



Slide 1: The main point of this presentation is that the Lord keeps His promises, all of them! Don't miss that! This presentation illustrates one promise kept, possibly unnoticed for thousands of years.

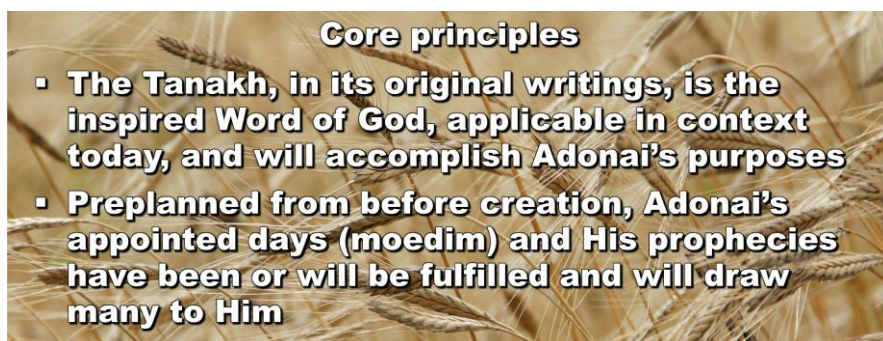
The content comes from *The First Passover, New Discoveries of the Astronomy and Date*, part of a 16-year effort by author Murray

Thorson.

This is the first of a two-part series on the First Passover I (Murray Thorson) will give at the Richland library. Pending room availability, the second part will be held on Monday, March 30, at 4 PM and 6 PM. This presentation ties the astronomy of the First Passover to the date and scriptural prophecy. See the PDF file *First Passover Eclipse* at <https://www.finding-the-messiah.com/resources> for today's slides and notes, and https://www.youtube.com/watch?v=a_thNO5smCw for a prerecorded rough-draft video. If today's session records well, it will be posted on the resources page, listed above.

I'll come back to this picture after slide 2, mentioning the rarity of this eclipse. This isn't just another blood-red moon. It's precisely what we could expect the Lord to do on the exact date and time stated in scripture. It had to occur on Abib 15 at midnight (15th day of the first lunar cycle of spring), with the First Shabbat (Friday sunset to Saturday sunset) two months (two moons) later (Ex 16:1) on the 23rd or 22nd day of that moon cycle (Ex 16:1–30). Also, Abib 7, 40 years later, could not have been a Sabbath (Shabbat), but Abib 10 probably was a Sabbath (Josh 3:1–5; 4:19, 5:6, 10–12). The 2,000 cubits separation in Josh 3:4 probably became part of the basis for a Sabbath day's journey distance, suggesting the crossing under the Lord's protection probably occurred on a Shabbat.

A blood-red moon requires a total lunar eclipse, which occurs about once every 18 months (70 times per century). Assuming no cloud cover, a total lunar eclipse visible from a single location, such as Egypt, occurs about once every 3.5 years after dark. One at midnight occurs about once every 26 years. A total lunar eclipse at midnight in the first lunar cycle of spring (Abib), as viewed from a single location, occurs about once every 320 years. It occurs on Abib 15 about once every 700 years. The subsequent 23rd or 22nd day, two moons later, is also a Shabbat (Exodus chapter 16), about once every 2,500 years. If we also required the 40-year-later crossing of the Jordan River on Abib 10 (Ex 16:35; Josh 4:19; 5:6) to occur on a Shabbat, which is likely, as an additional criterion, it would occur once every 17,000 years. All this is from a random chance perspective. But if this event was part of the Lord's plan to multiply His wonders in the land of Egypt, as He stated (Ex 11:9), then this is what we could expect in the year of the Exodus.



Slide 2: The background barley picture matches the Passover season and the Hebrew-month designation of Abib, when the First Passover occurred.

The Tanakh is the Hebrew Bible, composed of the Torah, the Prophets, and the Writings (24 books). It has the same writings as the Protestant Old Testament (39 books). The source texts for both are the same, primarily in Hebrew, with some portions in Aramaic.

Finding the First Passover Date and Time

- **At midnight**—“And it came to pass at midnight, that the LORD smote all the firstborn in the land of Egypt” (Ex 12:29)
- In the **month of Abib**—“This day ye go forth in the month Abib.” (Ex 13:4)
- **On the fifteenth day** of that first month—“And they journeyed from Rameses in the first month, on the fifteenth day of the first month; on the morrow after the passover the children of Israel went out with a high hand in the sight of all the Egyptians” (Num 33:3). “Your lamb ... ye shall keep it unto the fourteenth day ... the whole assembly of the congregation of Israel shall kill it at dusk.” (Ex 12:5–6).

Finding the First Passover Date and Time (cont.)

- In a year when the twenty-third day of the third lunar month (**Sivan 23**) **would be the first Jewish Shabbat** (Saturday, Ex 16:1–30)—the people arrived in the wilderness of Sin “on the fifteenth day of the second month after their departing out of the land of Egypt” (Ex 16:1), eight days before the first Shabbat (Ex 16:2–30).
 - Considering the travel route and distances, the large population, and the specified stops, the elapsed time had to be two lunar months after the descendants of Jacob/Israel left Egypt.

Slide 3: The sunset, ending the 14th day, began the 15th day. The consummation judgment of Pharaoh, his recalcitrance to let Israel leave, and the gods of Egypt occurred that coming midnight, on the 15th day. Elohim spared the households of Israel that midnight. Hence, the term *Passover*.

Slide 4: The Sivan 23 (or 22) first Shabbat criterion (Ex 16:1–30) eliminates 1446 and 1449 BC as candidate years unless “the second month after their departing” was Iyyar (Ziv), but that isn’t possible if Mt. Horeb is in Arabia. A plethora of evidence indicates it’s in Arabia.

Slides 16 to 19 provide maps to help illustrate the distances. “Now Moses was keeping the flock of Jethro his father-in-law, the priest of Midian; and he led the flock to the farthest end of the wilderness, and

came to the mountain of God, unto Horeb” (Ex 3:1, JPS). ... “11 But Moses said to God, “Who am I, that I should go to Pharaoh, and that I should bring the sons of Israel out of Egypt?” 12 And He said, “Certainly I will be with you, and this shall be the sign to you that it is I who have sent you: when you have brought the people out of Egypt, you shall worship God at this mountain.” (Ex 3:11–12, JPS).

Midian was east of the Gulf of Aqaba. The crossing of the Red Sea (or Sea of Reeds) served as a barrier so that the Egyptians would never again, in that generation, pursue the Hebrews. Mount Horeb, also called Mount Sinai, is in Arabia, not in today’s Sinai Peninsula. And its foothills are at the far extreme of the land of Midian. As 1 Kings 9:26 says, today’s Gulf of Aqaba is the Red Sea! “King Solomon also built a fleet of ships in Ezion-geber, which is near Eloth on the shore of the Red Sea, in the land of Edom. (1 Kings 9:26, JPS)

All this provides evidence that the First Shabbat started two lunar months after leaving Egypt, hence in the 3rd lunar month of the year, since they departed in the 1st lunar month of the year.

Finding the First Passover Date and Time (cont.)

- **Four hundred and eighty** (or possibly 479) **years before the fourth year of King Solomon’s reign**—“And it came to pass in the four hundred and eightieth year after the children of Israel were come out of the land of Egypt, in the fourth year of Solomon’s reign over Israel, in the month Ziv, which is the second month, that he began to build the house of the LORD.” (1 Kings 6:1; also stated in 2 Chron 3:1–2 with the addition that construction started on the second day of the month.)
- **Forty years later, Abib 7**, was a travel day and **can’t be a Shabbat** (Ex 16:29). However, **Abib 10**, when Israel crossed the Jordan River under God’s protection, **likely was a Shabbat**.

Slide 5: Josephus’ straightforward record, combined with 480 years before points to 1448 or 1449 BC, but the Ziv 2 non-Shabbat temple construction start (2 Chron 3:1–2) eliminates 1449 BC. Using the books of Kings and Chronicles, along with a plethora of assumptions, points to 1445–1447 BC, but the many assumptions, along with contradictions with other old texts, make that date range less certain.ⁱ

The author of Kings probably used a rounding-down system (compare 1 Kings 18:1 to Luke 4:25). Meaning, 480 years in 1 Kings 6:1 means no less than 480 years.

The crossing occurred on Abib 10, 40 years after

leaving Egypt (Ex 16:35; Josh 4:19; 5:6). Three days prior, on Abib 7, the Hebrews moved their camp from the town of Shittim to the banks of the Jordan River, a distance of about seven or eight miles (Josh 3:1–5).

It takes a new moon or spring month designation error for 1446 BC to survive the 40-year-later non-Shabbat move to the Jordan River criterion. The candidate Exodus year 1446 BC results in a forty-year-later Abib 7 (in 1406 BC) that is a

Shabbat—a violation of the Mosaic Law for the move date. There is an estimated 10% chance that the new-moon determination for that month could have been one day later than expected, and a 10% chance that the prior lunar cycle could have been designated as the month of Abib. Either would result in Abib 7 being a non-Shabbat date. All the other candidate Exodus years—1445, 1447, 1448, and 1449 BC—meet the 40-year-later-Abib 7, non-Shabbat criterion.

Only the candidate Exodus years 1445 and 1448 BC result in potential crossing dates forty years later that meet the Shabbat criterion. (Abib 10 of both 1405 and 1408 BC are Saturdays.) The other Exodus candidate years fail this criterion.

Finding the First Passover Date and Time (cont.)

- Forty years later, Israel entered the promised land on Abib 10. The subsequent fall began the first crop planned by Israel. Six years later (or possibly five years later if Israel counted the first crop that they ate, planted by the Canaanites), the first Sabbatical year likely started, setting the Sabbatical-year pattern. Therefore, **the Sabbatical-year pattern should begin in the fall, 46 (or 45) years after the Exodus.**
- Ten subsequent Sabbatical years are known, all landing on the same seventh-year pattern matching a Tishri 1402 BC start. **This corresponds to a 1448 BC (or 1447 BC) Exodus.**

Slide 6: Ten subsequent Sabbatical years are known, all landing on the same seventh-year pattern matching a Tishri 1402 BC start and a Tishri 1401 BC end, abbreviated as 1402/1401 BC. These are the Sabbatical years 163/162 BC, 135/134 BC, AD 41/42, AD 55/56, AD 69/70, AD 132/133, AD 139/140, AD 237/238, AD 531/532, and AD 748/749. (Appendix 4 of Ernest Martin's book, *The Star of Bethlehem: The Star that Astonished the World*. 1996; Prof. B.Z. Wacholder in Hebrew Union College Annual (43) 1973—*The Calendar of Sabbatical Cycles During the Second Temple and the Early Rabbinic Period* and (46) 1975—*The Timing of Messianic Movements and*

the Calendar of Sabbatical Cycles; and Section C.4 of the chapter *Ancient Timekeeping* in Bieke Mahieu's book *Between Rome and Jerusalem*. 2012)

Astronomy of the Exodus

Based upon the book:

The First Passover New Discoveries of the Astronomy and Date

Acknowledgments:

Scripture quotations in this presentation are from the Jewish Publication Society of America, *Torah Nevi'im U-Khetuvim. The Holy Scriptures according to the Masoretic Text*. (Philadelphia, PA: Jewish Publication Society of America, 1917).

Astronomical Images provided by Starry Night, a Simulation Curriculum Company. All rights reserved 2023, www.simulationcurriculum.com.

© 2023 Thorson

Slide 7: This presentation is excerpted from the book listed, one of five books that together unravel many mysteries associated with the coming of the Messiah. See finding-the-messiah.com for summaries and links.

First Passover: 1448 BC, fits all criteria well

- 480 years before temple construction began (Kings and Chronicles with many assumptions or Josephus) on a non-Shabbat Ziv 2 (1445, 1446, 1447, 1448, 1449)
- Shabbat Sivan 23 (1445, 1446, 1447, 1448, 1449)
- Shabbat Jordan River crossing 40 years later (1445, 1446, 1447, 1448, 1449)
- Non-Shabbat move to Jordan River (1445, 1446, 1447, 1448, 1449)
- Sets Sabbatical year pattern (1445, 1446, 1447, 1448, 1449)
- Corresponding, symbolic, and rare astronomy signs (1445, 1446, 1447, 1448, 1449)

Slide 8: Daytime Sivan 23 in 1445, 1446, 1447, 1448, and 1449 BC: **Saturday**, Tuesday, Wednesday, **Saturday**, and Tuesday, respectively. (Must be a Saturday, or possibly a Sunday if Ex 16:1–30 covers only seven days.)

FYI, daytime Ziv 23 (which is one month too early for the first Shabbat) in 1445, 1446, 1447, 1448, and 1449 BC: Friday, Sunday, Tuesday, Thursday, and Sunday, respectively.

Abib 10, forty years later, (1405, 1406, 1407, 1408, and 1409 BC): **Saturday**, Tuesday, Thursday, **Saturday**, and

Sunday, respectively. (Probably should be a Saturday.)

Abib 7, forty years later, (1405, 1406, 1407, 1408, and 1409 BC): Wednesday, **Saturday**, Monday, Wednesday, Thursday, respectively. (Must not be a Saturday. Hence, unless a new-moon or Abib determination error occurred, a 1446 BC Exodus isn't possible.)

Only an 1448 (or 1447) BC Exodus fits the subsequent known Sabbatical years.

First Passover night sky, midnight on the fifthteenth day of the first lunar month, Monday night, April 15, 1448 BC

Path of Sun
Starry Night Astronomy

Scorpius
40x enlargement
180° az.

Total eclipse of the moon at the head of the serpent (Scorpius), Gen 3:15

30° altitude
15° altitude

120° field of view of the Rameses, Egypt night sky

South
Southwest
West

© 2023 Thorson

First Passover midnight sky, April 15, 1448 BC, the moon at the head of Scorpius

Nu Scorpii

Graffias

Starry Night Astronomy

Path of Sun

Scorpius

Dschubba

2.6°

Total eclipse of the moon (blood red) at 179.9° azimuth, 53.9° altitude, brightened for visibility

10° field of view of the Rameses, Egypt night sky

© 2023 Thorson

Intertie with Gen 3:15

- This first prophecy in the Tanakh matches the First
Passover eclipse as a simultaneous astronomical sign:
And I will put enmity between thee and the woman, and
between thy seed and her seed; **they shall bruise thy
head** (he [וְהָרָא] he-shall-hurt-you [וְיִשְׁפָּד] head [רֹאשׁ])**, and
thou shalt bruise their heel.” (Gen 3:15)
 - ❖ Satan would receive irrecoverable judgment (pictured as
a head injury)

** Hebrew-to-English translation from Scripture4All
(<https://www.scripture4all.org/OnlineInterlinear/OTpdf/gen3.pdf>) added between
parentheses

Intertie with Gen 3:15 (cont.)

- This astronomy sign appropriately coincided with the event:
Then God said, “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 (Moed, appointed time), and for days and years;** (Gen 1:14, **fourth day of Creation**)

4 of 6

Lunar Eclipse: Symbolism

- The eclipse was an astronomical match for Gen 3:15d: **they** (her seed) **shall bruise** (bruise, injure, cover, overwhelm) **thy** (the serpent: Satan's) **head**
 - The First Passover began the defeat of Satan and his grip on humanity and was accompanied with judgment upon those who trusted in demonic protection and sparing of those who followed God's deliverance plan
 - The eclipse occurred at the head of the constellation Scorpio, the symbol of harm to humanity, as the Passover lamb role was established (Isa 53:4-10)
 - Everyone in Egypt that saw this eclipse knew that judgment had come to those who trusted in the wrong god

Slide 13, to the left: No notes.

Lunar Eclipse: Symbolism, Gen 3:15, Rarity

- It was one of only three midnight Nisan 15 lunar eclipses between 2000 and 1 BC
 - The only one at the head of the constellation Scorpio
 - The only one with a subsequent Sivan 23 (or 22) Shabbat

Slide 14: A total lunar eclipse, when viewed from a location such as Egypt, passes through midnight approximately every 26 years. This occurs in the month of Abib about once every 318 years. About once every 700 years, it occurs on Abib 15. About once every 2,500 years, it occurs on Abib

15, and the subsequent Sivan 23 or 22 is a Shabbat (Saturday after midnight), matching Exodus chapter 16. About once every 12,000 years it occurs on Abib 15, the subsequent Sivan 23 or 22 is a Shabbat, and it's within ± 3 degrees of the likely head of Scorpio (to match Gen 3:15). About once every 83,000 years it occurs on Abib 15, the subsequent Sivan 23 or 22 is a Shabbat, it's within ± 3 degrees of the likely head of Scorpio (to match Gen 3:15), and Abib 10, 40 years later, is a Shabbat.

First Passover Lunar Eclipse: Symbolism

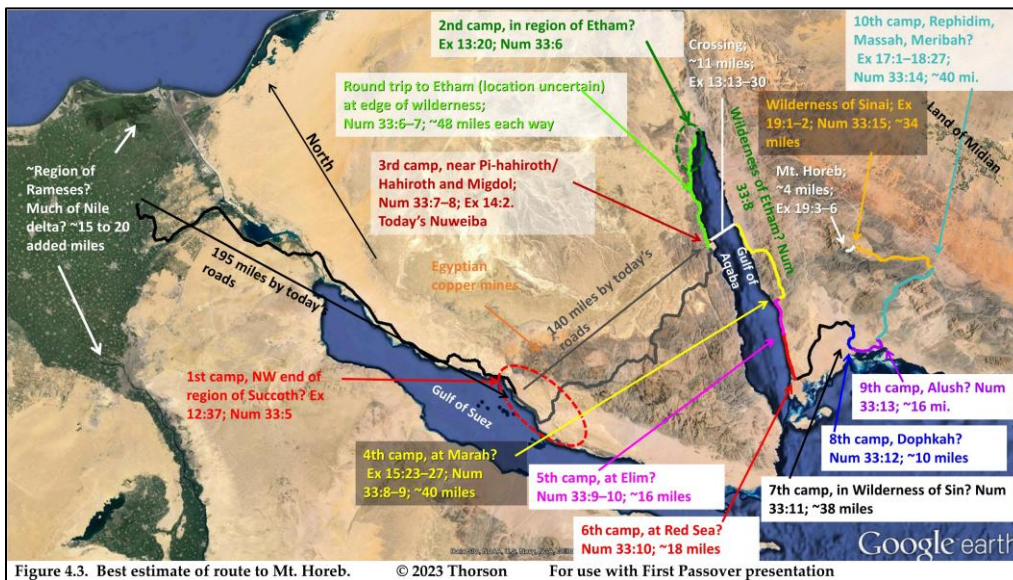
- That First Passover midnight, God judged all the gods of Egypt (Ex 12:12; Num 33:4), including the moon god — Khonsu to the Egyptians who worshipped it, considered the son of the king sun god and analogous to Pharaoh's firstborn son
 - Households that followed God's instructions and painted blood on their doorframes, ate the Passover lamb, and stayed inside were spared any death
 - Those that didn't saw the moon turn blood red as their firstborn sons died

Slide 15, to the left: Notice the symbolism.

Starry Night Astronomy

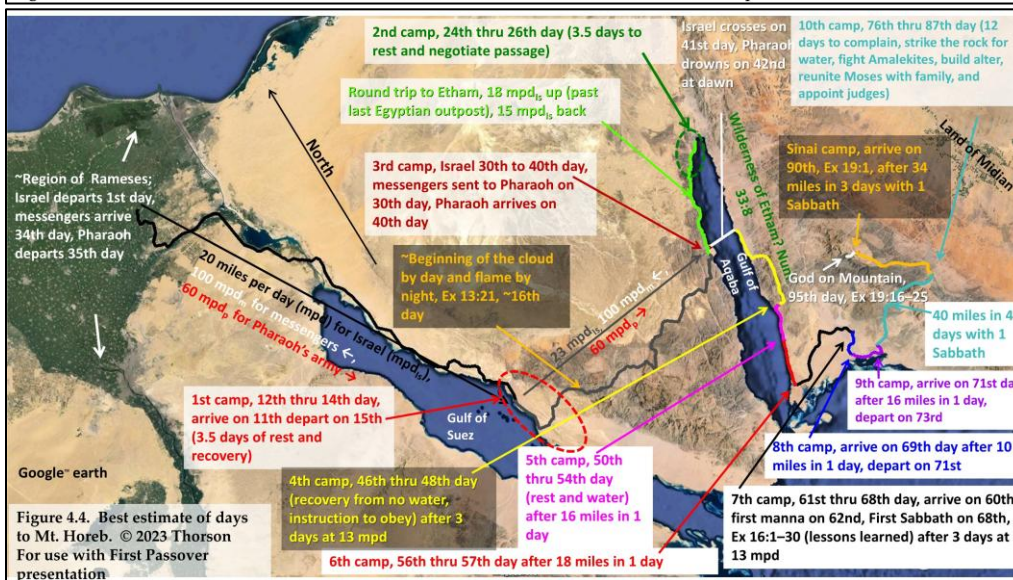


Slide 16: Slides 16 through 19 are helpful to support that the events of Exodus chapter 16 occurred two lunar cycles after the First Passover. Therefore, the first Shabbat occurred on Sivan 23 (or 22) as proposed in Slide 4.

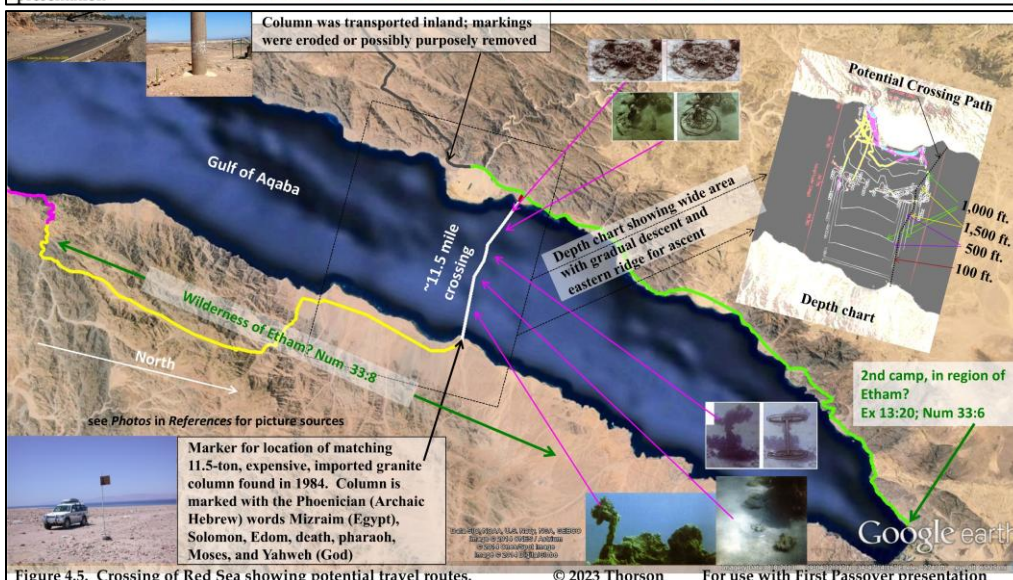


Slide 17: Total travel from Rameses to the Wilderness of Sin is about 565 miles, 60 days. Total travel from Rameses to the Wilderness of Sinai is about 664 miles, 90 days.

Figures 4.3, 4.4, and 4.5 (Slides 17, 18, and 19) are from the book *Finding the Messiah, What the Magi Saw and Much More*, Thorson, 2023.



Slide 18: Total travel from Rameses to the Wilderness of Sin is about 565 miles, 60 days. Total travel from Rameses to the Wilderness of Sinai is about 664 miles, 90 days.



Slide 19: No notes.

References for slide 5:

(1) Flavius Josephus, in *The Life. Against Apion*, Translated by H. St. J. Thackeray. Loeb Classical Library 186, 1:108, 117-126. Cambridge, MA: Harvard University Press, 1926. ([A] there were 155 years and eight months from the ascension of Hiram to the founding of Carthage and [B] the temple in Jerusalem was built in the twelfth year of Hiram, "by King Solomon 143 years and eight months before the foundation of Carthage by the Tyrians."); (2)

Murray Thorson, "Date and Time of the Passover Judgment" in *The First Passover, New Discoveries of the Astronomy and Date*, pp. 4-12. 2023; (3) William H. Barnes, in *Studies in the Chronology of the Divided Monarchy of Israel*, Harvard Semitic Monographs, No. 48. Frank Moore Cross, ed., pp. 12-13, 23-25, 54-55. Atlanta, Georgia: Scholars Press, 1991; (4) Edwin Thiele, in *The Mysterious Numbers of the Hebrew Kings*, Rev. ed. Grand Rapids, Michigan: Zondervan/Kregel, 1994; and (5) Rodger Young, in "When Did Solomon Die?" 2003. *Journal of the Evangelical Theological Society* 46(4): 589-603.