

Precessional Age Structure and Great Pyramid Metrology: A Quantitative Analysis (extra Notes)

Reign of Tiberius Caesar: Sep. 18, 14 CE - Mar. 16, 37 CE

John the Baptist began his ministry during the 15th year of Tiberius (Luke 3:1-2) - that is to say, sometime after autumn 28 CE. At the first of three Passovers mentioned by John during Jesus' ministry, it was recorded that it took "46 years to build this temple" (John 2:20). If this refers to the inner temple, it would probably be, considering the preparation time, 30 CE that Jesus would have had this conversation with the Jews. In other words, Jesus began his ministry about a year (29 CE) after John the Baptist began his, and in the spring of 30 CE, the first of these three Passovers mentioned was observed.

Reigns of certain 17th and 18th Dynasty Egyptian Pharaohs:

Senakhtenre Tao I -	(died 1558 BCE)
Sequenre Tao II	(1558 - 1555 BCE) - he fathered two pharaohs: Kamose and Ahmose I
Kamose	(1555 - 1550 BCE)
Ahmose I	(1550 - 1525 BCE)
Amenhotep I	(1526 - 1506 BCE)
Thutmose I	(1506 - 1493 BCE)
Thutmose II	(1493 - 1479 BCE)
Thutmose III	(April 24, 1479 - Mar. 11, 1425 BCE), in agreement with ref. 11, p. 45
Hatshepsut	(1479 - 1458 BCE) - stepmother and aunt of Thutmose III; coronated probably in her 7th year, 1473 BCE, according to Goedicke (ref. 3, p. 11)
Amenhotep II	(1425 - 1401 BCE) - co-regent 2 yrs 4 mths with his father, Thutmose III

Thutmose III's eldest son, Amenemhat, predeceased him and, according to our chronology, was due to the Last Plague (the killing of the firstborn - Ex. 11:5). Amenhotep II, a younger son of Thutmose III and by a different wife, succeeded him. Josephus mentions (quoting Manetho) that "Tethmosis [i.e., Thutmose III, according to our view] was king when they went away" (ref. 4).

Reigns of certain Kings of Persia (ref. 5):

538-529 BCE - Cyrus
529-522 BCE - Cambyses
522-521 BCE - Gaumata (Pseudo-Smerdis), a usurper
521-486 BCE - Darius I (Hystaspis)
486-465 BCE - Xerxes I (Ahasuerus)
464-424 BCE - Artaxerxes I (Longimanus) (ref. 22)
424-423 BCE - Xerxes II
423-404 BCE - Darius II (Nothus)
404-359 BCE - Artaxerxes II (Mnemon)
359-338 BCE - Artaxerxes III (Ochus)
338-331 BCE - Darius III (Codomannus)

King Cyrus' Decree (Ezr. 1:1-4; 6:1-12)

The famous cuneiform Cyrus Cylinder now in the British Museum depicts Cyrus as a supporter of Marduk: "Marduk, the great lord, caused the magnanimous people of Babylon [to ...] me,

and) I daily attended to his worship ... I sought the welfare of the city of Babylon and all its sacred centers” (ref. 11, p. 218). The scribe Ezra mentions a similar writing of Cyrus, who acknowledges the God of Israel “who is in Jerusalem” (Ezr. 1:2-4; II Chr. 36:22-23). “The Lord, the God of heaven” who stirred the spirit of Cyrus was Marduk, according to the cuneiform, not the God of Israel. Cyrus clearly differentiates: “Whoever there is among you of all His people, may his God be with him! Let him go up to Jerusalem which is in Judah, and rebuild the house of the Lord, the God of Israel; He is the God who is in Jerusalem.” An argument has been made that Marduk and Jehovah are identical, both slayers of the sea monster (Tiamat in the Babylonian tale, Rahab in the Jewish), differentiated by name only.

Ezra came to Jerusalem in 458 BCE (-457 astronomical year), the 7th year of the Persian king Artaxerxes I (Ezr. 7:7); Nehemiah came in 445 BCE, the 20th year of the same reign (Neh.2:1).

King Artaxerxes I's Decree (Ezr. 7:11-26)

-457 + 490 Jubilee years (70 weeks - Dan. 9:24-27) = Friday, April 3, 33 CE (Crucifixion of Jesus) at Passover in Jerusalem.

26-27 CE = Sabbatical year

26-33 CE = 7 final years that some of the Dead Sea sectarians thought would usher in the “Apocalypse”; the “veil of the Temple was torn in two from top to bottom” (Matt.

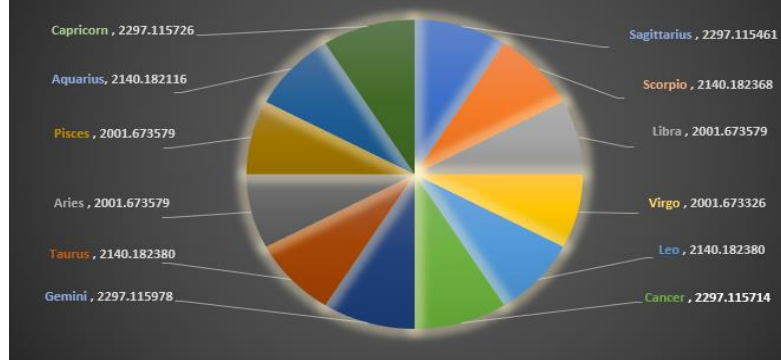
27:50-51; Mark 15:38; Luke 23:45), signifying the end of the cult of the Sacrificial Lamb, “58.5116” years after the beginning of the Piscean Age

Precessional Ages

Age	Date	UT	JD	Length
Taurus	-4168-11-07	03:44:57.655	199006.65622286	2140.1824
Aries	-2027-01-12	18:29:47.630	980708.27069017	2001.6736
Pisces	-0026-09-16	01:05:22.315	1711819.54539717	2001.6736
Aquarius	1976-06-01	07:40:57.000	2442930.82010417	---
				6143.5295

6143.5295 yrs. = length of Universal Time (UT) for these three Zodiacal Signs to rise on the Earth's equator = 5.70906936 hours divided by 24 hours = 0.23787789 (fraction of solar day) x 25,826.4 years.

Precessional Ages



Basis of Interpreting Precessional Years

Date	UT	JD	Length of Transit Time		Precessional Years	Age	Notes
5060-04-07	8:41:47.8565	3569283.862359450	1.988832247	1:59:19.7961	2140.1823804718	Taurus	6143.529538 Precessional years 5.709069360 Hours of UT 0.23787789 Fraction of day
5060-04-07	6:42:28.0610	3569283.779491447	1.860118557	1:51:36.4268	2001.6735789377	Aries	
5060-04-07	4:50:51.6341	3569283.701986506	1.860118557	1:51:36.4268	2001.6735789377	Pisces	
5060-04-07	2:59:15.2073	3569283.624481566	1.988832001	1:59:19.7952	2140.1821158920	Aquarius	Length of Sidereal Day 23.9344728067517 hours
5060-04-07	0:59:55.4120	3569283.541613565	2.134667527	2:08:04.8031	2297.1157257300	Capricorn	
5060-04-06	22:51:50.6092	3569283.452669088	2.134667281	2:08:04.8022	2297.1154611502	Sagittarius	
5060-04-06	20:43:45.8063	3569283.363724610	1.988832235	1:59:19.7960	2140.1823684454	Scorpio	Length of Solar Day 24 hours
5060-04-06	18:44:26.0108	3569283.280856607	1.860118557	1:51:36.4268	2001.6735789377	Libra	
5060-04-06	16:52:49.5841	3569283.203351668	1.860118322	1:51:36.4260	2001.6733263843	Virgo	
5060-04-06	15:01:13.1575	3569283.125846731	1.988832247	1:59:19.7961	2140.1823804718	Leo	Length of Precessional Years 25755.886187 * 23.9344728 = 25826.4 years
5060-04-06	13:01:53.3621	3569283.042978728	2.134667516	2:08:04.8031	2297.1157137036	Cancer	
5060-04-06	10:53:48.5587	3569282.954034244	2.134667762	2:08:04.8039	2297.1159782834	Gemini	
5060-04-06	8:45:43.7552	3569282.865089759					

The Great Pyramid of Giza:

Longitude: 31°08'03.90"E

Latitude: 29°58'46.53"N

Elevation: 204 feet (at base of North side)

Angle of ascent in the Great Pyramid:

26.302739° or 26°18'09.7" (This angle is 5.1 miles due south of the Nativity, as measured by ruler-line using Google Earth)

Pyramid inch measurements are taken from Peter Lemesurier's book (ref. 1), of which are based on Adam Rutherford's work (ref. 2)

Original height of the Pyramid's present 203rd course = 5448.736 pyramid inches (P" hereafter)

Total floor-line length = 5448.736 P" (4128.1294 + 1320.6066)

Entrance of pyramid to foot of Scored Lines = 481.7457 P" = Fri., June 23, 2648 BCE, JD = 754415.4491

Entrance to Ascending Passage:

1169.7702 P" (April 1, 1478 BCE) = Yali eruption (ref. 14). In 1558 BCE, Moses was born. He was 80 years old when he and Aaron approached the Pharaoh Thutmose III/

Hatshepsut (Ex. 7:7), after which the plagues are mentioned. The volcano's eruption, here suggested as the source of the final plague, is noted for April 1, 1478 BCE.

According to Hans Goedicke (ref. 3, pp. 23-28), it was Queen Hatshepsut who expelled the shemau-people (Israelites), since she was primarily in control of the throne at the time.

According to our understanding of the Great Pyramid's passageway system, the Exodus occurred during Thutmose III/Hatshepsut's 2nd regnal year, i.e., April 18, 1478 BCE

Ascending Passage to North Wall of Grand Gallery = 1485.0068 P"

Distance to Well-Shaft = 25 P". Apr. 3, 33 CE, 2:01:14 pm LMT; 3793 Nisan 15.0 was at sunset; also Height of Grand Gallery wall - 286.1 P")

The length of the Grand Gallery roofline is 153 feet (1836 P"), same as Distance GE, and representative of the 153 fish caught, 2001.6 years after April 3, 33 CE (John 21:11-14)

Sum of base-diagonals (AX + BX) = 25,826.4 P" (ref. 1, Appendix. B, pp. 280, 309)

Angle of slope = 51°51'14.3"

Plane of Life projected = 33.2563 - 58.5116 = -25.2553 (Sat., Sep. 16, 27 BCE)

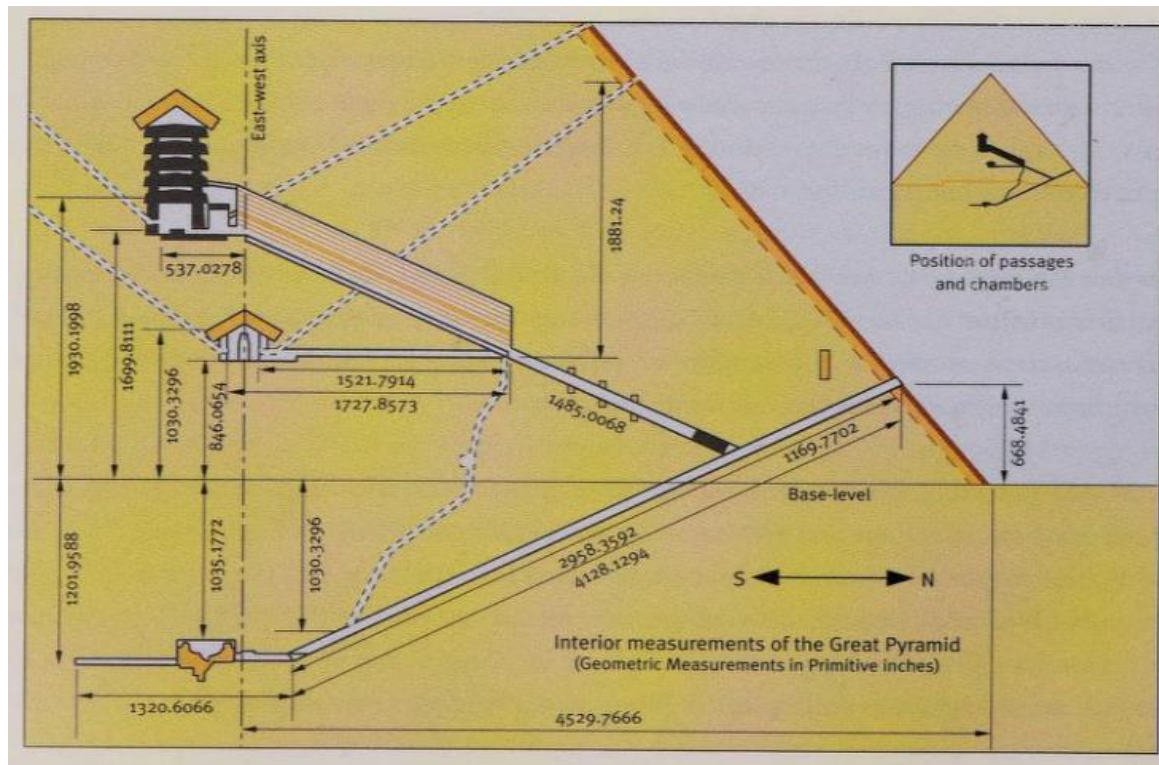


Image credit: Peter Lemesurier (ref. 1)

Some key dates to consider:

Taurus Age	2140.1824	Bull-worship begins after the first man Adam is created
Aries Age	2001.6736	"Offering of Isaac"
Pisces Age	2001.6736	"The Tale of the Two Lordships"
Entrance to Asc. Passage	1169.7702	
Scored Lines	688.0245	Birth of Abram
Asc. Passage	1485.0068	Exodus from Egypt
	58.5474	
	33.5474	
North Wall	13.0000	Bar Mitzvah?
NW to Well-shaft	25.0000	
Well-shaft entrance	37.9999	Crucifixion of Jesus
70 weeks prophecy	490.0691	"Day of Atonement"

References (alphabetized in paper):

- 1 Lemesurier, Peter. (1977). *The Great Pyramid Decoded*. New York: Avon. Revised edition, New York: Barnes & Noble, 1996.
- 2 Rutherford, Adam. (1957–1972). *Pyramidology*. 4 vols. Royston, Hertfordshire: Institute of Pyramidology.
- 3 Goedicke, Hans. 2004. *The Speos Artemidos Inscription of Hatshepsut and Related Discussions*. Branford, CT: Halgo.
- 4 Josephus, Flavius. (1926). *Against Apion*. Translated by H. St. J. Thackeray. Loeb Classical Library. Cambridge, MA: Harvard University Press.
- 5 Wright, J. Stafford. (1947). "The Date of Ezra's Coming to Jerusalem." *BiblicalStudies.org.uk*. Accessed 13 December 2025. http://www.biblicalstudies.org.uk/article_ezra_wright.html.
- 6 Sewell, Curt. (n.d.) "Biblical Chronology and Dating of the Early Bible." Lambert Dolphin's Library. Accessed 13 December 2025. <http://www.ldolphin.org/sewell/sewellchron.html>.
- 7 Martínez, Florentino García. (1996). *The Dead Sea Scrolls Translated*. 2nd ed. Leiden: E. J. Brill.
- 8 Humphreys, Colin J., and W. G. Waddington. (1983). "Dating the Crucifixion." *Nature* 306 (5945): 743–46. Accessed 13 December 2025. https://www.researchgate.net/publication/232761602_Dating_the_Crucifixion
- 9 Carmichael, Calum M. (2000). "The Story of Joseph and the Book of Jubilees." *The Dead Sea Scrolls in Their Historical Context*, edited by Timothy H. Lim, 145–59. New York: T&T Clark International.
- 10 Landau, Brent. (2010). *Revelation of the Magi: The Lost Tale of the Wise Men's Journey to Bethlehem*. New York: HarperOne.
- 11 Shanks, Hershel, ed. (2011). *Ancient Israel: From Abraham to the Roman Destruction of Jerusalem*. 3rd ed. Washington, DC: Biblical Archaeology Society.
- 12 Finegan, Jack. (1998). *Handbook of Biblical Chronology*. Rev. ed. Peabody, MA: Hendrickson.
- 13 Nostradamus. (1558). "Letter to King Henry II." *Sacred Texts*. Accessed 13 December 2025. <https://www.sacred-texts.com/nos/epistle.htm>.
- 14 Sivertsen, Barbara J. (2009). *The Parting of the Sea: How Volcanoes, Earthquakes, and Plagues Shaped the Exodus Story*. Princeton: Princeton University Press.
- 15 Young, Andrew. (2021). "When Did Herod the Great Die? Part 1." *Bible Archaeology Report*. Accessed 13 December 2025. <https://biblearchaeology.org/abr-projects-main/the-daniel-9-24-27-project-2/4366-when-did-herod-the-great-die-part-1>.
- 16 Walker, Derek. (2009). "Chapter 4: Calculation and Fulfilment of the 70 Weeks." *Daniel's Seventy Weeks*. Accessed 13 December 2025. <https://www.oxfordbiblechurch.co.uk/index.php/books/new-book-daniel-s-70-weeks/456-chapter-4-calculation-and-fulfilment-of-the-70-weeks>.
- Cole, J. H. (1925). *Determination of the Exact Size and Orientation of the Great Pyramid of Giza*. Cairo: Government Press.
- Davidson, David. (1924). *The Great Pyramid: Its Divine Message*. London: Williams and Norgate.
- Espenak, Fred, and Jean Meeus. (2023). "Delta T Values." NASA Eclipse Website. Accessed 13 December 2025. <https://eclipse.gsfc.nasa.gov/SEhelp/deltat2004.html>.
- Morrison, L. V., and F. R. Stephenson. (2004). "Historical Values of Delta T." *Journal of the British Astronomical Association* 114: 23–28.
- Nolle, Richard. (1998). "The Neptune-Pluto Conjunction (600 BCE to 2400 CE)." Accessed 13 December 2025. <https://www.astropro.com/features/tables/geo/ne-pl/ne-000-pl/ne000pl.html>.
- Parker, Richard A., and Waldo H. Dubberstein. (1956). *Babylonian Chronology 626 B.C.–A.D. 75*. Providence: Brown University Press.
- Petrie, W. M. Flinders. (1883). *The Pyramids and Temples of Gizeh*. London: Field & Tuer.
- Reingold, Edward M., and Nachum Dershowitz. (2001). *Calendrical Calculations*. 3rd ed. Cambridge: Cambridge University Press.
- Smyth, Charles Piazzi. (1864). *Our Inheritance in the Great Pyramid*. London: Strahan.
- Stockhorst, Georg. (2022). "Pluto-Neptune Cycles & Ages in Mundane Astrology." *Astrological World Map (Astrogeography blog)*. Accessed 13 December 2025. <https://astrologicalworldmap.com/2022/08/12/the-pluto-neptune-year-in-astrology/>.
- Taylor, John. (1859). *The Great Pyramid: Why Was It Built and Who Built It?* London: Longman.
- Walker, John. (2015). "Calendar Converter." *Fourmilab*. Accessed 13 December 2025. <https://www.fourmilab.ch/documents/calendar/>.