1086 BC**

**End of
Kingdom
3496 AM
586 BC**

Moses 120
30 (Dt 34:7) 40

50

Judges 50 + (479 – 82.5) = 446.5 years
(Which is about 450 years, Acts 13:20)

Saul 40
David 39
Solomon 3.5

Total Period for Kings 500 Years

Kings from Start of Temple 417.5 years

480th Year from Exodus (1 Kg 6:1) (479 years 2 months
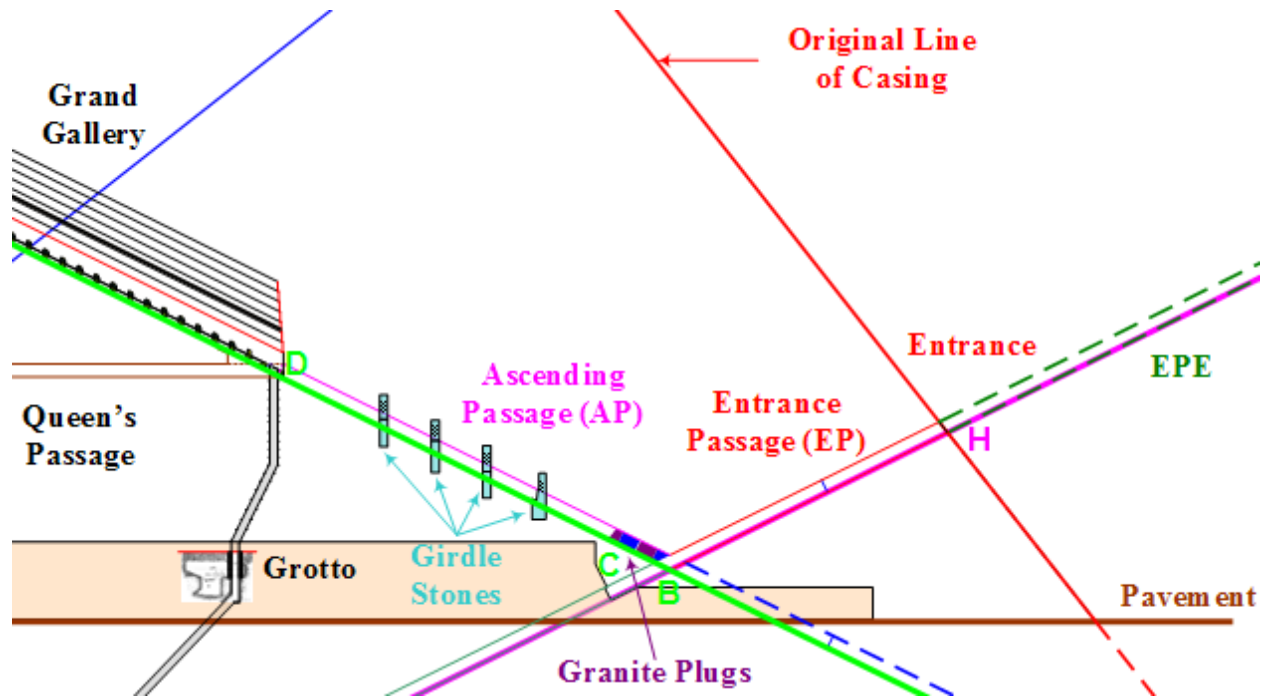to 4th year of Solomon's reign, 2nd month Zif)

Jesus′ Ministry

At this point, the next major match between the Bible and Pyramid chronologies is evaluated.

The Ascending Passage

The Ascending Passage (AP) is shown in the figure below:

The AP begins at the junction of the EP and AP, point B, and proceeds upward through point C to point D at the beginning of the GG. At the beginning of the GG, the roof significantly increases in height through seven corbelled faces.

The previous analysis evaluated the first 60 inches of the AP up to point C, where one or more stones fell from the roof of the EP. Moving back to point B, which is Moses′ 20th birthday, it is known, from ″5 Passage Reconstruction″, that the theoretical length of the AP to the start of the GG is 1547.346″, and this is then

divided by the timescale, 0.9932″/year = 1557.939 years

multiplied by the number of days in a year, 365.25 = 569037.258 days

added to the JD at the EP/AP junction = 1158295.060 + 569037.258 = JD (TT) 1727332.318

and then converted to Julian Date (+2:21) = 19:05, Saturday, 6th March 17

In previous analyses by Davidson, the Edgars and Rutherford, the start of the GG, has been taken as symbolizing Jesus′ Crucifixion because of the significant increase in the height of the roof of

the GG at this point opens up the Gospel age. In this analysis, it can be seen that the date of the beginning of the GG is 13 to 16 years earlier than a Crucifixion date of AD 30 or AD 33. The search for a match should be extended to see if one occurs during the period of the seven corbels.

As previously pointed out, in Paper 5, many of the dimensions in the GG are integer values of the cubit. Using Inductive Metrology, it can be argued that seven corbels fit precisely into one cubit, horizontally. Each corbel is, therefore, 20.607/7″ = 2.944″. Projecting this onto the slope, by dividing by the cosine of the passage angle, and then converting to TT as per the example above, it can be computed that each corbel represents 1207.638 days (TT).

The following table provides the Julian dates and times of the ends of all seven corbels plus the middle of the fourth corbel:

Corbel	JD (+2:21)	Julian Date (+2:21)	Hebrew Date m/d/y
Start of GG	1727332.295	19:05, Saturday, 6th March 17	12/19/17
S end 1st Corbel	1728539.934	10:24, Wednesday, 26th June 20	3/15/20
S end 2nd Corbel	1729747.572	01:44, Sunday, 17th October 23	7/12/23
S end 3rd Corbel	1730955.211	17:03, Wednesday, 5th February 27	11/9/27
Middle 4th Corbel	1731559.030	12:43, Friday, 1st October 28	6/23/28
S end 4th Corbel	**1732162.849**	**08:22.24, Sunday, 28th May 30**	**3/6/30**
S end 5th Corbel	1733370.488	23:42, Wednesday, 16th September 33	6/3/33
S end 6th Corbel	1734578.126	15:01, Sunday, 6th January 37	9/29/37
S end 7th Corbel	1735785.765	06:21, Thursday, 28th April 40	1/27/40

The table was created to determine if one of the transitions between corbels, or the middle of all seven produced a recognizable date, and it can be seen that the date, in bold red, is the day of Pentecost, in the year AD 30, which is one of several years favored by many for the Crucifixion. This end of this corbel can, therefore, be considered to represent the very end of Jesus′ ministry, which would be almost the hour and day of the coming of the Holy Spirit upon the apostles.

The first column defines the point of each corbel under consideration, while the second provides the JD number for that point. The third column provides the time of day, and the Julian date and the fourth provides the Hebrew date, and it is this column that was used to search for a matching Holy Day.

The following table shows eight astronomical events in blue, which are significant days during the Crucifixion period if it was in AD 30. They stretch from the Vernal Equinox, signifying the approaching start of the year, to Pentecost 67 days later. Pentecost is the day described in Acts 2:1-12 when the Holy Spirit came upon the apostles. The event in bolded red is from the Pyramid passages and is the south end of the fourth corbel. It fits perfectly with the calendar dates. The time of day of the occurrence is also within a few minutes, as discussed later.

Event	JD (+2:21)	Julian Date (+2:21)	Hebrew Date m/d/y
Vernal Equinox AD 30	1732096.542	01:00, Thursday, 23rd March 30	12/29/30
Start of the first day of the first month	1732098.263	18:18, Friday, 24th March 30	1/1/30
End of the 10th day of the first month, (Palm Sunday) - sacrificial lamb selected	1732108.263	18:18, Monday, 3rd April 30	1/10/30
End of 14th-day sacrifice lamb, i.e., Jesus, about 3 pm - first day in the tomb	1732112.263	18:18, Friday, 7th April 30	1/14/30
End of 15th day - Sabbath -second day in the tomb	1732113.263	18:18, Saturday, 8th April 30	1/15/30
End of 16th day - third day in the tomb – ascension? - Wave Sheaf first day of the week	1732114.263	18:18, Sunday, 9th April 30	1/16/30
End of 40th day after resurrection Jesus ascension?	1732154.263	18:18, Friday, 19th May 30	2/27/30
End 4th Corbel from North (Day & Time of Pentecost) (The first day of the week after the 7th Sabbath after the Wave Sheaf)	**1732162.849**	**08:22 Sunday, 28th May 30**	**3/6/30**
End of Pentecost - the first day of a week	1732163.263	18:18, Sunday, 28th May 30	3/6/30

These dates are from the 10th to the 16th of the first month for the Passover and Feast of Unleavened Bread and the day of the offering of the first fruits. Pentecost is included, which is the sixth day of the third month. It is known as Shavuot by the Jews, and it should end 50 days after the Sabbath during the week of the Feast of Unleavened Bread, and that should be the first day of a week, i.e., Sunday. The Jews have fixed this date, in this age, as the sixth day of the third month, and, coincidentally, it matched this date in AD 30.

Since each corbel is 1208 days long, which is 41 months, it can be seen that the fourth corbel is about long enough to contain all of Jesus′ ministry. The start of the fourth corbel is the end of the third, which is 17:03, Wednesday, 5th February 27, 11/9/27.

Since the beginning of the GG is marked by seven corbels, the fourth, or middle, one of which encompasses Jesus′ ministry, and which ends on the day of Pentecost, a parallel can be drawn between that and the last week of Daniels seventy week prophecy. Daniel 9:24-27 (KJV)

24 Seventy weeks are determined upon thy people and upon thy holy city, to finish the transgression, and to make an end of sins, and to make reconciliation for iniquity, and to bring in everlasting righteousness, and to seal up the vision and prophecy, and to anoint the most Holy.
25 Know therefore and understand, *that* from the going forth of the commandment to restore and to build Jerusalem unto the Messiah the Prince *shall be* seven weeks, and threescore and two weeks: the street shall be built again, and the wall, even in troublous times.
26 And after threescore and two weeks shall Messiah be cut off, but not for himself: and the people of the prince that shall come shall destroy the city and the sanctuary; and the end thereof *shall be* with a flood, and unto the end of the war desolations are determined.
27 And he shall confirm the covenant with many for one week: and in the midst of the week he shall cause the sacrifice and the oblation to cease, and for the overspreading of abominations he

shall make *it* desolate, even until the consummation, and that determined shall be poured upon the desolate.

Most commentators accept that the "weeks" above symbolize seven years each. However, there are two schools of thought concerning the length of the year. The Dispensational view is that the year is a 360-day prophetic year, while the Traditional view is that a year is 365.25 days.

The Hebrew word for "week" is H7620 שָׁבֻעָה (Strong's Talking Greek & Hebrew Dictionary), meaning *"shabua`, shaw-boo'-ah; also (feminine) shebu`ah, sheb-oo-aw'; properly passive participle of <H7650> (shaba`) as a denominative of <H7651> (sheba`); literal sevened, i.e. a week (specifically of years) :- seven, week."*

This word is translated as seven ordinary years in Genesis 29:27-30 (KJV)

[27] Fulfil her week, and we will give thee this also for the service which thou shalt serve with me yet seven other years.
[28] And Jacob did so, and fulfilled her week: and he gave him Rachel his daughter to wife also.
[29] And Laban gave to Rachel his daughter Bilhah his handmaid to be her maid.
[30] And he went in also unto Rachel, and he loved also Rachel more than Leah, and served with him yet seven other years.

Daniel's seventy weeks are, therefore, 490 typical years which are determined upon Daniel's people, the Israelites, and the holy city, which is Jerusalem.

The seventy weeks are divided into seven weeks, symbolizing 49 years, 62 weeks, symbolizing 434 years and a final week, symbolizing seven years. Why is the time divided this way? The 7 weeks and 62 weeks lead to the final week, and so define the time between a start point, which is a commandment to restore and build Jerusalem, and the Messiah. Verse 24 does not define anything between these two events other than a total time of 69 weeks, so why divide it into 7 weeks and 62 weeks?

Some say that Jerusalem was to be rebuilt by the end of the seven weeks. Others say that the end of the seven weeks marks the completion of the book of Nehemiah, which would have been the last Old Testament book to be written. Others say that if verse 24 is punctuated correctly, then the Messiah would come after seven weeks, but since He is cut-off sixty-two weeks later, verse 25, He would have been 434 years old at that time, which He was not.

As there is no one event after the seven weeks that satisfactorily determines the reason for the split, then it could be that the value seven, or sixty-two, defines the reason. At the beginning of chapter 9, Daniel has determined from books that the seventy years of the desolations of Jerusalem, prophesied by Jeremiah, were coming to an end. The reason for the seventy years was that Israel, when they were in the Promised Land, had failed to honor that many Sabbath years.

Thus seven "weeks," or seven periods of seven years, should put in mind the forty-nine years of a Jubilee cycle, which is seven sets of sabbatical years of 365.25 days.

The seven-week part of the 7/62 split, therefore, validates that typical years of 365.25 days are to be used for this prophecy. The 69 weeks, therefore, define the period from the going forth of the commandment to restore and build to the Messiah, as 483 normal years. Then seven normal years follow to make a total of 490.

Note that verse 25 indicates that Jerusalem will be restored and built. The word translated "restore" is Strong's H7225 means a "return", although it can mean to build again. The word for "build" in verse 25 is Strong's H1129, which can also mean to build again. Although these two words could have been used to emphasize that Jerusalem was to be rebuilt, it could also mean that Jerusalem was, in some way, to be returned to Judah and also be rebuilt. Which is the correct interpretation? The following helps the analysis and also answer the question.

Four decrees could be "the commandment to restore and to build Jerusalem" as follows:

1. Cyrus' decree in his first year, 538/7 BC, permitted the Jews to rebuild the Temple but said nothing about being able to use Jerusalem as an administrative center. Sixty-nine weeks or 483 years later puts the coming of the Messiah in 55 BC, which is too early.

2. Darius' decree in 520 BC repeated what Cyrus had decreed in greater detail. Sixty-nine weeks or 483 years later puts the coming of the Messiah in 37 BC, which is too early.

3. Artaxerxes I decree, in his seventh year, in the last quarter of 458 BC goes beyond Cyrus' and Darius' decrees in that it restores, or returns, administration to the Israelites through Jerusalem. They are permitted to use God's laws and punishments for any transgressions of those laws, including the death penalty, see Ezra 7. Sixty-nine weeks, or 483 years, later places the coming of the Messiah in 27 BC, which is when Jesus was baptized and therefore is a viable choice. 27 BC is shown to be the year that starts the fourth corbel at the north end of the Grand Gallery.

4. Artaxerxes I decree, in his 20th year, in 445 BC repeats his earlier decree.
    Sixty-nine weeks or 483 years later, places the coming of the Messiah in 39 BC, which is too late unless the prophetical year of 360 days is used, as it is in the Dispensational interpretation. However, standard years should be used, as shown above.

Item 3, the decree of Artaxerxes in 457 BC, is the beginning of Daniel's seventy weeks for two reasons. Firstly it restored Jerusalem to Judah for use as their administrative center, or capital city, as required by Dn 9:25, where the earlier decrees, 1 and 2, did not. Secondly, it places the coming of the Messiah in AD 27, which defines His baptism and the start of His ministry. The start of the fourth corbel at the north end of the Grand Gallery is 5th February 27, which is the

ninth day of the eleventh Hebrew month and is the beginning of the 484th year of Daniel's seventieth week.

Daniel 9:25-27 contains two parallel narratives in the seventieth week, and as such, they are not written in chronological order. One narrative is centered on Jerusalem and the other on Messiah. When separated, it can be seen that each set is expressed in chronological order as follows:

Jerusalem Related Events

25a)   Know therefore and understand, *that* from the going forth of the commandment to restore and to build Jerusalem…

25c)   the street shall be built again, and the wall, even in troublous times.

26b)   and the people of the prince that shall come shall destroy the city and the sanctuary; and the end thereof *shall* be with a flood, and unto the end of the war desolations are determined.

27b)   and for the overspreading of abominations he shall make it desolate, even until the consummation, and that determined shall be poured upon the desolate.

Messiah Related Events

25b)   unto the Messiah the Prince *shall* be seven weeks, and threescore and two weeks.

26a)   And after threescore and two weeks shall Messiah be cut off, but not for himself:

27a)   And he shall confirm the covenant with many for one week: and in the midst of the week he shall cause the sacrifice and the oblation to cease.

Jerusalem was destroyed by Nebuchadnezzar, the King of Babylon, in 586 BC, and the sequence for Jerusalem, shown above, starts about 130 years later with the decree from Artaxerxes I to restore and build Jerusalem in 457 BC. Decrees were issued earlier than this to rebuild Jerusalem, starting with Cyrus' in 538BC but these did not ″restore″ the ability of the Jews to administer God's laws and impose God's punishments as did Artaxerxes' decrees. The books of Ezra and Nehemiah record that some Jews did return from Babylon and did rebuild the city and the Temple despite harassment from the local population.

After the Messiah had been crucified by the Jews, the prince, who was the Roman general Titus, came in AD 70 and destroyed Jerusalem and made it desolate. Other desolations followed, such as Hadrian plowing the city and expelling the Jews to create Aelia Capitola. The Muslim and Ottoman occupations and other desolations followed these.

The events related to the Messiah in the seventieth week, as listed above, began after seven plus sixty-two weeks. The actual start for the Messiah would have been during the four hundred and eighty-fourth year in AD 27. No other decree, using typical years, can bring us to this time. After this time, Messiah was cut off, which this author believes occurred when the Holy Spirit descended upon Him after His baptism and God said in Luke 3:22 (KJV):

22 And the Holy Ghost descended in a bodily shape like a dove upon him, and a voice came from heaven, which said, Thou art my beloved Son; in thee I am well pleased.

After this event, Jesus was cut off from God and heaven as He says in John 18:36 (KJV)

36 Jesus answered, My kingdom is not of this world: if my kingdom were of this world, then would my servants fight, that I should not be delivered to the Jews: but now is my kingdom not from hence.

and in Mark 15:34 (KJV)

34 And at the ninth hour Jesus cried with a loud voice, saying, Eloi, Eloi, lama sabachthani? which is, being interpreted, My God, my God, why hast thou forsaken me?

During the first four days of Daniel′s last week, Jesus described to many that the New Covenant or Testament as found in **Matthew 26:28 (KJV)**

28 For this is my blood of the new testament, which is shed for many for the remission of sins.

Also, Mk 14:24 and Luke 22:18-20 (KJV)

In the middle of the seventieth week, Messiah was crucified, and through His righteousness, He paid the price for our sin. As a result, there was no longer any need for the daily sacrifice or oblation found in Exodus 29:38-43 (KJV)

38 Now this *is that* which thou shalt offer upon the altar; two lambs of the first year day by day continually.
39 The one lamb thou shalt offer in the morning; and the other lamb thou shalt offer at even:
40 And with the one lamb a tenth deal of flour mingled with the fourth part of an hin of beaten oil; and the fourth part of an hin of wine *for* a drink offering.
41 And the other lamb thou shalt offer at even, and shalt do thereto according to the meat offering of the morning, and according to the drink offering thereof, for a sweet savour, an offering made by fire unto the LORD.
42 *This shall be* a continual burnt offering throughout your generations *at* the door of the tabernacle of the congregation before the LORD: where I will meet you, to speak there unto thee.
43 And there I will meet with the children of Israel, and *the tabernacle* shall be sanctified by my glory.

Sacrifices continued in the Temple until it was destroyed in AD 70, but they no longer had value.

Events for Jerusalem and the Messiah in Daniel′s seventieth week extend beyond the end of the seventy weeks in AD 33 even until today and beyond. These events are the desolations, the New Covenant, and the end of the daily sacrifice and oblations. The prophecy requires an endpoint, which Gabriel told Daniel was the end of the seventy weeks. However, the continuation of these events is covered by Daniel′s 1260, 1290, 1335, and 2300 year prophecies found in Daniel 8 and 12.

The 1335 year prophecy is discussed later in this Paper, and the Pyramid shows us that Daniel′s 2300 year vision completes in the year AD 2333, and this, too, will be discussed later in this Paper. Daniel 8:13-14 (KJV)

[13] Then I heard one saint speaking, and another saint said unto that certain *saint* which spake, How long *shall be* the vision *concerning* the daily *sacrifice*, and the transgression of desolation, to give both the sanctuary and the host to be trodden under foot?
[14] And he said unto me, Unto two thousand and three hundred days; then shall the sanctuary be cleansed.

At this point, the dates associated with the 1260 and 1290 prophecies in Daniel 12 have not been identified in the Pyramid.

The Traditional Interpretation discussed above shows that Daniel′s last week begins in AD 27. The middle of that last week begins after three years, at the start of AD 30, and ends at the end of AD 30. The remaining three years are from the start of AD 31 to the end of AD 33.

Time of Day of the Coming of the Holy Spirit

The end of the fourth corbel, given above, is 08:22 Sunday, 28th May 30. **Acts 2:15 (KJV)**

[15] For these are not drunken, as ye suppose, seeing it is *but* the third hour of the day.

The table below was created to show when the third hour of the day ended on 28th May AD:

Event on 28th May AD 30	Time
Sunrise (Solex 12)	4:47:04
Sunset (Solex 12)	18:59:06
# Daylight Hours (2019)	14:12:02
Length variable hour	1:11:00
End 3rd hour	8:20:04

It is assumed that during daylight there are twelve variable-length hours in a Hebrew day regardless of the actual number of fixed length hours that we would use today, see **John 11:9 (KJV)**

The length of each hour is calculated by determining the number of hours and minutes between sunrise, 4:47 am, and sunset, 18:59, which is 14:12 hours — dividing this by 12 results in 1:11 fixed hours per variable Hebrew hour on that day. To get to the end of the third hour, this is multiplied by three and added to sunrise, and the result is 8:20 a.m. It can be seen that this is two minutes earlier than indicated by the end of the fourth corbel.

The whole Pyramid chronology was slightly shifted so that an event near the top of the Grand Gallery was accurately aligned to a historical event, which led to the alignment of 8:20 am on Pentecost. Base on these two accurate alignments, all the assumptions made regarding the equations used to determine the size of the Pyramid and the lengths of its passages and chambers are, therefore, validated.

It is reasonable to conclude that the seven corbels at the north end of the Grand Gallery symbolize the last week of Daniel′s seventy weeks, which further validates the claim that the Pyramid passages represent Bible chronology.

As an aside, the possible dates of the Crucifixion are limited by the years that Pontius Pilate held the office of the Prefect in Judaea. The following table shows the only possible dates, and day of the week, for which the Crucifixion could have occurred based on the calendar in use herein, which requires that the Vernal Equinox be seen before the New Year is declared.

Year	JD (+2:21)	Julian Date (+2:21)
Start of Year AD 26	1730665.268	18:26, Sunday, 21st April 26
Start of Year AD 27	1731019.264	18:20, Thursday, 10th April 27
Start of Year AD 28	1731403.272	18:31, Wednesday, 28th April 28
Start of Year AD 29	1731758.267	18:25, Monday, 18th April 29
Start of Year AD 30	**1732112.263**	**18:18, Friday, 7th April 30**
Start of Year AD 31	1732495.270	18:28, Wednesday, 25th April 31
Start of Year AD 32	1732850.266	18:22, Monday, 14th April 32
Start of Year AD 33	1733233.273	18:33, Saturday, 2nd May 33
Start of Year AD 34	1733588.269	18:27, Thursday, 22nd April 34
Start of Year AD 35	1733943.265	18:21, Tuesday, 12th April 35
Start of Year AD 36	1734327.273	18:32, Monday, 30th April 36

The last column provides the Julian date and time, in Jerusalem, on which the Crucifixion could have occurred. The Crucifixion occurred on the day of the Passover, which is 14 days after the beginning of the year. In only one year, AD 30, does the Crucifixion occur on a Friday, which is the preparation day before the Sabbath. Please see Mt 27:62, Mk 15:42, Lk 23:54, Jn 19:31, and

Jn 19:42. The calendar in use, therefore, conforms to the Pyramid on this point as they both identify AD 30 as the year of the Crucifixion.

Please note that given the Exodus occurred in 1482 BC, then the year beginning Tishri AD 29 is the 30th Jubilee, which, therefore, encompasses Jesus′ Crucifixion, Jesus′ Ressurection, and the coming of the Holy Spirit.

In summary, the next major chronological point in the Pyramid after Moses broke the two tablets, is Pentecost during AD 30. The south end of the fourth, or middle, corbel of the GG represents this and represents the midst of Daniel′s seventieth week.
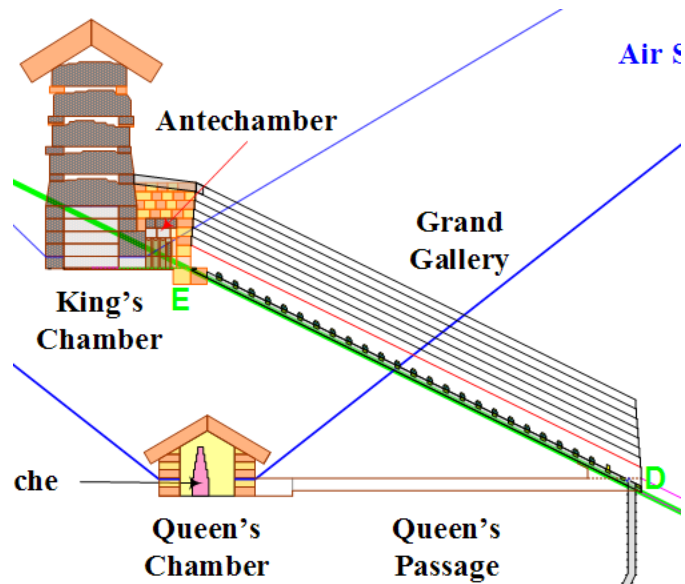
It is concluded that the original seven corbels at the north end of the Grand Gallery represent the last week of Daniel′s seventy weeks.

It should be noted that the lowest corbel on the north wall of the GG has been pushed out of its position by subsidence and its overlap no longer exists. Likewise, Howard Vyse removed the topmost corbel on this wall. The net result is that the number of corbels has been reduced to five from the original seven. Therefore the corbels no longer represent Daniel′s seventieth week, which indicates that the prophecy was fulfilled in the past and has no future fulfillment.

It is possible that the beginning of the GG, Saturday, 6th March 17, represents the 20th birthday of John the Baptist. However, there is insufficient evidence to prove this.

The Grand Gallery

The next major point to be considered will be the south end of the Grand Gallery (GG). The GG begins at the south end of the AP, point D, and proceeds upward to point E at the south end of the GG, where the roof is significantly decreased in height through seven corbels. The sides of the GG roof also consist of 7 corbels.

From ″5 Passage Reconstruction″ the length of the GG from the end of the AP to the start of the 1st Low Passage is 1884.518″ which is then

divided by the timescale, 0.9932″/year = 1897.419 years

multiplied by the number of days in a year, 365.25 = 693032.157 days

added to the JD at the AP/GG junction = 1727332.318+ 693032.157 = JD (TT) 2420364.475

and then converted to Julian Date (+2:21) = 01:44, Thursday, 20th August 1914

On this date, WWI had just begun. Most of the combatants had declared their allegiance and intent. Even though this analysis uses a different timescale than the Edgars, Davidson, and Rutherford, it is curious that the south end of the GG, in this study, should closely indicate the same date in history as they do. However, why WWI? Indeed it involved many of the countries of the world, and it also used new weapons such as tanks and airplanes, and these are prophesied in the Bible. However, as far as can be seen, there is nothing specific that can be attributed to this particular day in biblical terms.

The solution is that the south end of the GG is a starting point for a search that, when carried out, reveals that a relevant event has been hidden until this time in history.

The answer is found in ″5 Passage Reconstruction. ″ On pp 71-72, it is noted that the intersection of the upward extension of the AP roof meets the northward extension of the roof of the 1st Low Passage, exactly two corbels before the vertical end of the GG.

It is instructive to calculate not only the dates of the two corbels leading up to the south end of the GG but the dates of the next two corbels heading south. These two corbels are virtual because they only exist as a mathematical construct. Petrie considered that the extended upward path of

the floor of the GG at this point was also virtual for the same reason since it passes through the Great Step, so there is a precedent for this construct. The following figure shows the details of the Great Step and the Virtual Corbels.

The stone blocks of the pyramid are shaded light orange and yellow. The junction of the extensions of the AP and 1st Low Passage roofs are shown in dashed light blue, and they meet at point L directly below the plane of the face of the second corbel. One corbel is one-seventh of a Cubit, which is also one palm, or four digits since there are seven palms and twenty-eight digits in one cubit.

To the left of the south end of the GG, i.e., the vertical black line is the 1st and 2nd Virtual Corbels shown as dotted vertical red lines, which are all one "corbel" apart.

The horizontal length of the 1st Virtual Corbel is projected onto the slope, which at this point, is the solid green line, which represents Petrie's virtual floor. The length along the slope is the same as for the north end of the GG, i.e.,1207.638 days (TT). Therefore, the Julian Day of the intersect of the red stroke and virtual GG floor is 2420364.475 + 1207.638 = 2421572.113 (TT). This day is 17:03, Sunday, 9th December, 1917. The time is precisely sunset, and on this day, British and ANZAC forces had liberated Jerusalem from the Ottoman Empire, and the seven times of Leviticus 26 ended.

So far the following chronological points, at major features of the Pyramid passages, have been linked to the corresponding Bible dates with an accuracy of better than one day,

Moses 20th birthday -   05:45, Saturday, 29th March 1542 BC

Moses breaks stone tablets which identifies the Exodus - 23:35, Friday, 24th August 1482 BC

Pentecost, which identifies the Crucifixion - 08:22, Sunday, 28th May 30

The Liberation of Jerusalem and the end of the seven times - 17:03, Sunday, 9th December 1917

What is more astonishing is that there is one more point on the 6008-year sloping path which can be accurately identified, and that is the 2nd Virtual Corbel, represented by the leftmost dotted, vertical, red line. The elapsed time, in astronomical years, from the start of the Pyramid chronology to the 2nd Virtual Corbel is:

Length   = APE + AP + GG + 2 Corbels along the slope

                 = 2520.770 + 1547.346 + 1884.518 + 6.568 = 5959.202″

When converted to years, by dividing by the timescale 0.9932″/year, = 5999.9969 years (TT)

This result is 1.146 days short of 6000 years (TT).

This result is quite remarkable and validates the decisions and assumptions that have been made along the way to arrive at this point. In particular, it validates the other hidden date from the 1st Virtual Corbel, which is the day that Jerusalem was liberated, 17:03, Sunday, 9th December 1917.

The date represented by the 2nd Virtual Corbel is JD (+2:21) 05:39, Thursday, 31st March 1921. On this day, Kamil al-Husayni, the Grand Mufti of Jerusalem, died and was replaced the next day, 09:10, Friday, 1st April 1921, by Amin al-Husseini. These two Muftis had utterly different outlooks and allegiances.

Kamil al-Husayni (Wikipedia) - *During the British Mandate for Palestine, he sought compromise with the Jews and British authorities. The British appointed him chairman of the Appeal Courts and later director of the Higher Waqf Committee. The British also made him a Companion of the Order of St Michael and St George (CMG).*

Amin al-Amin al-Husseini (Wikipedia) - *From as early as 1920 he actively opposed Zionism, and was implicated as a leader of the 1920 Nebi Musa riots. Al-Husseini was sentenced to ten years' imprisonment for incitement but was pardoned by the British. In 1921 the British High Commissioner appointed him Grand Mufti of Jerusalem, a position he used to promote Islam while rallying a non-confessional Arab nationalism against Zionism.*

So it can be seen that the 2nd Virtual Corbel signifies a transition from compromise to opposition on the part of the leaders of Jerusalem. The opposition persists today in 2019. However, even though this corbel signifies 6000 years from the beginning of God′s Plan, it does not signify the

beginning of the Millenium! The Millenium will be seen to be the entire horizontal path from the Great Step to the center of the Coffer, and the vertical faces of the Coffer, one of which signifies Satan′s ″Little Season″.

December 9^{th,} 1917 – The End of the Seven Times

The Bible contains prophecies that identify the day, month and year associated with the 9th of December 1917. Further details are found on websites such as:

As Birds Flying: Jerusalem 1917
AS BIRDS FLYING, The Miracle of December 8th
As Birds Flying - 100th anniversary of the deliverance of Jerusalem. (Video)

Using the Rosh Hashanah postponement rules for the Hebrew calendar, the 9th December 1917 was the 24th day of the 9th month (Kislev), of the 5678th year of the Hebrew calendar. However, the astronomical calendar indicates that the previous first sighting of the visible crescent of the new moon occurred at sunset on the 16th of November 1917, which makes sunset on the 9th December 1917 the end of the 23rd day and the beginning of the 24th day. So the actual surrender of Jerusalem and the first movement of British troops into the city took place on the 23rd day of the 9th month, and this is precisely identified by the south end of the 1st Virtual Corbel at the south end of the Grand Gallery of the Great Pyramid. Thus on the 23rd day of the 9th month, Jerusalem was under both Turkish and British rule. It was not until the 24th day of the month that Britain was in complete control for the whole day, and the significance of all this is found in the second chapter of the book of Haggai.

The prophet Haggai mentions the 24th day of the 9th month four times in this chapter. Please note that this correlates with Leviticus 26, which mentions the seven ″times″ punishment four times.

Haggai 2:10 (KJV)

¹⁰ In the four and twentieth *day* of the ninth *month*, in the second year of Darius, came the word of the LORD by Haggai the prophet, saying,

Haggai 2:15 (KJV)

¹⁵ And now, I pray you, consider from this day and upward, from before a stone was laid upon a stone in the temple of the LORD:

Haggai 2:18 (KJV)

¹⁸ Consider now from this day and upward, from the four and twentieth day of the ninth *month, even* from the day that the foundation of the LORD′S temple was laid, consider *it*.

Haggai 2:20 (KJV)

²⁰ And again the word of the LORD came unto Haggai in the four and twentieth *day* of the month, saying,

Not all of these verses mention the day or the month or the day of the month. However, verse 18 provides the complete type for the other three verses. These are "from this day and upward, from the four and twentieth day of the ninth *month*" which links verse 10, In the four and twentieth *day* of the ninth *month*", verse 15, "from this day and upward", and verse 20, "in the four and twentieth *day* of the month", together with verse 18 for a total of four occurrences.

In the first of these references, verses 10 to 14, God is telling the returning Israelites that He considers the work of their hands to be unclean. In verses 15 to 17, before a stone was laid upon a stone in the Temple, God explains to the Jews that despite the work, their efforts are not fruitful because they have turned from Him and have not sought Him. Since these verses reference the Temple, then Jerusalem is identified by association. In verses 18 and 19, God says that from this day forward, even from the day that the foundation of the Temple was laid, then there is a promise of a future blessing. Again Jerusalem is identified by association with the Temple and finally, it can be seen what the blessing is to be from **Haggai 2:20-23 (KJV)**

²⁰ And again the word of the LORD came unto Haggai in the four and twentieth *day* of the month, saying,
²¹ Speak to Zerubbabel, governor of Judah, saying, I will shake the heavens and the earth;
²² And I will overthrow the throne of kingdoms, and I will destroy the strength of the kingdoms of the heathen; and I will overthrow the chariots, and those that ride in them; and the horses and their riders shall come down, every one by the sword of his brother.
²³ In that day, saith the LORD of hosts, will I take thee, O Zerubbabel, my servant, the son of Shealtiel, saith the LORD, and will make thee as a signet: for I have chosen thee, saith the LORD of hosts.

Zerubbabel, the governor of Judah, and Joshua, the son of Josedech, the high priest, were responsible for finishing the second Temple. Zerubbabel was a descendant of King David, and by choosing him as a signet, God promised him that the seed to the Messiah would go through him. Matthew and Luke show that the line of Zerubbabel extended to both Mary and Joseph. Because of this association, we can see that the blessing was to come at a time after Jesus had come into the world.

The shaking of heavens and earth, which in the Bible is an allegory for war, along with the overthrow of heathen kingdoms, is another clue as to when this blessing was to occur.

The liberation of Jerusalem from a heathen kingdom, the Ottoman Empire, occurred on the 24th day of the 9th month, i.e., 9th December during World War I is the only event that satisfies the above indications.

An interesting detail in the blessing is "*and I will overthrow the chariots, and those that ride in them; and the horses and their riders shall come down, every one by the sword of his brother.*" WWI was the first war in which airplanes played a significant role. Take the chariots in the above sentence to be airplanes, the riders to be the pilots, and the horses to be the engines. Writing in the "Conquest of Jerusalem" General Allenby, who had obtained dominance in the air, said as part of his operations that "More than twenty airplanes were destroyed by our airmen or burned by the enemy to avoid capture. " which epitomizes "*horses and their riders shall come down, every one by the sword of his brother.*"

Note that from sunset on the 10th of December to sunset on the 11th was the 25th day of the 9th month of the Hebrew year, which is the first day of Hanukkah, which is a Jewish festival commemorating the rededication of the Second Temple in Jerusalem. On this day, General Allenby walked into Jerusalem for the first time to accept its official surrender from the Turks.

As for the year of the liberation of Jerusalem, **Daniel 12:12 (KJV) says**

[12] Blessed *is* he that waiteth, and cometh to the thousand three hundred and five and thirty days.

The 1335 days in the above verse refers to that number of years.

The video referenced above, at time 21 to 24 minutes, presents evidence of an Arabic coin which equates the Gregorian year 1917 to the Islamic year 1335. The Islamic calendar is the same as the Hebrew in that they both define the beginning of the month in the same way. The Islamic calendar always uses 12 months to define a year, but the Hebrew calendar intercalates a 13th month when necessary to keep the year aligned with spring. The Islamic calendar begins at the first visible sighting of the crescent of the new moon that occurred on July 16th AD 622, which is when Mohammed departed Mecca for Medina. 1335 x 12 new moons later was 18th October 1917, and 52 days after that, Jerusalem was captured by the British. So the liberation of Jerusalem is associated with 1335 and historically satisfies the prophecy of Daniel 12:12.

The use of the number 1335 needs to be understood. To celebrate somebody being 100 years old, we will do that on their 100th birthday. We will not celebrate in the preceding year even though that is that person′s 100th year of life. Likewise, when Daniel says we should ″come to the 1335th year″, we should wait until 1335 years have elapsed rather than the beginning of the 1335th year. Hence the use of the 1335th ″birthday″ above, 18th October 1917, rather than one year earlier.

The above websites also show how General Allenby′s use of airplanes satisfies the prophecy in **Isaiah 31:5 (KJV)**

[5] As birds flying, so will the LORD of hosts defend Jerusalem; defending also he will deliver *it; and* passing over he will preserve it.

Time of Day of the Calculated Dates

As expected, the theoretical lengths discussed above, when converted to dates, show alignment between Pyramid features and Biblical events. The missing stone in the Entrance Passage roof aligns with the date that Moses broke the tablets of the Law. The south end of the fourth corbel at the north end of the Grand Gallery aligns with the day of Pentecost. The 1st Virtual Corbel aligns with the day on which Jerusalem was liberated at the end of the seven times. So far, the alignment has only been discussed with the resolution of one day but, note that the time of day of some Pyramid features are aligned with the corresponding Bible event to within a few minutes.

For example, the date and time of the liberation of Jerusalem, as indicated by the 1st Virtual Corbel, was adjusted so that it represents 17:03, Sunday, 9th December 1917, which is sunset. Because the Hebrew day changes at sunset, the 1st Virtual Corbel then indicates the day that Jerusalem was liberated, 9th December, and the next day, which was the 24th Kislev. It was manually adjusted and, as a consequence, all other times and dates from the Pyramid were

adjusted by the same amount (TT). The impact was that the time and date of Pentecost was moved, in terms of the Pyramid, to just 2 minutes after the end of Peter's ″third hour″, Acts 2:14, which was shown in the table on page 52. Since there are about 1900 years between these two dates, a match as close as this was appreciated.

The Pyramid indicates that Moses broke the tablets at 23:35. There is no corresponding time given in the Bible, but since Moses had just come down from the mount, this would indicate the end of the day rather than the beginning.

Genesis 3:8 indicates that God was walking in the Garden in the cool of the day, and usually, this is considered to be the evening. However, the translation of this ″time of day″ is questioned, by some, in that the word for ″cool″ is mostly translated as wind. The intent of this verse may not be to indicate a time of day since the use of the word wind conveys the impression given when God is walking and communicating with people. Also, it has been determined that point G represents the time when Adam lost eternal life, the specific time of which is not defined in the Bible, so a close match is not anticipated.
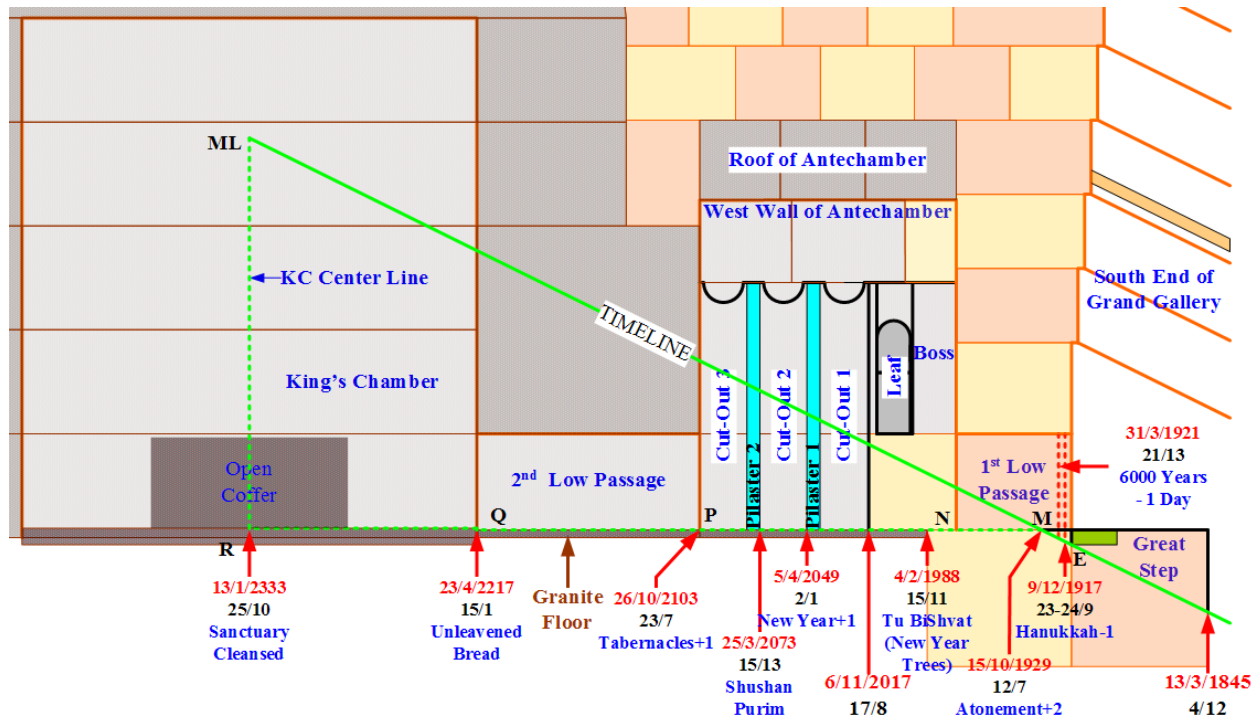
Appendices 6-1 and 6-2

To avoid the need to interrupt the narrative of the Timeline, Appendix 6-1 of this Paper has been created to calculate the dimensions and Julian Day number for all the major and minor features from the beginning to the end of the King's Chamber System (KCS). Those features that have already had dates calculated are included.

Appendix 6-2 of this Paper is an attempt to define the theoretical dimensions of the Antechamber mathematically. For all of the other Pyramid dimensions, it has been possible to create equations that define their theoretical lengths. However, this has not been possible for the Antechamber since it has been distorted by seismic activity and subsidence. Two solutions are presented and the second one selected but, since it has not been possible to fit many Holy days to the features, for either solution, there is low confidence in these theoretical dimensions. An alternative interpretation for the events which are happening in the Antechamber is presented in Paper 7 which is considered to be more appropriate.

The King′s Chamber System

The following diagram shows how the timeline traverses the King′s Chamber System from the east looking west. The Great Step is included in the KCS because its top face, or tread, is in the same plane as the floor of the two Low Passages and the Antechamber. The plane of the floor of the King′s Chamber is about 0.7 ″ higher because of the small upward step at its entrance.

The period from the Great Step to the center of the Coffer is from 1845 to 2921, which is 1076 years. It, therefore, provides time for the Millenium, Satan′s ″Little Season″ and for the Judgment of the Great White Throne. These periods will be defined herein.

The solid green timeline enters the figure at the bottom right along the floor of the GG. It passes through the Great Step, the 1st Low Passage, through the Antechamber, above the 2nd Low Passage and finally turns west, into the page, at the mid-line (ML) of the King′s Chamber. At this point, its height is just a little lower than the top of the fourth course of the wall. The dashed green lines are the horizontal and vertical projections of the timeline. Limestone blocks are shown colored yellow or orange, while granite blocks are shades of light brown. The width of the Antechamber, into the page, is 48″, while the three Cut-Outs and two Pilasters form three slots on both sides of the chamber, which, it has been suggested, contained three granite Portcullis.

The figure above also shows a selection of dates at significant points along the floor of the KCS. The Gregorian date is red, the Hebrew date is black (dd/mm). Many of the features, but not all of them, have an associated Holy Day, or historical day relative to Jerusalem shown in blue. The current year, 2019, occurs just south of the north end of Cut-Out 1, which is the Gregorian date 6th November 2017 and the seventeenth day of the eighth Hebrew month. No historical events have been found that occurred on this day or the day represented by the face of the Great Step.

Appendix 6-1 of this Paper contains a table that lists the distances between the major and minor features of the KCS and converts them to Julian Days in Jerusalem (+2:21). The Table below has been derived from the table in Appendix 6-1 and lists all the KCS features, Hebrew date (dd/mm), a note describing any relevance of the Hebrew date, and the Gregorian date (+2:21).

Feature	Hebrew Date (dd/mm)	Note	Gregorian Date (+2:21)
Face of Great Step	04/12	Pyramid Central Vertical Plane	13th March 1845
South End of Grand Gallery	27/5	Start of WWI 7/28/1914	20th August 1914
1st Virtual Corbel	23-24/9	Liberation of Jerusalem by UK and Anzac Forces	9th December 1917
2nd Virtual Corbel	20/13	5999.9969 Years	31st March 1921
6000 years TT from Beginning (365.25 Days/yr.)	21/13	6000.0004 Years	1st April 1921
End of Sloping Timeline in 1st Low Passage	12/7	Day of Atonement +2, 1929 Stock Market Crash 14 days later and start of the Great Depression	15th October 1929
End of 1LP (From the end of GG)	22/12	2 days later last US soldier leaves Vietnam	27th March 1973
Granite Floor N	15/11	Tu Bi'Shvat	4th February 1988
Leaf Slot N	15/4		14th July 1995
Leaf Slot S	12/6		19th September 2013
Cut-out 1 N	17/8		6th November 2017
Cut-out 1 S	8/6		25th August 2042
Pilaster 1 S	2/1	New Year +1	5th April 2049
Cut-out 2 S	15/13	Shushan Purim in Jerusalem	25th March 2073
Pilaster 2 S	10/8		5th November 2079
Cut-out 3 S - 2LPN/ACS	23/7	Day after Feast of Tabernacles	26th October 2103
2LPS/KCN	15/1	3698th anniversary of Exodus (43x43x2). Jesus entry into kingdom Satan chained in the pit	23rd April 2217
Mid KC (Turn West)	25/10	Daniel 2300 end, Sanctuary cleansed - 77th Jubilee and the 4th year of 777th Olympiad	13th January 2333
N/S Centerline	5/2		3rd May 2541
Start of Coffer (Outside)	5/9		11th December 2727
Top of Coffer (Outside)	14/5	Tu B'Av - 1 (Minor)	3rd August 2821
Top of Coffer (Inside)	7/12	Moses Death	15th March 2828
Floor of Coffer (Inside)	14/13	Purim	30th March 2906
Start of 2921	1/1	Start of Year	31st March 2921
15th Day 2921	15/1	Start of Unleavened Bread	14th April 2921
Center of Coffer (End of Pathway & Timeline)	20/1	Wave Sheaf/ First Fruits - 89th Jubilee	Sunday, 20th April 2921

The years shaded in green are jubilee years, i.e., 2333 and 2921.

The 1st Low Passage

The first four rows of the Table, after the header row, show that the 1st Low Passage marks the month of the beginning of WWI followed by the 1st Virtual Corbel which marks the 9th December 1917 and then the 2nd Virtual Corbel marks the end of the first six millennia and the beginning of the seventh. The import of these four features has already been discussed.

Moving on a little distance from the 2nd Virtual Corbel along Petrie′s upward sloping virtual floor, the virtual height of the passage is reduced until point M is reached. At this point, the height is the lowest in any of the upper passages, and it indicates the beginning of a time of tribulation.

The Gregorian date of point M is Tuesday, 15th October 1929. The Hebrew date is the twelfth day of the seventh month, which is the 2nd day after the Day of Atonement.

The end of the 1st Low Passage is at point N, and the Gregorian date is Tuesday, 27th March 1973, which is the 22nd day of the twelfth Hebrew month.

So the period of the 1st Low Passage is from 20th August 1914, which is the 27th day of the 5th Hebrew month, to Tuesday, 27th March 1973, which is the 21st day of the 12th Hebrew month. Two days after this date saw the last US soldier leave Vietnam. During this period, there was much turmoil in the world. This period includes the following wars from thoughtco :

1910–1920   Mexican Revolution
1914–1918   World War I
1915–1918   Armenian Genocide
1917   Russian Revolution
1918–1921   Russian Civil War
1919–1921   Irish War of Independence
1927–1937   Chinese Civil War
1933–1945   Holocaust
1935–1936   Second Italo-Abyssinian War (also known as the Second Italo-Ethiopian War or
*   the Abyssinian War)*
1936–1939   Spanish Civil War
1939–1945   World War II
1945–1990   Cold War
1946–1949   Chinese Civil War resumes
1946–1954   First Indochina War (also known as the French Indochina War)
1948   Israel War of Independence (also known as the Arab-Israeli War)
1950–1953   Korean War
1954–1962   French-Algerian War
1955–1972   First Sudanese Civil War

1956   Suez Crisis
1959   Cuban Revolution
1959–1975   Vietnam War
1967   Six-Day War

Author′s Note:

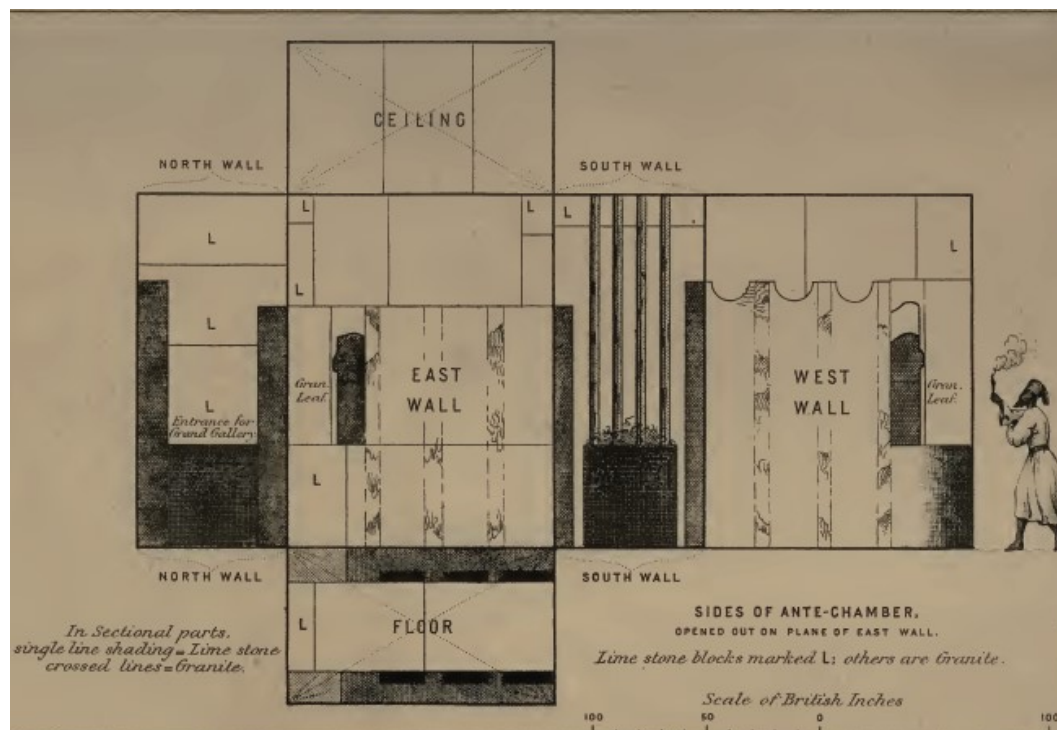1945 and on   Nuclear weapons and nuclear power were invented and used

Fourteen days after point M, the US stock market crashed, which lead to the Great Depression. The Stock Market did not show recovery until 1932 when it reached its lowest point. The Great Depression is considered by [Burton W. Folsom](#) to have ended because of the military spending stimulus of WWII.

The Antechamber

In the figure above, the Antechamber begins at point N and ends at point P, which is Friday, 26th October 2103, and also the 23rd day of the 7th Hebrew month, which is the day after the 8th day of the Feast of Tabernacles.

The Antechamber period is, therefore, from point N, Tuesday, 27th March 1973, which is the 21st day of the 12th Hebrew month to point P, 26th October 2103, which is the 23rd day of the 7th Hebrew month. This period includes the current year, 2019.

The features of the Antechamber are shown in the figure from Smyth below:

Most passages and chambers within the Pyramid are made of limestone. Here in the Antechamber, the limestone blocks are labeled ″L″, and the granite blocks are unlabelled. The limestone blocks at the north end are rapidly replaced with granite blocks until there are just two remaining at the south end. The transition from limestone to granite does not occur in the same vertical plane but is staggered. Once the 2nd Low Passage and King′s Chamber are entered, all the walls, floors, and ceilings are made of granite.

Only three of the eight features between N and P have dates that correspond to Holy Days or Jewish holidays. The first is the start of the Granite Floor, which is the start of the Jewish agricultural year, Tu BiShvat. As explained earlier, this is the same Holy Day that occurred one day before Adam lost eternal life because he ate of the Tree of Knowledge of Good and Evil. Here it occurs on the very day indicated by the start of the granite floor, and as noted, the whole Antechamber signifies a transition from limestone floors, walls, and ceilings to granite. The Hebrew date is the 15th day of the 11th month, and the Gregorian date is 4th February 1988. It has not been possible to associate a historic event with this date, so it is interpreted as a sign.

Looking ahead, it can be seen that the 2nd Low Passage is approaching, which indicates tribulation like the 1st Low Passage, and it and the King′s Chamber surrounds one with granite. Wikipedia - Granite says that ″*Granite is nearly always massive (i.e., lacking any internal structures), hard, and tough*″, and so it can act as protection. Therefore in the 2nd Low Passage and the King′s Chamber, it can be interpreted as the Armour of God. The armor is described in **Ephesians 6:10-18 (KJV)**

10 Finally, my brethren, be strong in the Lord, and in the power of his might.
11 Put on the whole armour of God, that ye may be able to stand against the wiles of the devil.
12 For we wrestle not against flesh and blood, but against principalities, against powers, against the rulers of the darkness of this world, against spiritual wickedness in high *places*.
13 Wherefore take unto you the whole armour of God, that ye may be able to withstand in the evil day, and having done all, to stand.
14 Stand therefore, having your loins girt about with truth, and having on the breastplate of righteousness;
15 And your feet shod with the preparation of the gospel of peace;
16 Above all, taking the shield of faith, wherewith ye shall be able to quench all the fiery darts of the wicked.
17 And take the helmet of salvation, and the sword of the Spirit, which is the word of God:
18 Praying always with all prayer and supplication in the Spirit, and watching thereunto with all perseverance and supplication for all saints;

At this time, we are at a point just after the start of Cut-Out1, which is surrounded by granite. We should have already put on the whole armor of God to withstand the present evil days of the Antechamber when Christianity is under attack. We should know the truth, which can only be obtained from the word of God and act upon it righteously, which is to keep the law and preach

the gospel of peace. We should take and yield the shield of faith and quench all the fiery darts of the wicked and take the helmet of salvation and the sword of the Spirit, which is the word of God. We should have started doing this in 1988 as the Antechamber is transitioning from limestone to granite, but we should surely have on all the armour of God by the beginning of the 2nd Low Passage which, at point P, is the next day after the 8th day of the Feast of Tabernacles in 2103. Get going! You and your loved ones have but one lifetime left to put on the whole armor to protect you against over 100 years of tribulation of the 2nd Low Passage.

The second dated feature is the south end of Pilaster 1, which is one day after the new year of 2049. Remember that the 2nd Virtual Corbel marks one day before the end of 6000 (TT) years, and as was explained both that day and the next are relevant to God's history, particularly to Jerusalem. Also, N marks two days after Atonement Day 1929. A date, identified by a feature, can, therefore, be related to the day before or after in terms of a Holy Day. On this basis, it is reasonable to assume that one or more events relevant to Israel, or more likely Jerusalem, will occur on the first or second Hebrew day of 2049.

The third date is identified by the south end of the second cut-out, which is the Jewish holiday Purim for Jerusalem in the year 2073. Purim is not a God-given Holy Day but relates to the salvation of the Jews from Haman, as described in the Book of Esther. The holiday occurs on the 14th day of the 12th, or if intercalated that year the 13th month, which is the day following the victory of the Jews. However, according to [Wikipedia Purim](#)

Purim is celebrated on the 15th of the month of Adar on what is known as Shushan Purim, since fighting in the walled city of Shushan continued through the 14th day of Adar.[10] Today, only Jerusalem and a few other cities celebrate Purim on the 15th of Adar.

So on the 15th day of the 13th Hebrew month of 2073, it seems likely that the Jews in Jerusalem will overcome their enemies.

Based on the above, it can be seen that by relating these precise future dates to God's, and sometimes Jewish, Holy Days, it is possible to arrive at a reasonable prediction for what might happen on those days.

The next date is defined by the south end of the Antechamber, which marks one day after the last of God's Holy Days in the 7th month, which is the 8th day of the Feast of Tabernacles. After this, the 2nd Low Passage is entered, which is the same height, 43.6″, as the 1st Low Passage. Much tribulation occurred during the period of this passage, and so we can expect the same for the 2nd Low Passage. Alas, it will last nearly 114 years until the King's Chamber is entered.

The Hebrew date is significant because, during the 7th month, which is Tishri, there are multiple Holy Days as follows:

1st Tishri   **Leviticus 23:24 (KJV)**

²⁴ Speak unto the children of Israel, saying, In the seventh month, in the first *day* of the month, shall ye have a sabbath, a memorial of blowing of trumpets, an holy convocation.

10th Tishri – Day of Atonement - **Leviticus 23:27 (KJV)**

²⁷ Also on the tenth *day* of this seventh month *there shall be* a day of atonement: it shall be an holy convocation unto you; and ye shall afflict your souls, and offer an offering made by fire unto the LORD.

15th – 22nd Tishri – Feast of Tabernacles - **Leviticus 23:34-36 (KJV)**

³⁴ Speak unto the children of Israel, saying, The fifteenth day of this seventh month *shall be* the feast of tabernacles *for* seven days unto the LORD.
³⁵ On the first day *shall be* an holy convocation: ye shall do no servile work *therein*.
³⁶ Seven days ye shall offer an offering made by fire unto the LORD: on the eighth day shall be an holy convocation unto you; and ye shall offer an offering made by fire unto the LORD: it *is* a solemn assembly; *and* ye shall do no servile work *therein*.

So the 23rd day of Tishri, after the final Holy Day for that year, has ended, and the final tribulation begins. Note that the first of these Holy Days is the Feast of trumpets, and it might be that this indicates the ″Last Trump″ occurs a few weeks before entry into the 2nd Low Passage.

Why the final Tribulation? After the end of the 2nd Low Passage, the timeline only has to traverse the King′s Chamber, and, given its height of 235″, little to no tribulation is expected, and so this chamber represents the Kingdom of Heaven on earth. That makes the 2nd Low Passage the final tribulation along the Pyramid timeline. At point Q it enters into the King′s Chamber, which can be taken to be the start of the Kingdom of God, as seen in **Acts 14:22 (KJV)**

²² Confirming the souls of the disciples, *and* exhorting them to continue in the faith, and that we must through much tribulation enter into the kingdom of God. ′

Point Q has three witnesses to validate its date. The first is that it is the 15th day of the first Hebrew month, which is the first day of the Feast of Unleavened Bread and, therefore, the anniversary of the Exodus. However, it is not just any anniversary of the Exodus because from 1482 BC to AD 2217, there are 3698th years after subtracting one year because there is no year zero. **Exodus 12:41 (KJV)** tells us how and when the Exodus occurred:

⁴¹ And it came to pass at the end of the four hundred and thirty years, even the selfsame day it came to pass, that all the hosts of the LORD went out from the land of Egypt.

The factors of 430 are   43 × 5 × 2   (Jacob′s Date of Birth)

The factors of 3698 are   43 × 43 × 2

Up to this point, there have been some very remarkable dates identified, such as Moses′ 20th birthday, the day Moses threw down the tablets of the law, the date of Pentecost, the liberation of Jerusalem, and a warning to put on the whole armor of God. After 6296 years, from the start of the Pyramids timeline, a date and a year are reached at the entry to the King′s Chamber, TO THE DAY, which shares two out of three factors with a date 3698 years earlier. To me, this is not a coincidence, it is stunning, and I hope you share that feeling with me.

However, there is still the third witness to the fact that this a very significant day in God′s plan.

Point Q is the entry into the King′s Chamber, and the Pyramid indicates it to be the Gregorian date April 23rd, which is St. Georges Day, and as legend has it, he slew a dragon.

If the King′Chamber represents Jesus′ kingdom on earth, then this is the day He will enter into it. Before he can do that, the current Prince of this world will need to be removed because there will be no co-regency with him. **John 12:30-32 (KJV)**

30 Jesus answered and said, This voice came not because of me, but for your sakes.
31 Now is the judgment of this world: now shall the prince of this world be cast out.
32 And I, if I be lifted up from the earth, will draw all *men* unto me.

Moreover, then we can see that the Dragon, which is the Devil, or Satan, who is the Prince of this world will be chained up and sealed in the pit, **Revelation 20:1-6 (KJV)**

1 And I saw an angel come down from heaven, having the key of the bottomless pit and a great chain in his hand.
2 And he laid hold on the dragon, that old serpent, which is the Devil, and Satan, and bound him a thousand years,
3 And cast him into the bottomless pit, and shut him up, and set a seal upon him, that he should deceive the nations no more, till the thousand years should be fulfilled: and after that he must be loosed a little season.
4 And I saw thrones, and they sat upon them, and judgment was given unto them: and *I saw* the souls of them that were beheaded for the witness of Jesus, and for the word of God, and which had not worshipped the beast, neither his image, neither had received *his* mark upon their foreheads, or in their hands; and they lived and reigned with Christ a thousand years.
5 But the rest of the dead lived not again until the thousand years were finished. This *is* the first resurrection.
6 Blessed and holy *is* he that hath part in the first resurrection: on such the second death hath no power, but they shall be priests of God and of Christ, and shall reign with him a thousand years.

All the events above will occur by **19:30 (UT+2:21)** on **Wednesday, 23rd April 2217**.

That is 198 years from now and 372 years since the beginning of the millennium in 1845. Note that verses 2 through 6 contain the words ″thousand years″. Verses 3 and 5 indicate that these events do not occur at the beginning of the thousand years; they indicate that the period which follows only lasts until the thousand years have been fulfilled or finished. The Pyramid, therefore, conforms with this interpretation because it indicates that the events occur about 372 years after the millennia began.

It should also be pointed out that Matthew, 24:50 and 25:13, and Mark 13:32 tell us that no man knows the day or the hour of Jesus′ coming so it cannot be on this date. It has to be sometime before that, and probably it will be sometime toward the end of the period of the 2nd Low Passage.

The final event shown in the KCS in the view looking west is point R, where the Timeline turns west after having spent 4080 + 2333 -1 = 6412 years heading south. This point represents 2300 years from when Daniels seventieth week in AD 33. Note that this year is the 77th Jubilee and also the 4th year of the 777th Olympiad. The simultaneous occurrence of these two witnesses, with multiple numbers of sevens in them, points to Daniel′s seventy weeks of seven years.
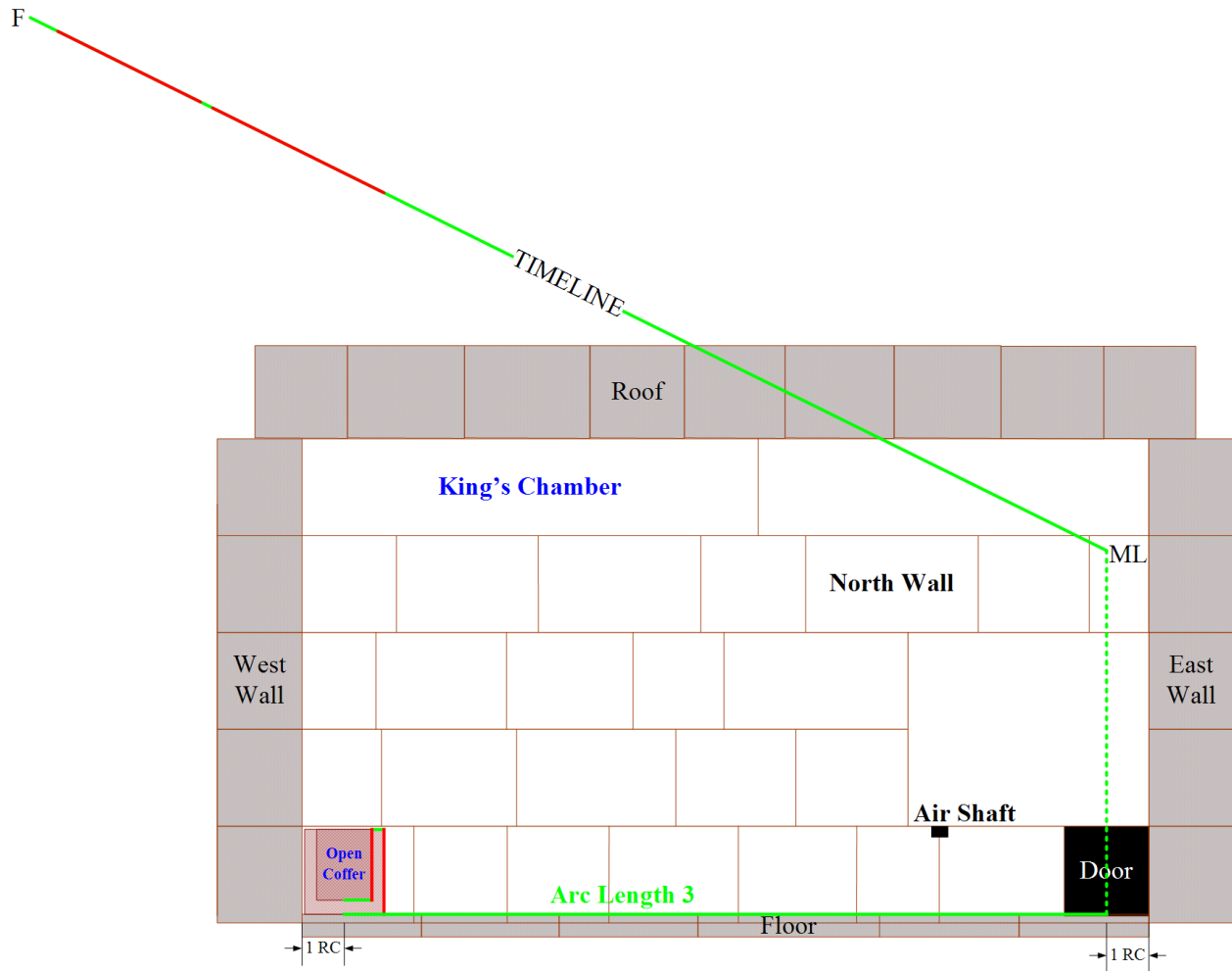
Note that in **Daniel 8:13-14 (KJV)**

^{13} Then I heard one saint speaking, and another saint said unto that certain *saint* which spake, How long *shall be* the vision *concerning* the daily *sacrifice*, and the transgression of desolation, to give both the sanctuary and the host to be trodden under foot?
^{14} And he said unto me, Unto two thousand and three hundred days; then shall the sanctuary be cleansed.

We see here that the vision concerning the daily sacrifice and the transgression of desolation is referenced, and as discussed, this represents the end of Daniel′s last week, which occurred in AD 33. Two thousand three hundred years later, per this verse, is AD 2333. To be precise, the Pyramid indicates 03:24, Friday, 13th January 2333, and this is when the Sanctuary will be cleansed, and the Timeline can now move in the right direction, west instead of south, toward the center of the Pyramid and the end of God′s plan.

The following diagram shows how the timeline traverses the King′s Chamber System from the south looking north. The Timeline, in solid green, enters at point ML from the previous diagram showing the view looking west through the King′s Chamber. The Timeline continues rising, passing through the two red sections corresponding to the projections of the vertical walls of the open Coffer. Finally, the Timeline finishes at point F.

Continuing along the Timeline, we pass over the centerline of the Pyramid on 3rd May 2541 and come to the foot of the east wall of the Open Coffer on 11th December 2727. Neither of these dates is recognized as major or minor Holy days.

Note that there is no lid on the Coffer and whether there ever was one is not known. At the top of the east wall of the Coffer, the date 3rd August 2821, which is the fourteenth day of the fifth Hebrew month, is reached, which is the date before the minor Jewish festival Tu B′Av on the fifteenth.

Wikipedia Tu_B′Av says *According to the Mishna, Tu B'Av was a joyous holiday in the days of the Temple in Jerusalem, marking the beginning of the grape harvest. Yom Kippur marked the end of the grape harvest.*

Which brings to mind **Isaiah 18:5-7 (KJV),** which describes the return of God′s people:

⁵ For afore the harvest, when the bud is perfect, and the sour grape is ripening in the flower, he shall both cut off the sprigs with pruning hooks, and take away *and* cut down the branches.

In passing, please note that Isaiah 18, of course, precedes Isaiah 19, which defines the Great Pyramid and where it is located, and this was discussed in "1 Introduction".

It can be seen that the top outside edge of the Open Coffer symbolizes the gathering or harvesting of God's people to the events that will transpire after this date.

The inside top edge of the Coffer indicates the date 15th March 2828, which is the seventh day of the twelfth Hebrew month the day of the year during which Moses died. There has to be a time for Satan's "Little Season" and another for the Judgment of the Great White Throne before the end of God's Plan. There are but two periods left at this point, which are the inside wall of the Coffer and half the floor to the center. So, the inside top edge of the Coffer marks the beginning of Satan's "Little Season" which is symbolized by the inside face of the Coffer. Its period is from 15th March 2828 to 30th March 2906, about the length of life of a typical man in these days, about 78 years. The end date is the fourteenth day of the thirteenth month, which is Purim when the Jews celebrate being saved from Haman in Esther's time. **Revelation 20:7-9 (KJV)** reveals what is to happen during Satan's "Little Season".

⁷ And when the thousand years are expired, Satan shall be loosed out of his prison,
⁸ And shall go out to deceive the nations which are in the four quarters of the earth, Gog and Magog, to gather them together to battle: the number of whom *is* as the sand of the sea.
⁹ And they went up on the breadth of the earth, and compassed the camp of the saints about, and the beloved city: and fire came down from God out of heaven, and devoured them.

Satan gathers the nations together to battle the saints at Jerusalem but is devoured by fire from God out of heaven. It is quite apt that this period begins with a symbol of the death of God's people, i.e., Moses' death foretelling a forthcoming battle under God's protection, and ends with a symbol of salvation from God, i.e., Purim.

The final date of God's Plan, 20th April 2921, is represented by the center of the Coffer. It will be the day during the Feast of Unleavened Bread when the first fruits of the wheat harvest were waved by the priest before Jehovah as commanded in **Leviticus 23:11 (KJV)**

¹¹ And he shall wave the sheaf before the LORD, to be accepted for you: on the morrow after the sabbath the priest shall wave it.

As can be seen in the table on page 62, the start of 1921 is 31st March 2921, and the Feast of Unleavened Bread begins fifteen days later on Monday, 14th April 2921. The center of the Coffer indicates the date Sunday, 20th April 2921, which is the first day of the week after the Sabbath that occurs during the feast. It is, therefore, the ″morrow after the Sabbath″, per verse 11 above that makes it the Wave Sheaf or First Fruits day. This is the day of the year AD 30, in which Jesus became the first fruit of the resurrection.

Jesus was crucified on the day before the beginning of the Feast of Unleavened Bread, which, as always, began on the 15th day of the first Hebrew month. Jesus was crucified on Friday, 7th April, in the late afternoon and buried that same day, which is, therefore, the first day of his death. The second day was Saturday 8th April, which was the Sabbath and also the start of the Feast of Unleavened Bread, and so the next day, 9th April, was the third day of His death upon which He rose from the dead. Since it was the ″morrow after the Sabbath″, He is considered to be the first fruits of the resurrection. The equivalent day in 1921 is, therefore the 20th April which is the date indicated by the center of the Coffer and it, therefore, represents the fruits of the final resurrection, and the end of God′s Plan where all those who were to be resurrected have been resurrected, **Revelation 20:11-15 (KJV)**

[11] And I saw a great white throne, and him that sat on it, from whose face the earth and the heaven fled away; and there was found no place for them.
[12] And I saw the dead, small and great, stand before God; and the books were opened: and another book was opened, which is *the book* of life: and the dead were judged out of those things which were written in the books, according to their works.
[13] And the sea gave up the dead which were in it; and death and hell delivered up the dead which were in them: and they were judged every man according to their works.
[14] And death and hell were cast into the lake of fire. This is the second death.
[15] And whosoever was not found written in the book of life was cast into the lake of fire.

Summary

The accurate reconstruction of the internal passageways of the Great Pyramid, through mathematical equations, has led to the creation of a Timeline which has been shown matches Bible Chronology. The Timeline covered the complete Bible story from Adam′s loss of eternal life to the eventual recovery of that for all those found in the Book of Life. The use of Holy days, where possible, and details of the passages such as the missing stones in the EP and the seven corbels at the beginning of the GG identified the symbolism of specific features,

It is seen that the Timeline started at point G, outside of the Pyramid, but on the line of the floor of the EP. At this point, Adam lost eternal life the day after Tu BiShavat, and everything ran downhill until Moses′ 20th birthday when God′s plan provided an upward path, which led to the Exodus of his people and the giving of the law. From the beginning, God′s people disobeyed

Him, and Moses broke the tablets of the law. Eventually, the Israelites entered the Promised Land, but through their backsliding, God later expelled them for seven times.

During the 2520 years of the seven times punishment, God sent His only begotten Son Jesus to provide salvation from sin because the law could not do this. The seven corbels at the north end of the GG represent Daniel′s seventieth week, and the south end of the fourth of these corbels indicate the date of Pentecost on May 28th AD 30. At the end of the seven times punishment, on 9th December 1917, God restored Jerusalem to His people who are identified as the British, and their kindred, and, as a result, they are identified as the lost sheep of the Hosue of Israel.

Very soon after the liberation of Jerusalem, the tenure of the Promised Land passed to the Jews by the Balfour Declaration, which brings us up to the present time, 2019. We can see some of the events that the future holds, especially the entrance into the Kingdom on April 23rd, 2217, followed by the cleansing of the Sanctuary and the resurrection to eternal life.
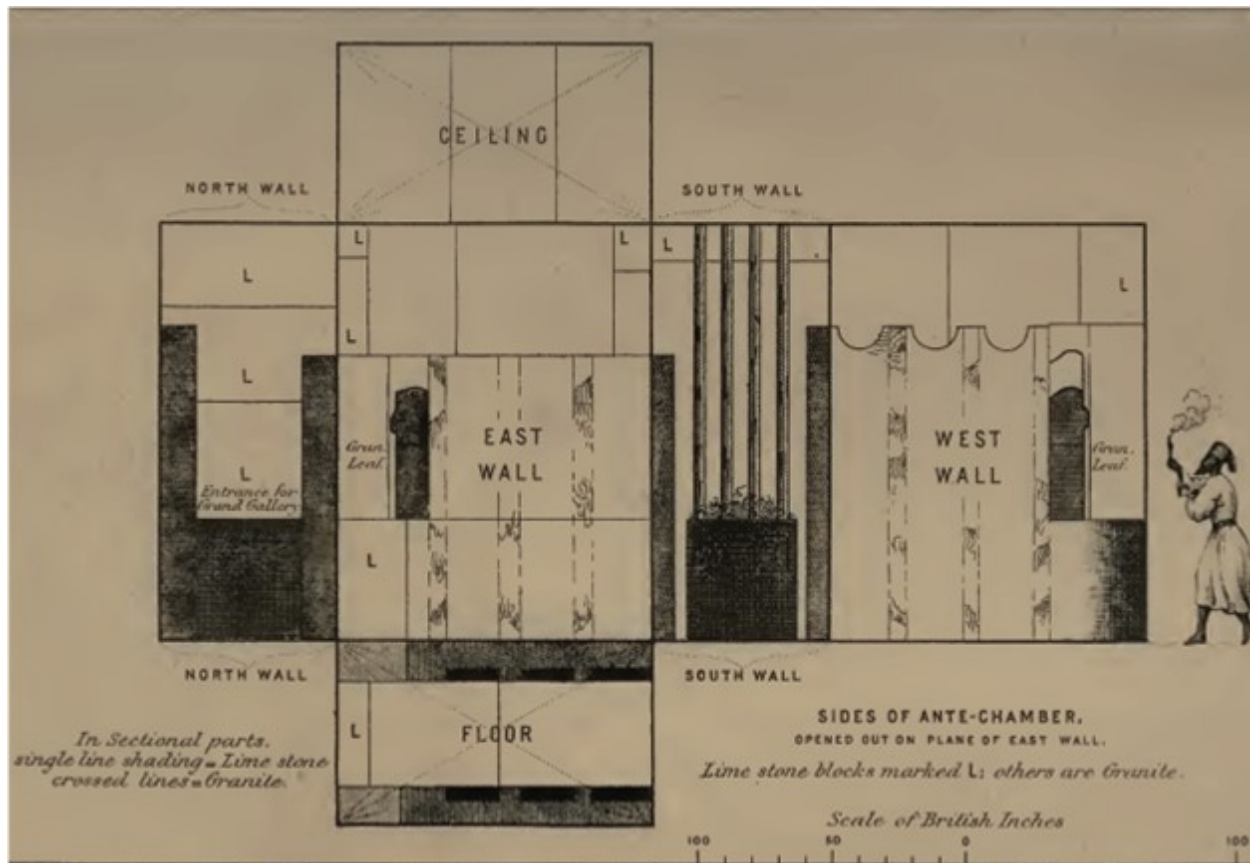
The Pyramid provides these indications along its Timeline most accurately, and the original hypothesis is proven using all the exact matches between the Pyramid passages and Bible chronology.

Appendix 6-1 King's Chamber System - Length and JD Table

Feature	Length ″	Type	Corrected for Type	Length ″ from Start	JD (+2:21)
Face of Great Step	1815.557	s	1815.557	5883.673	2395004.173
South End of Grand Gallery	1884.518	s	1884.518	5952.634	2420364.572
1st Virtual Corbel	3.284	s	3.284	5955.918	2421572.210
2nd Virtual Corbel	3.284	s	3.284	5959.202	2422779.849
6000 years TT from Start (365.25 days/yr.)	5959.205	s	5959.205	5959.205	2422780.995
End of Sloping Timeline in 1st Low Passage	15.053	s	15.053	5967.687	2425900.280
End of 1LP (From end of GG)	52.179	h	58.205	6010.839	2441769.400
Granite Floor N	13.228	h	14.755	6025.594	2447195.645
Leaf Slot N	19.851	h	22.144	6032.983	2449912.830
Leaf Slot S	16.191	h	18.061	6051.044	2456554.840
Cut-out 1 N	3.680	h	4.105	6055.149	2458064.387
Cut-out 1 S	22.079	h	24.629	6079.778	2467121.673
Pilaster 1 S	5.888	h	6.568	6086.345	2469536.949
Cut-out 2 S	21.343	h	23.808	6110.153	2478292.325
Pilaster 2 S	5.888	h	6.568	6116.721	2480707.601
Cut-out 3 S - 2LPN/ACS	116.263	h	129.690	6140.529	2489462.976
Floor Joint	30.310	h	33.811	6174.340	2501896.821
2LPS/KCN	101.048	h	112.719	6253.248	2530915.313
Mid KC (Turn West) (Daniel 2300 end)	103.035	h	114.935	6368.182	2573182.642
N/S Centerline	185.463	h	206.883	6575.065	2649263.832
Start of Coffer (Outside)	166.144	h	185.332	6760.398	2717419.896
Top of Coffer (Outside)	41.214	v	93.010	6853.408	2751624.408
Top of Coffer (Inside)	5.888	h	6.568	6859.975	2754039.684
Floor of Coffer (Inside)	34.345	v	77.508	6937.484	2782543.444
Start of 2921	0.000	u		0.000	2788023.267
14th Day2921	0.000	u		0.000	2788036.267
15th Day 2921	0.000	u		0.000	2788037.267
Center of Coffer (End of Pathway)	13.406	h	14.954	6952.438	2788042.741

Appendix 6-2 – Dimensions of the Antechamber

Smyth′s diagram of the Antechamber is shown below. The walls and floors have been opened out for a better understanding of the features.

The ranges of the measurements of the Antechamber and its features are large, so it is challenging to derive sound mathematical expressions for them. It has been shown that the presence of the year line, year circle, and year square at the center of the floor of the Antechamber confirms that its major dimensions are related to the year value, which is 365.25 days.

The length of the Antechamber is the diameter of the year circle, Y/π, which is 365.25/π or 116.263″. The granite floor starts at the length of one side of the year square, 103.035″, from the south wall of the Antechamber, which is, therefore, 116.263 – 103.035 = 13.228″ from the north wall.

Smyth′s data is used for the Antechamber because he measured at different heights above the floor and because it is far more complete and extensive than Petrie′s. The following table shows the variation in Smyth′s measurements of the Antechamber as they relate to the features on the side walls.

Feature Length	East		West		East	West	Min	Max	Range	Avg
	Smyth v2 Page 94				S v2 pp 97-98					
AC N to Granite Floor	13.7		13.1				13.1	13.7	0.6	13.375
AC N to Leaf Slot N	19.5		19.5		19.5	20.2	19.5	20.2	0.7	19.675
Leaf Slot	16.3		16.2		16.5	17.1	16.2	17.1	0.9	16.525
To cut-out 1 N	Smyth v2 p96				3.6	3.7	3.6	3.7	0.1	3.650
Cut-out 1	22.2	22.0	22.0	22.2	22.0	21.7	21.7	22.2	0.5	22.017
Pilaster 1	5.8	6.0	5.6	6.0	4.8	5.3	4.8	6.0	1.2	5.583
Cut-out 2	21.5	21.5	21.4	21.0	21.8	21.8	21.0	21.8	0.8	21.500
Pilaster 2	5.8	6.0	5.6	6.0	5.3	5.4	5.3	6.0	0.7	5.683
Cut-out 3	21.0	21.0	21.8	21.0	22.5	21.3	21.0	22.5	1.5	21.433
Totals					116.0	116.5	116.0	116.5	0.5	116.250

Except for yellow, the colors in the chart indicate data taken from ″Life and Work at the Great Pyramid During the Months of January….″ Volume 2 Charles Piazzi Smyth. ″ The page numbers of the data are given in the chart. The data has been reduced to lengths of individual features rather than Smyth′s original measurements, which, in general, were cumulative from the Great Step or other features. This data occupies the second through seventh columns. The eighth and ninth columns show the minimum and maximum values for each length, and the range of each measurement is shown in column ten. Cells shaded with yellow in this column, which is all but two, show significant variance in the measurements given the magnitude of the associated dimension. The eleventh column is the average of the data in the second through seventh columns. Despite the significant variance in the individual measurements, it is notable that the total length of the Antechamber, as shown in the last row, is 116.25″ which is close to the theoretical dimension, 116.267.″

Inductive Metrology was applied to determine the intended lengths of the Antechamber dimensions. The table above was expanded to include columns that allowed two solutions to be determined, and these are shown in the table below.

Solution one is shown in columns two through six and solution two seven through eleven. In the first solution, Inductive Metrology (Ind Met) was based on dividing the average lengths of the features in column two by the shortest length in that column, which is shown bolded in red in the ″Cut-out 1 N″ row. The results from the third column are multiplied by two, rounded to the nearest integer and stored in column four as a fraction.

In the second row are the Inductive Metrology Parameters for each solution. The fractional lengths, of which there are a total of 64 for solution one, are required to fit in a theoretical length for the Antechamber of Y/π ″ = 116.263 ″, and so in the second row of the fifth column the value of 116.623/64 has been calculated = 1.817″. This value is then multiplied by each fraction, and they become the theoretical length of each feature in the fifth column. The sixth column shows the difference between the theoretical length and the average length.

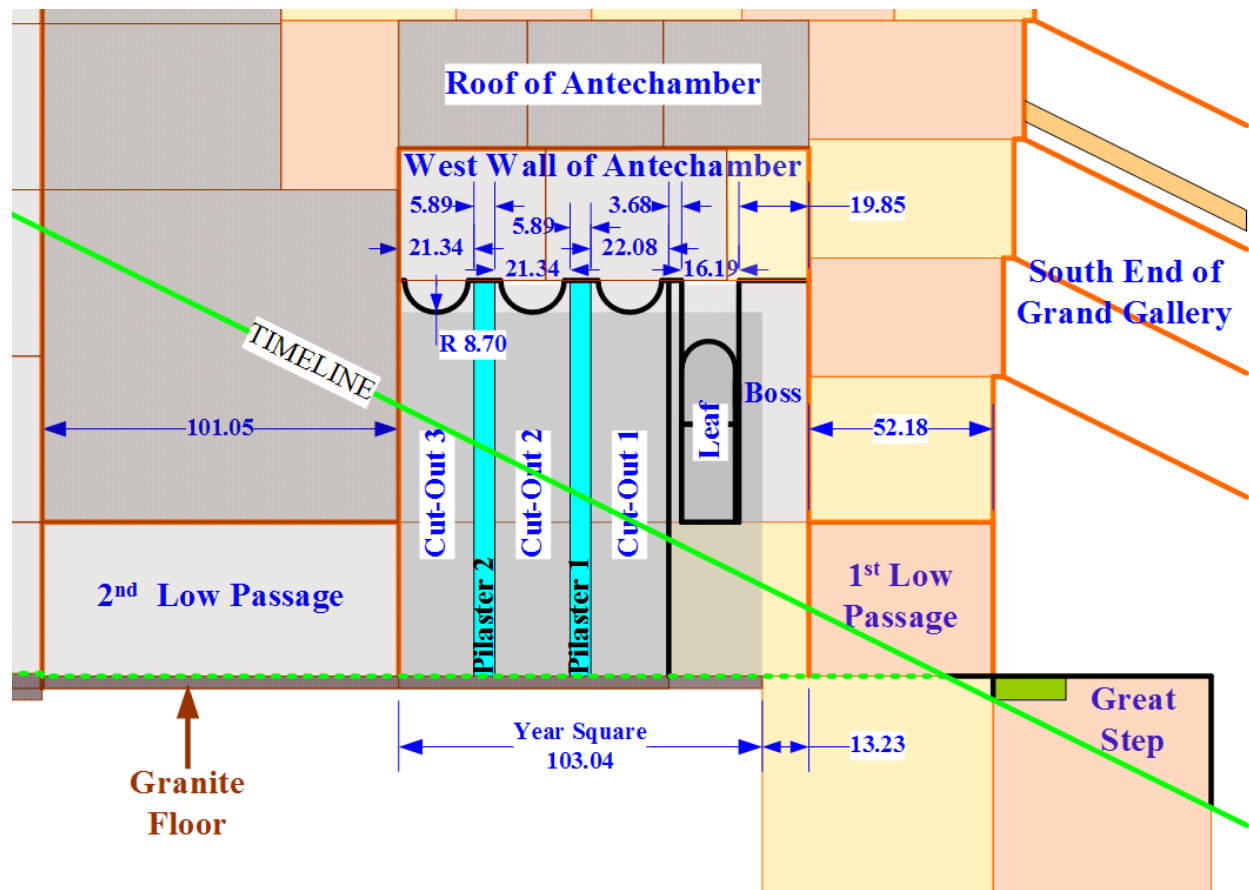| Feature Length	Solution 1					Solution 2				
	Average ″	Ind Met	Fraction	Theoretical ″	Diff ″	Average ″	Ind Met	Fraction	Theoretical ″	Diff ″
		116.26	64	**1.817**			103.04	140	**0.736**	
Granite Floor N	13.38					13.38			13.228	0.15
Leaf Slot N	19.68	5.39	11	19.983	-0.31	6.30	1.73	9	6.624	-0.32
Leaf Slot S	16.53	4.53	9	16.349	0.18	16.53	4.53	22	16.191	0.33
Cut-out 1 N	**3.65**	1.00	2	3.633	0.02	**3.65**	1.00	5	3.680	-0.03
Cut-out 1 S	22.02	6.03	12	21.799	0.22	22.02	6.03	30	22.079	-0.06
Pilaster 1 S	5.58	1.53	3	5.450	0.13	5.58	1.53	8	5.888	-0.30
Cut-out 2 S	21.50	5.89	12	21.799	-0.30	21.50	5.89	29	21.343	0.16
Pilaster 2 S	5.68	1.56	3	5.450	0.23	5.68	1.56	8	5.888	-0.20
Cut-out 3S	21.43	5.87	12	21.799	-0.37	21.43	5.87	29	21.343	0.09
Totals	116.25		64	116.263	-0.01	116.25	28.13	140	116.263	-0.01
Sub-Total						102.69			103.035	-0.34

Compared with the range in the previous table, the differences here are about one-quarter of the value. However, some differences are still greater than 1%, relative to the value of some measurements, as shown by the yellow shaded cells. Unused cells are greyed out.

Solution two is similar to solution one, with the exception that Inductive Metrology is applied from the start of the Granite Floor in the Antechamber. The reason for this is that the Granite Floor has been determined mathematically to start 5 cubits from the south end of the chamber and so it's position from the north end can also be defined mathematically as the length of the Antechamber, 365.25/π, minus 5 cubits, 365.25/√π/2 = 116.263 - 103.035 = 13.228 ″.The width of the gap from the north wall of the Antechamber to the north edge of the leaf slot was an average of 19.68 ″ in solution 1, but the 13.38″ average to the start of the granite floor has reduced this to 6.30″. All other dimensions remain the same. The dimensions have been divided by the smallest dimension in the set, which is the gap from the south of the leaf slot to the north of Cut-out 1 which is 3.65″.

When these proportions were summed in the ″Total″ cell at the bottom of column eight, the result was 28.13 which suggests that the increment in solution two was a ″digit″ since there are 28 of them in a cubit. Assuming that the dimensions were intended to be digits, the proportions in the eighth column were multiplied by 5 to arrive at a total number of 140 digits, which is the number of digits in 5 cubits. The theoretical lengths are calculated and shown in column ten, and the differences between them and the average lengths are shown in column eleven. The following figure shows the dimensions of solution 2, which was selected since two of the AC features align with Holy Days versus one for solution 1, which are discussed in the main section.

The figure starts at the right side and follows the Timeline, which, as in other figures, is the solid green line. The dashed green lined is the horizontal version of the timeline, and it can be seen

how features translate from the horizontal to the sloping timeline by following the vertical orange, black, or light blue lines that pass between the two.

All lengths described below are theoretical.

The north wall of the Antechamber is at the left end of the 1st Low Passage, which is 52.18″ long. After the Antechamber north wall (AC-N) there is a gap of 13.23″ to the start of the Granite Floor then another 19.85″ - 13.23″ = 6.62″ to the start of the leaf Slot. The width of the Leaf Slot is 16.19,″ followed by a gap of 3.68″ to the north end of Cut-Out 1. Cut-Out 1 is 22.08″ wide. The Leaf Slot and the three Cut-outs are replicated on the east wall, which, it is assumed, are intended to be aligned in every way with those on the west wall but which are not shown in the figure above. However, they can be seen in Smyth′s figure above. The first Cut-out is followed by Pilaster 1, 5.89″ wide, Cut-out 2, 21.34″ wide, Pilaster 2, 5.89″ wide, and Cut-out 3, also 21.34″ wide, the end of which is the south wall of the Antechamber (AC-S). Having thus arrived at theoretical lengths for each of the features in the Antechamber dates can then be calculated for them.