



Slide 1: This is quite an interesting story about wise men, Magi, who saw the signs of Christ's birth and came to worship Him. They were the first recorded people to directly worship Christ as the Messiah, probably all or mostly Gentiles. God preplanned this so we could discover many details of Christ's coming, especially that He is the pre-appointed One. Don't miss that. Even if this comes across as a blur. Get this: He is the pre-appointed One marked in the sky from the creation of the sun, moon, and stars.

We'll look at the key dates and astronomy events in Christ's coming, starting with Gabriel speaking to Zacharias about his future son John who would herald Christ, and ending

with Herod's attempt to kill Jesus. From December 15, 4 BC, to January 10, 1 BC, we'll cover 2.1 years. As time allows, we'll see eight sequential astronomy signs or matches for biblical and historical records, the appointed times (moedim) of Christ's conception and birth, the matching astronomy of Christ's 40-day-old presentation to the Lord and the Exodus generation's equivalent presentation, and the tie between the biblical and historical records of the Magi's arrival and Herod's attempt to kill Jesus. This will be a quick tour, likely with one or two follow-up sessions. Fasten your safety belts! Ask questions as needed.

Item to ponder: If this is so highly interconnected with the biblical account, historical records, and astronomy, why do so few see and believe it?

Magi image from Gospelimages, Jan van 't Hoff studio, with website permission ([The visit of the wise men – Gospelimages](https://www.gospelimages.com/paintings/100/the-visit-of-the-wise-men?thema=4); <https://www.gospelimages.com/paintings/100/the-visit-of-the-wise-men?thema=4>)

Matt 2:1-4 (Magi's arrival in Jerusalem; Herod's response)
¹ Now after Jesus was born in Bethlehem of Judea in the days of Herod the king, **magi from the east** arrived in Jerusalem, saying, ² "Where is He who has been born King of the Jews? **For we saw His star in the east** and have come to worship Him." ³ When Herod the king heard *this*, he was troubled, and all Jerusalem with him. ⁴ Gathering together all the chief priests and scribes of the people, he inquired of them where the Messiah was to be born.

Slide 2: Today, we'll focus on the bold text highlighted in yellow.

Items to ponder: why would God provide sufficient clues to find these details but imbed them such that they wouldn't be fully revealed for thousands of years? Any biblical precedent for this?

John 10:16 (One flock/one shepherd)

"I have other sheep, which are not of this fold; I must bring them also, and they will hear My voice; and they

will become one flock with one shepherd.

In our previous session on July 14, we discussed:

Why do you think Matthew is the only Gospel writer to include the story of the Magi?

Was what the Magi did evil? If so, explain why God led them to find Christ. Didn't Jesus say, "An evil and adulterous generation seeks after a sign" (Matt 16:4; similar to Matt 12:24 and Luke 11:29)? Explain.

What about Daniel? Should he have declined his appointment as head of the magi of his time (Dan 2:48; 5:11)?

Did any heroes of scripture talk about seeing God's greatness in the stars?

Were the Magi present on the night of Christ's birth? Explain your logic.

Why didn't scripture give the exact date of Christ's birth and the Magi's arrival, yet enough details were provided to potentially find this today? (Murray's analyses: Sivan 16, June 17, 2 BC, birth and Tivet 11, January 7, 1 BC, worship)

Why did Jesus speak in parables? (See Matt 13:10-13.) Should we expect understanding to increase as Christ's return nears? Bible verses? Is it good to search for knowledge? What about Matt 7:7-8: "Ask, and it will be given to you; seek, and you will find; knock, and it will be opened to you. ⁸ "For everyone who asks receives, and he who seeks finds, and to him who knocks it will be opened."

Silly question: from where did the Magi come: wasteland or country? Where did the Magi see His star? Does scripture say they followed His star on the way to Jerusalem? Were they Gentiles or Jews? Does God have a plan for Gentiles in His kingdom? Are they second-class citizens? Scriptures?

How did the Magi know He was “born King of the Jews”? Bible verses?

What applications do you get out of this passage?

All scripture quotes use the NASB-95. The purple superscript shows the verse number. *Italics* means the word is not in the source document but added by the NASB for clarity.

Matt 2:5–8 (Herod’s interview)

⁵ They said to him, “In Bethlehem of Judea; for this is what has been written by the prophet: ⁶ ‘AND YOU, BETHLEHEM, LAND OF JUDAH, ARE BY NO MEANS LEAST AMONG THE LEADERS OF JUDAH; FOR OUT OF YOU SHALL COME FORTH A RULER WHO WILL SHEPHERD MY PEOPLE ISRAEL.’” ⁷ Then Herod secretly called the magi and **determined from them the exact time the star appeared.** ⁸ **And he sent them to Bethlehem** and said, “Go and search carefully for the Child; and when you have found *Him*, report to me, so that I too may come and worship Him.”

Slide 3: On September 1, we discussed:

Why did Herod secretly meet with the Magi?

Who sent the Magi to Bethlehem?

Can God use evil people to accomplish His will? Any examples? (Augustus—census; Herod—out of Egypt I called my son; Pharaoh of Exodus—setting the stage (a) for the Passover to illustrate salvation, (b) to demonstrate God’s power even today, and (c) to form the nation of Israel.) What happened to these evil people?

Applications? (I/we don’t have to fret about the evil leaders and the weapons of today. Pray—yes; fret—no.)

Matt 2:9–12 (Finding and worshiping Christ; departure)

⁹ After hearing the king, they went their way; and (και ιδου, and behold) **the star, which they had seen in the east, went on before them until it came and stood over the place where the Child was.** ¹⁰ When they saw the star, they rejoiced exceedingly with great joy. ¹¹ After coming into the house they saw the Child with Mary His mother; and they fell to the ground and worshiped Him. Then, opening their treasures, they presented to Him gifts of gold, frankincense, and myrrh. ¹² And having been warned *by God* in a dream not to return to Herod, the magi left for their own country by another way.

Slide 4: Applications? (Don’t be fooled by the confusion of people and tradition—360-day prophetic year; the Feast of Weeks equals Pentecost; claim that visual sightings of the new moon are required for the start of each month; the church won’t see tribulation; etc.)

Thought prompts from September 1, including new questions to ponder today. (To stay on track, we’ll save this discussion until later.):

The star went before them after “they went their way.” Did they follow the star? Would they (a) follow roads or (b) traipse across open ground as they followed the star?

To see the star, was it day or night?

When did they rejoice? Where were they? Why did they rejoice? Is vs. 10 before or after the star going before them (vs. 9)?

How can a star stand over a child? Where was the child? Does scripture say the star stood over the child? Why is the wording so unusual (where the child was)? Verse 9 says, the star “stood over where the child was,” not “stood over *the place* where the child was.” Were they following a fairy or a twinkling light? Why didn’t others use the star to find Christ? Why did God use foreigners for this role?

When did they first see the Child? Where was Jesus? Was it dark out or was the sun out? If it was dark and the child was in the house, how could they see the child?

Was God taking care of and leading the Magi? Weren’t they astrologers and Gentiles? Does God work with dreams and how did the Magi know their dream was from God (*by God* is not in the original scripture)? Why were they warned in a dream? Were they uncertain if the warning was from God?

Why didn’t Herod’s informants know where the Magi found Christ?

Matt 2:13–15 (Flight to Egypt)

¹³ Now when they had gone, behold, an angel of the Lord appeared to Joseph in a dream and said, “Get up! Take the Child and His mother and flee to Egypt, and remain there until I tell you; for Herod is going to search for the Child to destroy Him.” ¹⁴ So Joseph got up and took the Child and His mother while it was still night, and left for Egypt. ¹⁵ He remained there until the death of Herod. This was to fulfill what had been spoken by the Lord through the prophet: “OUT OF EGYPT I CALLED MY SON.”

Slide 5: We’ll read this passage and save our discussion until later.

Hos 11:1—When Israel *was* a youth I loved him, And out of Egypt I called My son.

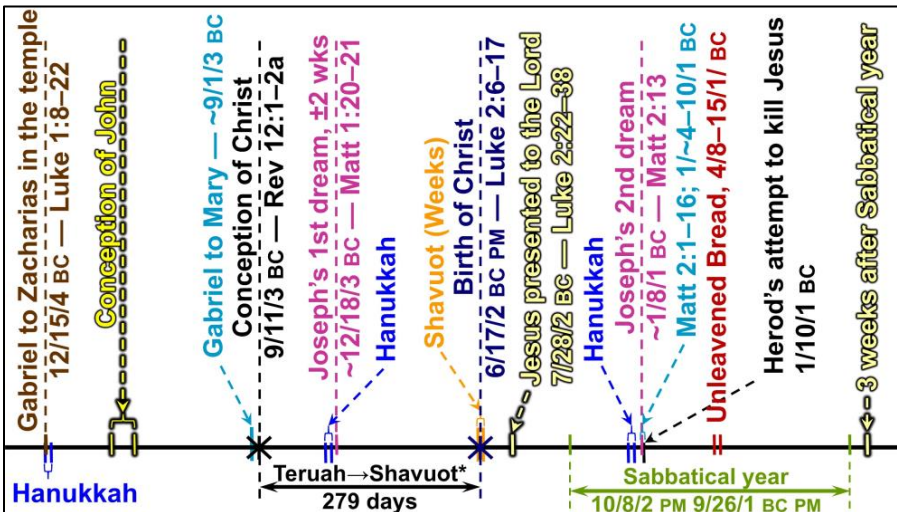
Discussion items for later:

- **Why does God make passages such as Hosea 11:1 so obscure to interpret when first written? Why hide part of the message for later? Can you think of other examples of this?**

Matt 2:16 (Herod's slaughter of Bethlehem boys)

¹⁶ Then when Herod saw that he had been tricked by the magi, he became very enraged, and sent and slew all the male children who were in Bethlehem and all its vicinity, from two years old and under, **according to the time which he had determined from the magi.**

Slide 6: (no notes)



Slide 7: Applications for us:

- (1) The Lord exquisitely planned the events around Christ's birth. As **children of God through faith in Christ**, we are **"fellow heirs with Christ"** (Rom 8:16). We will not be left behind. Our future is just as exquisitely planned. God can multi-task. He will take care of you and me despite opposition and conflict.
- (2) This sequence testifies that Jesus is the pre-appointed Messiah from before creation. The star alignments and trajectories were set at creation to reflect this. This latter-day understanding is

probably part of the predicted knowledge increase before Christ's return (Dan 12:4, 9). **He is coming quickly and His reward is with Him (Rev 21:12)! Be the faithful slave when He returns and He will put you in charge of all His possessions (Matt 24:45-47).** "Do not store up for yourselves treasures on earth, where moth and rust destroy, and where thieves break in and steal. But store up for yourselves treasures in heaven, where neither moth nor rust destroys, and where thieves do not break in or steal" (Matt 6:19-20).

- (3) **The evidence that Christ is the Messiah, preplanned from creation, is abundant. Yet, many find excuses, such as something they can't explain, to reject Him. Don't be like them. Go "all in" for Him!** (See John 7:40-43 as an example of finding excuses to reject Christ as the Messiah despite overwhelming evidence.)

Major fulfillments and mysteries solved in this sequence:

1. **Gabriel's announcement to Zacharias** on the first day of Hanukkah, Saturday, December 15, 4 BC, explains why "the whole multitude of the people were in prayer outside," Luke 1:10. That date can be calculated from (1) Jesus' entry on Palm Sunday, March 29, AD 33, the day after the 24th division of priests completed their seven-days of service concluding Daniel's prophetic 69 "sevens/weeks," Dan 9:25-26; (2) Elizabeth's pregnancy in her sixth month when Gabriel told Mary that she would bear the Messiah, Luke 1:36; and (3) Zacharias' service in the appointed order of the eighth division of priests, Luke 1:5, 8. The time of the evening prayers on this high-Sabbath beginning of this Feast of Dedication was the perfect time to announce John, who would herald the Messiah and rededicate the hearts of many to the Lord.
2. **Gabriel's announcement to Mary** on Saturday, Sept 1, 3 BC, **culminated the greatest Mercury-Venus "co-fly" of the century**—symbolizing the messenger of God (Mercury) pronouncing to the woman (Venus) that she would bear Christ. Gabriel's announcement ten days before conception fits well with the expected travel time to Elizabeth's house and Mary's conception likely there, too far south for Joseph to visit.
3. The **conception of Christ** on Yom Teruah (Day of Trumpets), Wednesday, Sept 11, 3 BC, at the time of evening prayers, fulfilled one of the seven appointed days (moedim) in Leviticus chapter 23. The coinciding astronomy alignment was likely the **best match to Rev 12:1 since creation "and she was with child,"** Rev 12:2a. To reconstruct the image of Virgo and understand Rev 12:1, we must look at the astronomical fulfillment of Gen 3:15e at the Crucifixion using the astronomy fulfillment of Gen 3:15d at the First Passover to prove the relationship. Rev 12:1 was written for our understanding today as the knowledge of God's preplanning increases (Dan 12:4). Yom Teruah (Hebrew: *day of blowing*) is the day of blowing of the ram's horn, symbolic of God providing deliverance for His people as He did for Abraham and Isaac via the ram caught in the thicket (Gen

22:13). The time of the evening prayers of this day is the most appropriate and symbolic time of the year for Christ's conception.

4. **Mary's pregnancy coincided with a once-in-100-year retrograde loop of Jupiter in the lower portion of Leo** past both Regulus and Rho (the major stars on the path of the sun below Leo) that culminated in the most-spectacular-ever Jupiter-Venus merger occurring at Christ's birth. **That retrograde loop and merger together fulfilled the astronomy portion of Balaam's Num 24:17 prophecy integrated with Jacob's Gen 49:9-10 prediction.** Jupiter's entire retrograde loop throughout Mary's pregnancy was readily visible worldwide.
5. **The birth of Christ in the middle of the feast of Shavuot** (Feast of Weeks, lasting seven days) fit the blessing and rejoicing purpose of that appointed feast (Deut 16:10-12) and occurred **on the Sivan 16 anniversary of the Lord providing Moses and Israel the plan for manna from heaven** who Jesus is (Ex 16:1-13a: Sivan 16, 1448 BC; John 6:33, 35). The total **visual merger of Jupiter and Venus that evening (Tuesday, June 17, 2 BC) was by far the brightest, longest-lasting, most spectacular in the history of that region of the world**, the only long-lasting J-V merger at night. It occurred on a full-moon night, enabling the shepherds to come in a hurry (Luke 2:16). Bethlehem was jam-packed with out-of-town Shavuot guests with many outside watching the spectacular early-evening conjunction as the shepherds excitedly recounted what they had seen and heard (Luke 2:18). News of the event would have spread far as the Shavuot pilgrims dispersed five mornings later.
6. **Jesus' 40-day-old presentation to the Lord** on the astronomical anniversary of the men of Israel's appointment to be a kingdom of priests, if they obeyed the Lord (Ex 19:5-6, 16-19), recognized the priestly role that Jesus would fulfill after a life of obedience. **The astronomy that day (the sun at Regulus; Monday, July 28, 2 BC) was identical to when the men of Israel were presented to the Lord (Friday, July 19, 1448 BC) and to when Jesus was baptized 30 years later (Thursday, July 28, AD 29).** Each was a milestone event recognizing their coming priesthood opportunity.
7. **Matching Matt 2:9, Jupiter was directly in front of the Magi as they traveled by starlight from Jerusalem to Bethlehem.** As they approached Bethlehem in the early dawn light of Wednesday, January 7, 1 BC, **Jupiter's orientation relative to the location of the historic Bright Morning Star moved to 0.3° directly over that location, the child in the constellation Virgo.** Hence, it stood over the child (in Virgo, Latin: *virgin*). Jesus referenced this symbolism when He said, **"I am ... the bright morning star,"** Rev 22:16. He is the promised seed of the Woman, the child of the Virgin that would deliver mankind (Gen 3:15; Isa 7:14). **Jupiter had reversed its retrograde motion staying within 0.4° of the "child in Virgo" for more than ten days, an event that only happened eight times in the preceding 2,883 years since the Bright Morning Star.** The early church celebration of the Magi's arrival on Epiphany, January 6, aligns well with the Magi (a) meeting with Herod on the evening of Tuesday, January 6, 1 BC; (b) worshipping Christ the next morning and afternoon, Matt 2:11; and (c) departing by another way (south) that night (Jan 7) after being warned in a dream not to return to Herod, Matt 2:12.
8. **Herod's slaughter of the boys in and around Bethlehem began three midnights later as the moon entered a total eclipse** at the Friday-to-Saturday, January 9-to-10, transition (Matt 2:16; *Antiquities of the Jews*, Josephus, 17.167). After this, King Herod's health swiftly declined leading to his death. Josephus records, "It was said by those who pretended to divine, and who were endued with wisdom to foretell such things, that God inflicted this punishment on the king on account of his great impiety" (*Antiquities of the Jews*, 17.170). Josephus neglected to mention the slaughter in and around Bethlehem. The timing of that Sabbath slaughter fit well with Herod's rage when the Magi didn't return Thursday and his scouts could confirm by Friday that they were gone: they had tricked him (Matt 2:16).

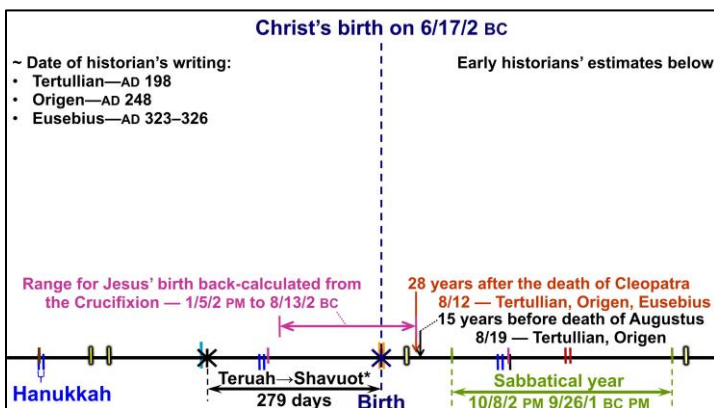
Hence, Christ's birth occurred on Tuesday evening within 3 hours after sunset, Sivan 16 (16th day of the third month in the Hebrew calendar).

* A mid-Shavuot Sivan 16 that can bridge a full-term pregnancy starting on the Day of Trumpets (Yom Teruah) is very rare, occurring about once every 108 years. It requires (1) the seventh-day Sabbath that starts the 50-day count to Shavuot to land on the last day of the preceding Feast of Unleavened Bread (once in seven years), (2) a Jewish leap year (13-lunar-month year to bridge a full-term pregnancy, occurring seven out of each nineteen years), and (3) the first two lunar cycles of the year (Nisan and Iyyar) to only last 29 days each (occurring about once in 5.6 years; usually one of the two months is 30 days long). These three events caused Shavuot to be the latest it could be in the Hebrew calendar and ~9.5 lunar months after Yom Teruah. That sequence and the preceding Passover occurring late in the year were required to place

Christ's presentation to the Lord (40 days after birth) on the solar anniversary of the men of Israel's presentation to the Lord (#6 above) while providing four subsequent days of Shavuot for the shepherds' news to spread among the Shavuot pilgrims.

Likely time sequence of Matt 2:1–16:

- The Magi arrived in Jerusalem (vs. 1–2) probably sometime between Sunday, January 4, and early Tuesday, January 6, 1 BC.
- They met and were dispatched by King Herod (vs. 7–8) on ~Tuesday evening, January 6, 1 BC (early church traditional Day of Epiphany).
- “After hearing the king, they went their way” (vs. 9a) probably represents their encampment or lodging near or in Jerusalem that Tuesday evening.
- “When they saw the star, they rejoiced exceedingly with great joy” (vs. 10) occurred about three hours before sunrise on Wednesday when the clouds must have cleared so they could again see Jupiter, which was “His star” that they had seen in the east.
- The star “went on before them” (vs. 9) occurred ~3 to 0.8 hours before sunrise on Wednesday as they traveled by star and early dawn light to Bethlehem.
- The star “came and stood over where the Child was” (vs. 9) occurred ~50 minutes before sunrise on Wednesday as they arrived at Bethlehem with Virgo rotated in the western sky and the stars disappearing in the early dawn light.
- They worshipped Christ and presented gifts (vs. 11) starting at ~sunrise and probably lasting for hours on Wednesday, January 7. (A meal and substantial conversations probably occurred with this. Christ was 203.5 days old.)
- After encamping that night and being warned via a dream, the Magi departed via another way (south towards the southern tip of the Dead Sea) towards their own country (vs. 12)—Wednesday night.
- Joseph's dream and departure (vs. 13–14) occurred ~midnight Wednesday (start of Thursday).
- “Herod saw that he had been tricked by the magi” (vs. 16a) by Friday, January 9. He slaughtered the two-and-under boys that night starting at midnight on Friday (transition between Friday and Saturday, January 9 and 10, and coinciding with a midnight lunar eclipse recorded by Josephus in *Antiquities* 17.167).



Slide 8: Early Christian historians wouldn't have had the precise astronomy tools available today to pinpoint Jesus' potential birthdates. Instead, they likely would have had confidence in His crucifixion date and back-calculated His birthdate. Many referenced the 3-hour solar blackout at the Crucifixion (Africanus, Origen, Eusebius), tying the date to the *Olympiades* by Phlegon of Tralles that placed the blackout in the fourth year of the 202nd Olympiad [~July 11, AD 32, to June 30, AD 33]). Hence, Christ was crucified at the Passover in AD 33.

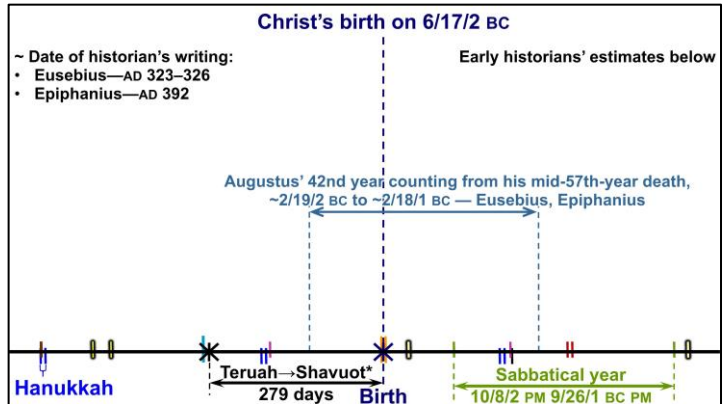
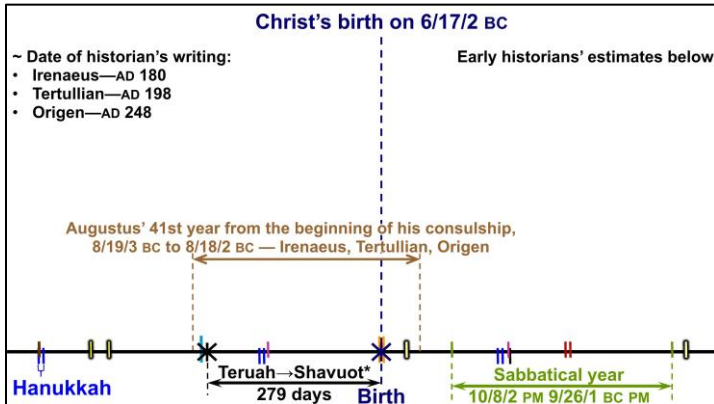
Back-calculation of Christ's birthdate results in a probable bounding range of January 5 to August 13, 2 BC (Section 8.2 of *Finding the Messiah: What the Magi Saw and Much More*). It uses:

- (1) Two of Christ's parables implying a 3.5-year ministry (Luke 4:23–26; 13:6–9);
- (2) Three Passovers during His ministry, supporting an ~3.5-year ministry (John 2:13–3:21; 5:1–47; 6:4–71);
- (3) If His public ministry started at the AD 29 Feast of Booths (matching a 3.5-year ministry), His baptism had to occur early enough to allow time for His 40-day fast and subsequent recovery (Matt 4:1–2, 11) before that feast;
- (4) As a priest with a vital ministry (Ps 110:4), His baptism and subsequent ministry would have started not long after His 30th birthday (Num 4:2–3, 34–37, 38–45; 1 Chron 23:3; Ezek 1:1);
- (5) Jesus' baptism, fast, and recovery must have been completed after the beginning of the mandatory AD 29 Feast of Weeks; otherwise, He would have started His public ministry at that feast or earlier. If this were so, His ministry

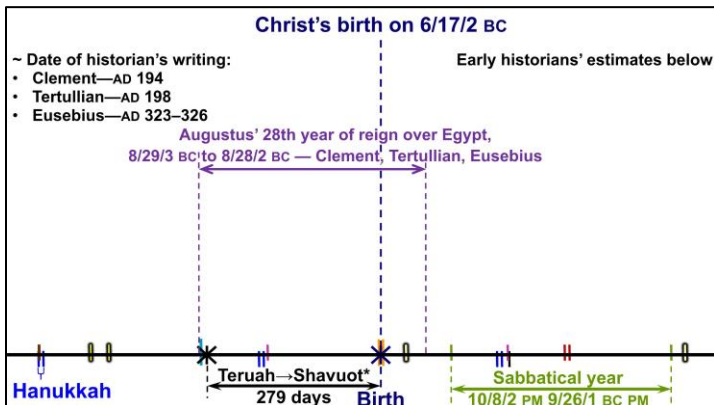
to Israel, but not to the people of Nazareth, would not have matched the three years and six months indicated in Luke 4:23–26; and

- (6) Jesus likely called His first disciples at, or shortly after, His first mandatory public feast presentation once He turned 30 and after His baptism, fast, and recovery. If His beginning-of-ministry feast was the AD 29 Feast of Weeks (June 11–18, including the preceding seventh-day Sabbath), by the time of the mandatory AD 29 Feast of Booths (October 11–18, including the concluding day), He likely would have had a significant following and the events of John 2:23 likely would have occurred then (“during the feast, many believed in His name, observing His signs which He was doing”). However, John 2:23 states this occurred at Passover (not Booths), making the AD 29 Feast of Weeks an unlikely time for His ministry to have begun.

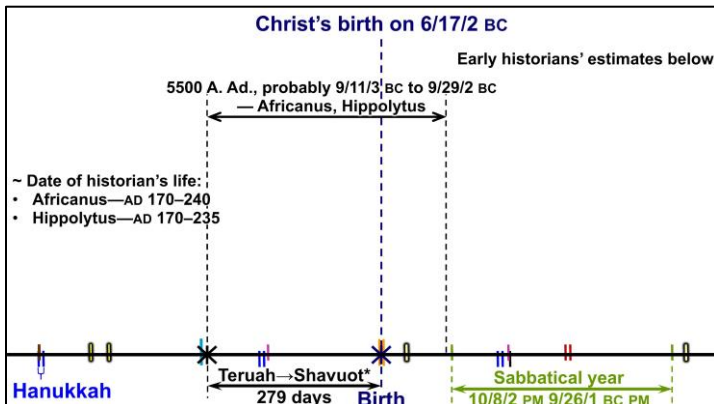
Jesus most likely started His public ministry with the start of the Feast of Booths (October 11, Tishri 15, 29 BC), three years and six months before His crucifixion, 75 days after His baptism, and 116 days after His 30th birthday (June 17, Sivan 16, 29 BC).



No notes for slides 9 and 10, above.



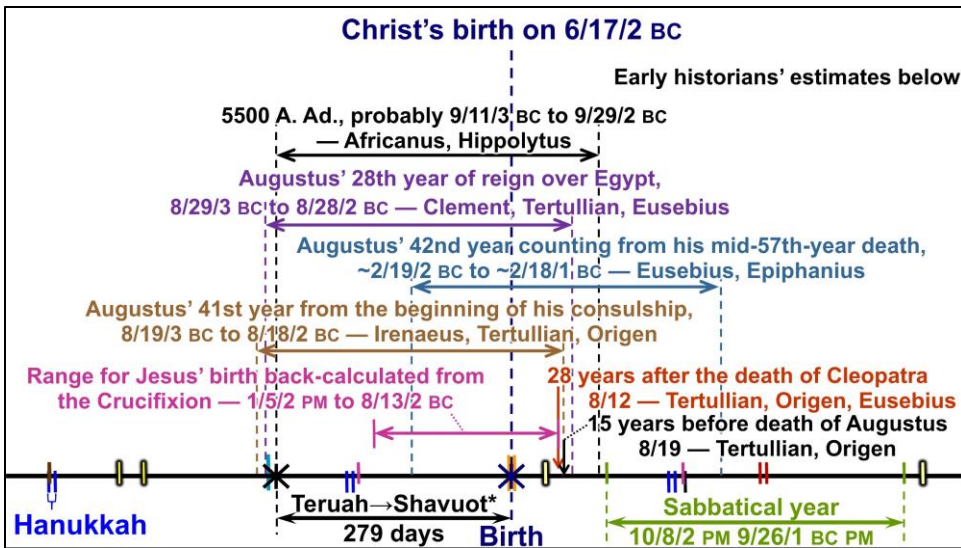
No notes for Slide 11 to the left.



Notes for Slide 12 to the left: Julius Africanus used an “in the year of Adam” (A. Ad.) numbering system for the birth and “advent,” or manifestation, of Jesus and correlated his numbering system to the Olympiads. He probably followed the Hebrew year numbering system starting his year numbering on Tishri 1 (September 11, 3 BC) and ending the day before the next Tishri 1 (September 29, 2 BC). Hippolytus, (bishop) of Rome, a contemporary of Africanus, used a similar year numbering system as Africanus—“in the year of Adam” (A. Ad.). Both stated Christ was born in 5500 in the year of Adam (A. Ad.).

Slide 13 on the next page has composite notes for slides 8

through 12.

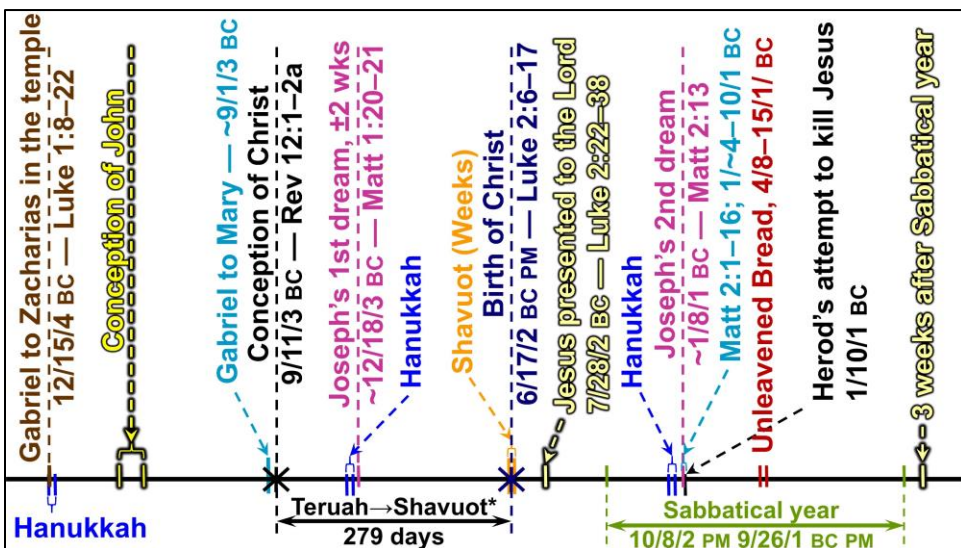


Slide 13: See section 8.3 of *Finding the Messiah: What the Magi Saw and Much More* for the early Christian historians' estimates of Christ's birth date. See section 8.2 for the determination of the maximum likely birth range back-calculated from Christ's crucifixion date. All these estimates, not counting the approximations of 28 years after the death of Cleopatra and 15 years before the death of Augustus, have a common overlap of ~ February 19 to August 13, 2 BC. Christ's actual birthday of June 17, 2 BC, fits all these

historical estimates. The combination of the eight symbolic astronomical alignments matching the biblical and historical records and the appropriate appointed day and feast of Yom Teruah and Shavuot for the conception and birth of Christ, respectively, firmly establishes Christ's birth on the evening of June 17, Sivan 16.

Many of today's historians errantly think that King Herod died in 4 BC and that Jesus was born before that. They neglect to reconcile or mention that all the early Christ historians place Christ's birth in 2 BC or 3 BC. Those early historians should have known when Herod died and that he attempted to kill Jesus, yet they didn't mention any conflict. They didn't think there was a conflict. The early historians, with their much better records, must have thought Herod died after their 2 to 3 BC birth date of Christ.

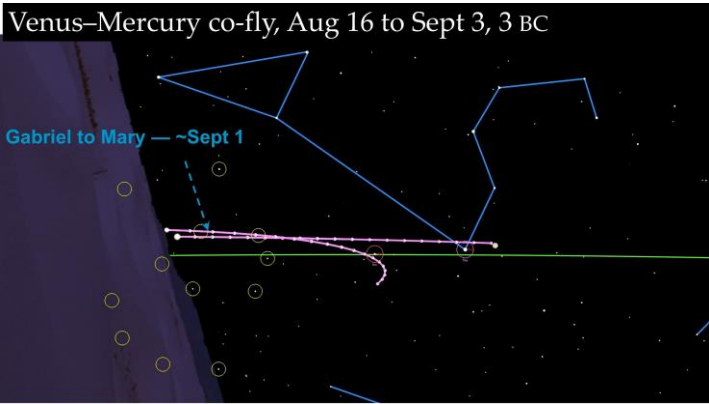
Application for us: Trust the Word of God. Don't be fooled by today's proposed conflicts. People are fairly easy to deceive, and Satan is good at it (John 8:44 — "the father of lies"). For example, many who didn't believe in Christ as the Messiah despite overwhelming evidence used the excuse that He was from Nazareth (not Bethlehem): "Search, and see that no prophet arises out of Galilee" (John 7:52, about six months before Christ's crucifixion). Let's not be like that and use excuses to not trust in God.



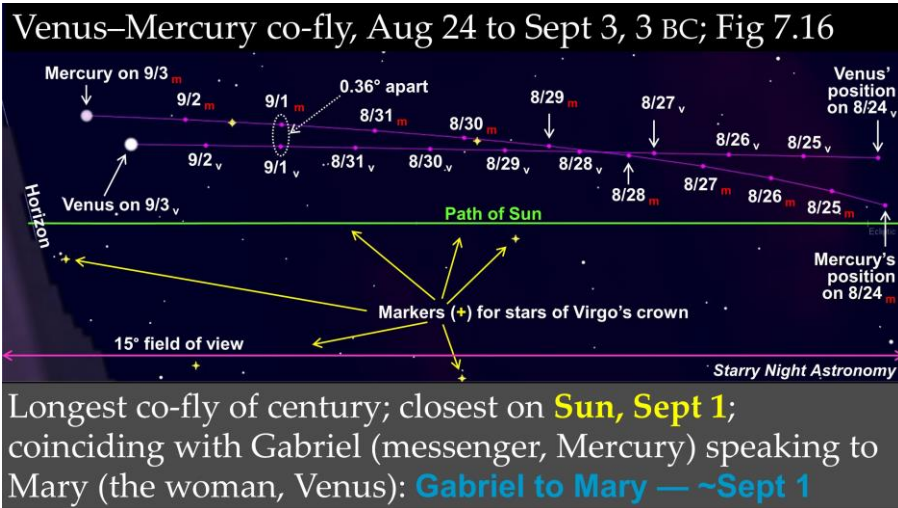
Slide 14: Repeat Slide 7 with the same notes as that slide

Gen 1:14-15 (Gen 1:14-15; fourth day of creation)
¹⁴ Then God said, "Let there be **lights in the expanse of the heavens** to separate the day from the night, and **let them be for signs** and for seasons and for days and years; ¹⁵ and let them be for lights in the expanse of the heavens to give light on the earth"; and it was so.

Slide 15: God keeps His Word. If He said he made stars for signs, He did. I find it interesting that people can be shown clear astronomical signs associated with Christ's coming and not believe that God would do this.



Slide 16: Babylon, 49° field of ecliptic view (along the path of the sun), Aug 16 to Sept 3, 3 BC. Sunday, September 1 ±2 days is my (Murray's) best estimate of when Gabriel spoke to Mary. Venus' path is relatively straight. Mercury's path is curved. Starting the morning of August 24, Mercury stayed within 1° of Venus as it rotated around Venus, readily visible more than an hour before each sunrise.



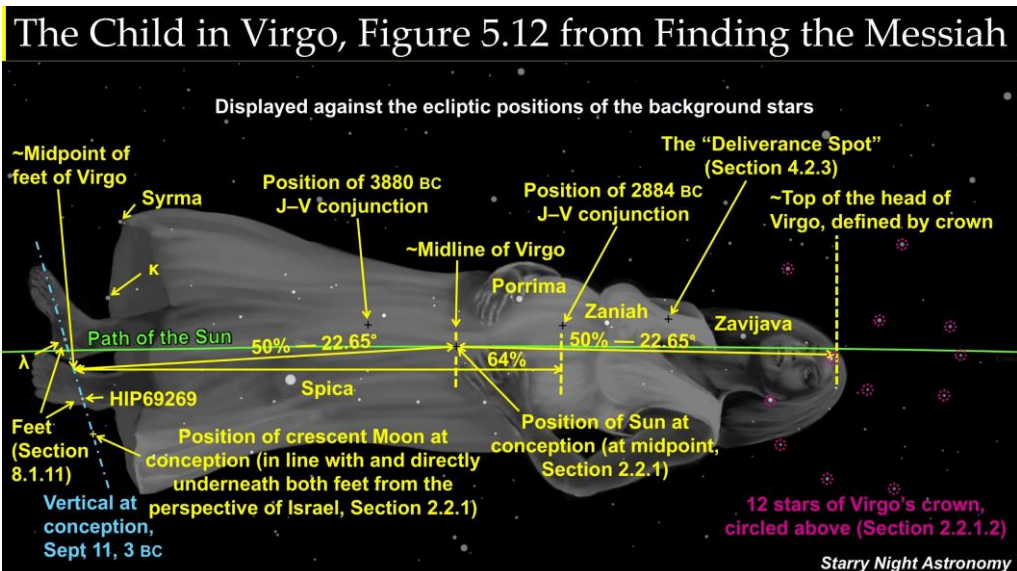
Slide 17: This best-of-the-century Mercury-Venus co-fly (displayed as viewed from Babylon) occurred as Jupiter approached Regulus and started its retrograde loop (Slide 22, figure 7.35).¹ Mercury and Venus were closest on Sept 1, Sunday, Elul 21. Mercury progressively brightened each of these 11 days, finishing at -1.03 magnitude, very bright. (It was also very bright on Sept 1, -0.95 magnitude. For comparison, the moon is 0.5° wide; Venus and Jupiter were at -3.93 and -1.79 magnitude, respectively, on Sept 1; each 1.0 decrease represents a 2.5 increase in brightness.)

Longest co-fly of century; closest on **Sun, Sept 1**; coinciding with Gabriel (messenger, Mercury) speaking to Mary (the woman, Venus): **Gabriel to Mary — ~Sept 1**

If Mary departed Nazareth early on Monday, September 2, and arrived at Elizabeth's house late on Tuesday, September 10, she would have eight travel days, reasonable to reach the southern hills of Judea (~140–155 miles).

Rev 12:1-2 (Conception, then birth)
¹ A great sign appeared in heaven: a woman clothed with the sun, and the moon under her feet, and on her head a crown of twelve stars;² and she was with child; and she cried out, being in labor and in pain to give birth.

Slide 18: Written in the AD 90s, over 90 years after Christ's conception. John, who wrote this, probably wasn't yet born when it occurred. Most or all of the other apostles had died. The great sign happened in the daytime. No one could see it. So, for whom was this written?



Slide 19: June Gardner and Emily Noel drew this Virgo image for me.

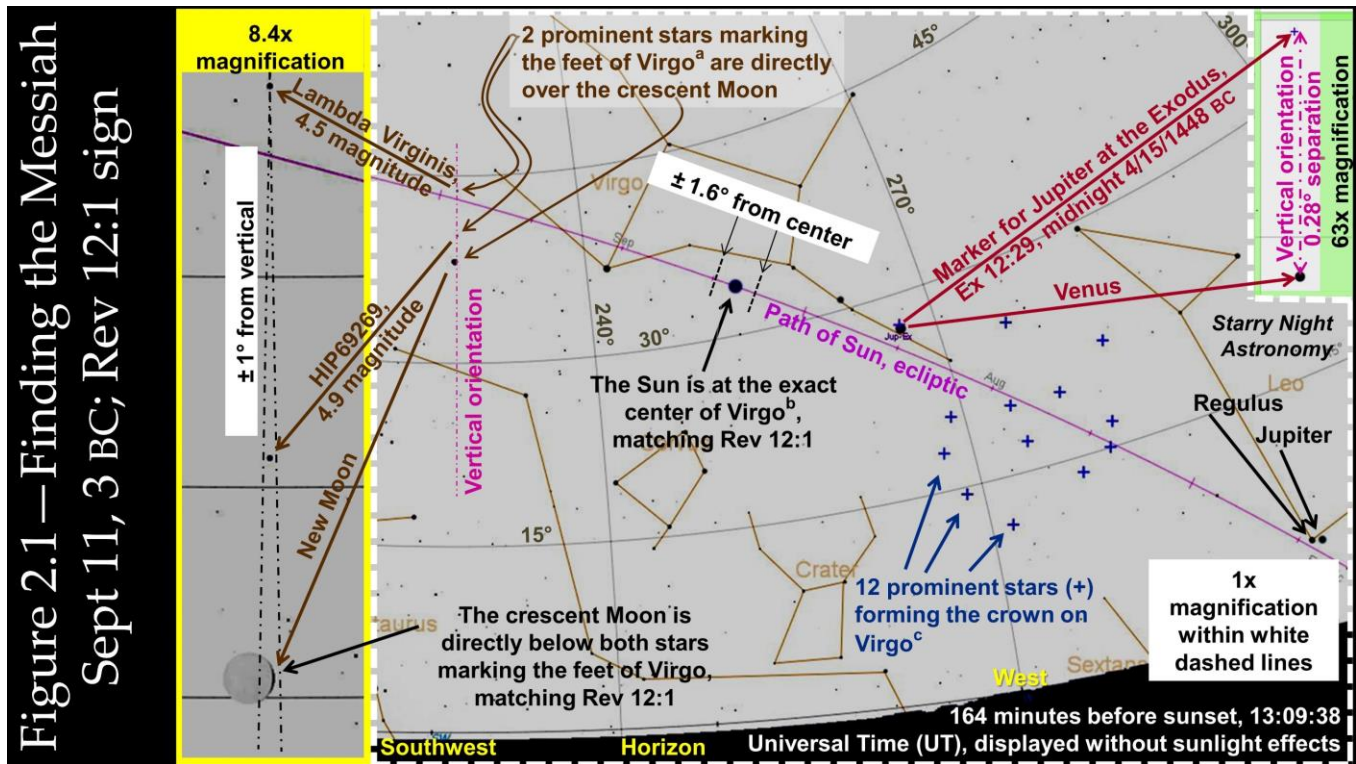
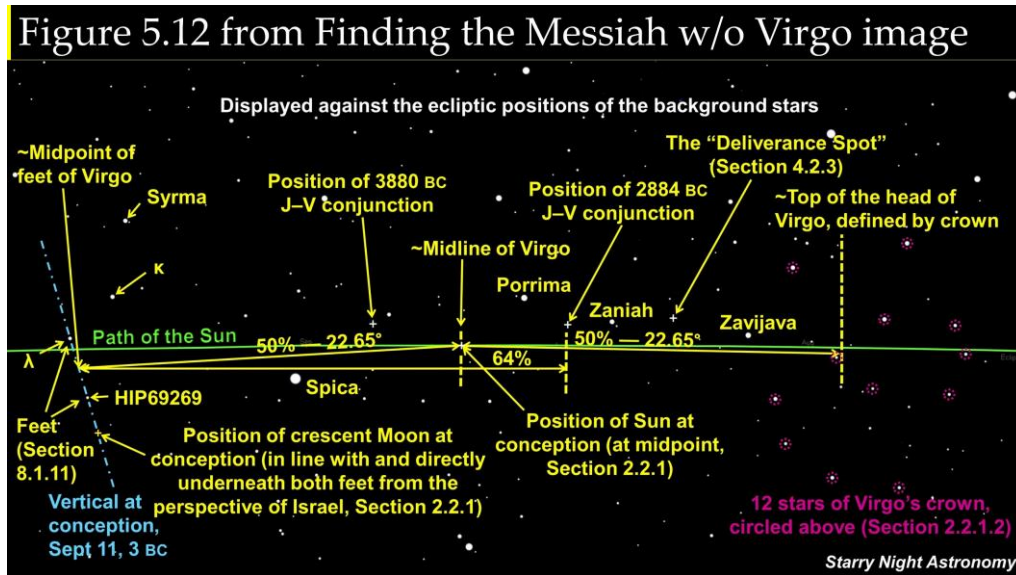
Virgo's dimensions are defined by her crown and her feet plus the prominent stars. Rev 12:1 specifies her crown of 12 stars and that the moon was under her feet at Christ's conception. Gen 3:15 describes the judgments of Satan and Jesus. Each has corresponding astronomy signs fitting as should be expected from Gen 1:14.

¹ All the slides containing figure numbers were extracted from the book *Finding the Messiah, What the Magi Saw and Much More*, © 2023.

The two greatest Jupiter–Venus conjunctions before Christ from that region of the world occurred in Virgo, shown in this slide. The latter likely became the famous great “Bright Morning Star” of Noah’s time seen by generations 5 through 10 in 2884 BC. (Noah, generation 10, was 181 years old. Enoch, generation 5, was “taken” 251 years before that.) The other great predecessor conjunction, tied with the 2884 BC conjunction for brightness and longevity, occurred in 3880 BC and could have been seen by Adam (245 years old), Seth (generation 2 at 117 years old), and Enosh (generation 3 at 9 years old). The 2884 BC conjunction stood out against a starlight-only night sky with the moon below the horizon; whereas, the 3880 BC conjunction had a 15.7-day-old moon above the horizon brightening the pre-dawn sky and making that conjunction look slightly less spectacular.

Star view from Jerusalem.

Slide 20: Same as the previous slide, but without Virgo’s image.

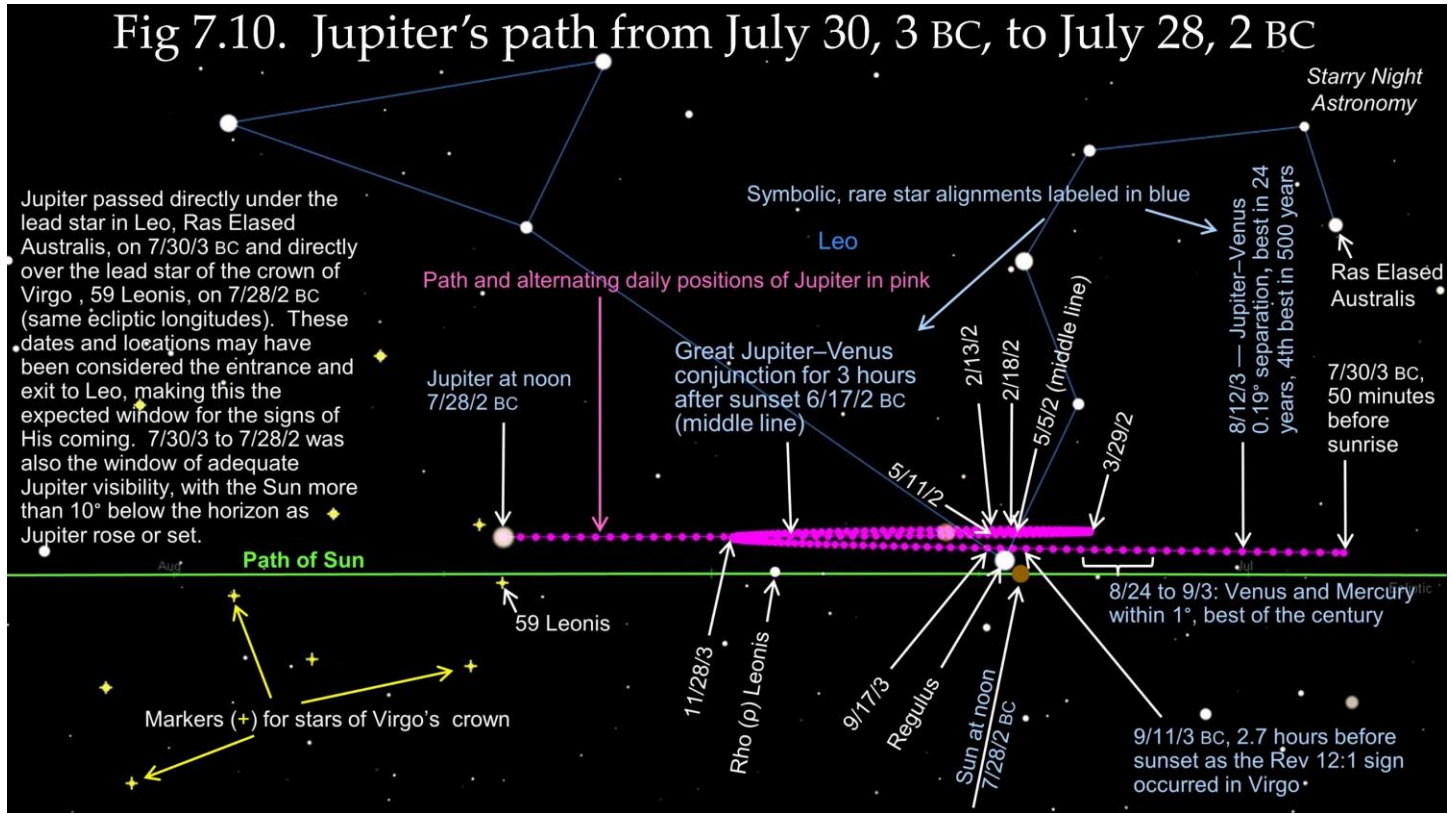


Slide 21: View from Jerusalem, 2 hours and 44 minutes before sunset.

Probably corresponds within one day to Luke 1:40–55:

⁴¹ When Elizabeth heard Mary’s greeting, the baby leaped in her womb; and Elizabeth was filled with the Holy Spirit. ⁴² And she cried out with a loud voice and said, “Blessed are you among women, and blessed is the fruit of your womb! ...

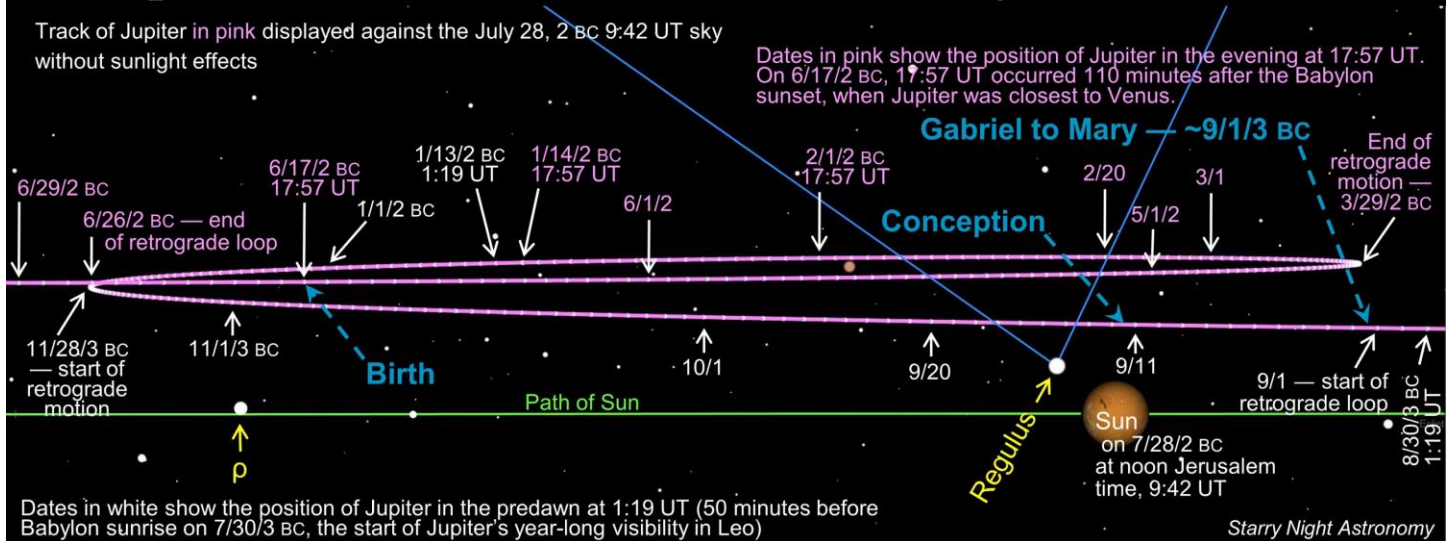
⁴⁶ And Mary said: "My soul exalts the Lord, ⁴⁷ And my spirit has rejoiced in God my Savior. ⁴⁸ "For He has had regard for the humble state of His bondservant; For behold, from this time on all generations will count me blessed.



Slide 22 (figure 7/10 on the previous page): Path of Jupiter from July 30, 3 BC, to noon July 28, 2 BC, showing alternating daily positions of Jupiter as viewed from Jerusalem. Includes symbolic, rare star events and the final star and planet positions at noon July 28, 2 BC.

This includes Jupiter's position (a) at Gabriel's announcement (~9/1), (b) at Conception (9/11), (c) through Mary's pregnancy (9/11/3 BC – 6/17/2 BC), (d) at Christ's birth (6/17/2 BC), and (e) at His presentation to the Lord (7/28/2 BC). These views of Jupiter were visible worldwide! Jupiter was highest and seen longest through the night during its retrograde loop from Sept 1, 3 BC, to June 26, 2 BC.

Figure 7.35—Path of Jupiter during Mary's pregnancy Sept 11, 3 BC, to June 17, 2 BC, + 13 days on each side



Num 24:17: ... A star shall come forth from Jacob, A scepter shall rise from Israel, ...

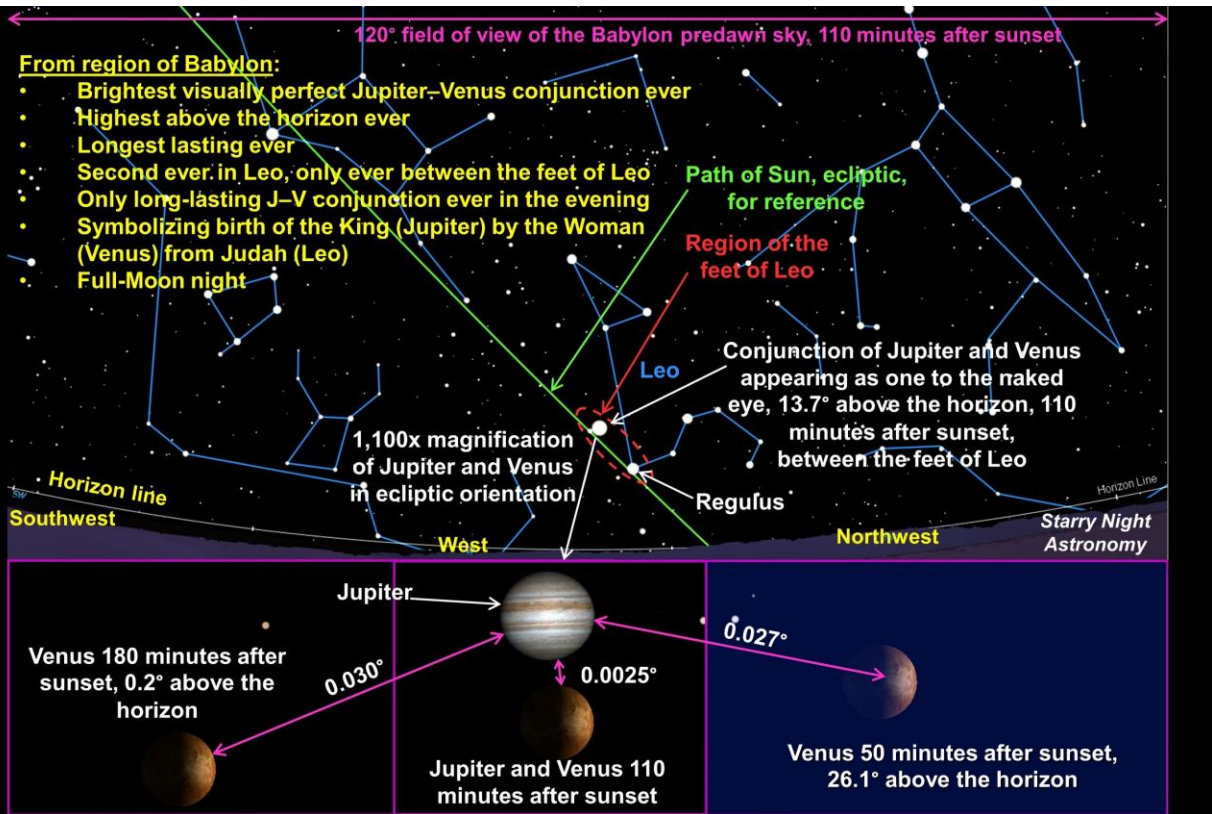
Slide 23: Notice the symmetry in the retrograde loop of Jupiter between conception and birth, viewed from Babylon.

Barring cloud cover, this pattern was visible worldwide. On the morning before conception (9/11), Jupiter rose in the east as a morning star 3.5 hours before sunrise, disappearing at early dawn light. Each subsequent morning it rose earlier and earlier, visible all night by mid-pregnancy. On the evening of or after birth (6/17), it set as an evening star, visible from dusk until it set in the west 3 hours after sunset.

For people with average vision, the great Jupiter-Venus conjunction at Christ's birth appeared as one merged light from the eastern Mediterranean Sea to mid-present-day Iran. Further west and east Jupiter and Venus could be seen as separate for part of the evening, but the complete merger could be extrapolated from observations the day before and after.

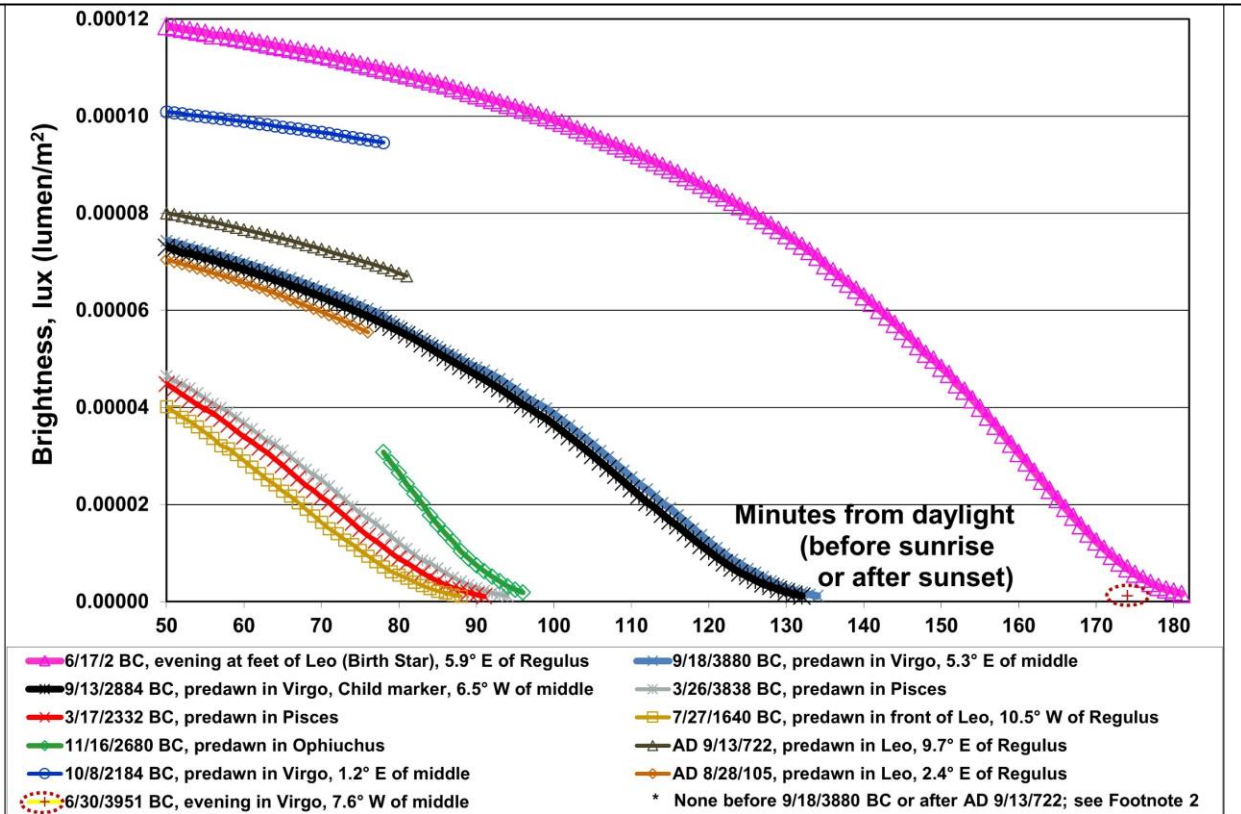
This worldwide display of Jupiter from conception to birth, culminating in the merger with Venus, is the star of Balaam's prophecy (Num 24:17).

Figure 5.9 — Finding the Messiah
June 17, 2 BC
Christ's Birth Star



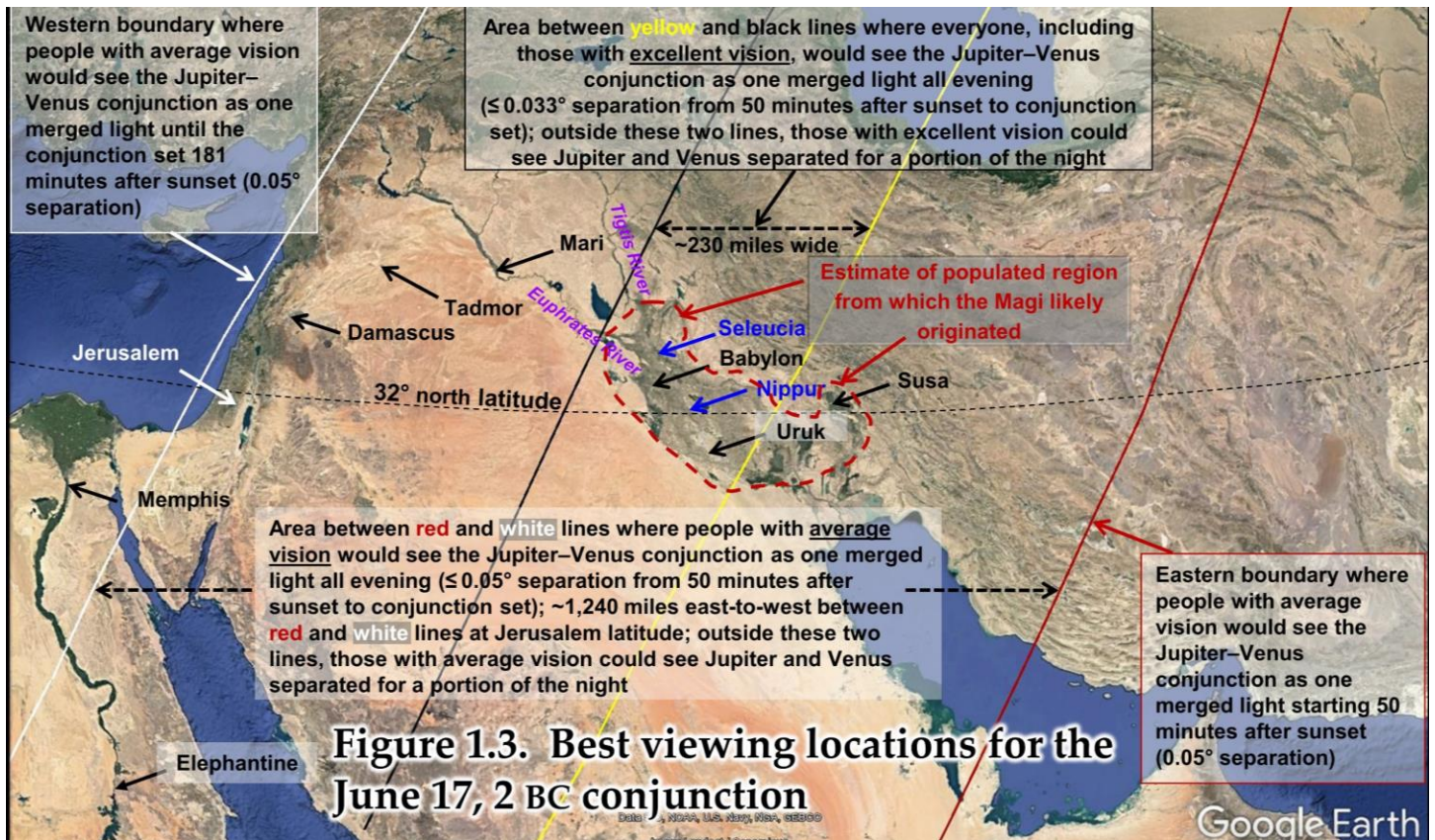
Slide 24: View from Babylon. The view from Israel to the naked eye was essentially the same.

Figure 5.1 — Finding the Messiah
Comparing all the Babylonian
Jupiter-Venus Mergers

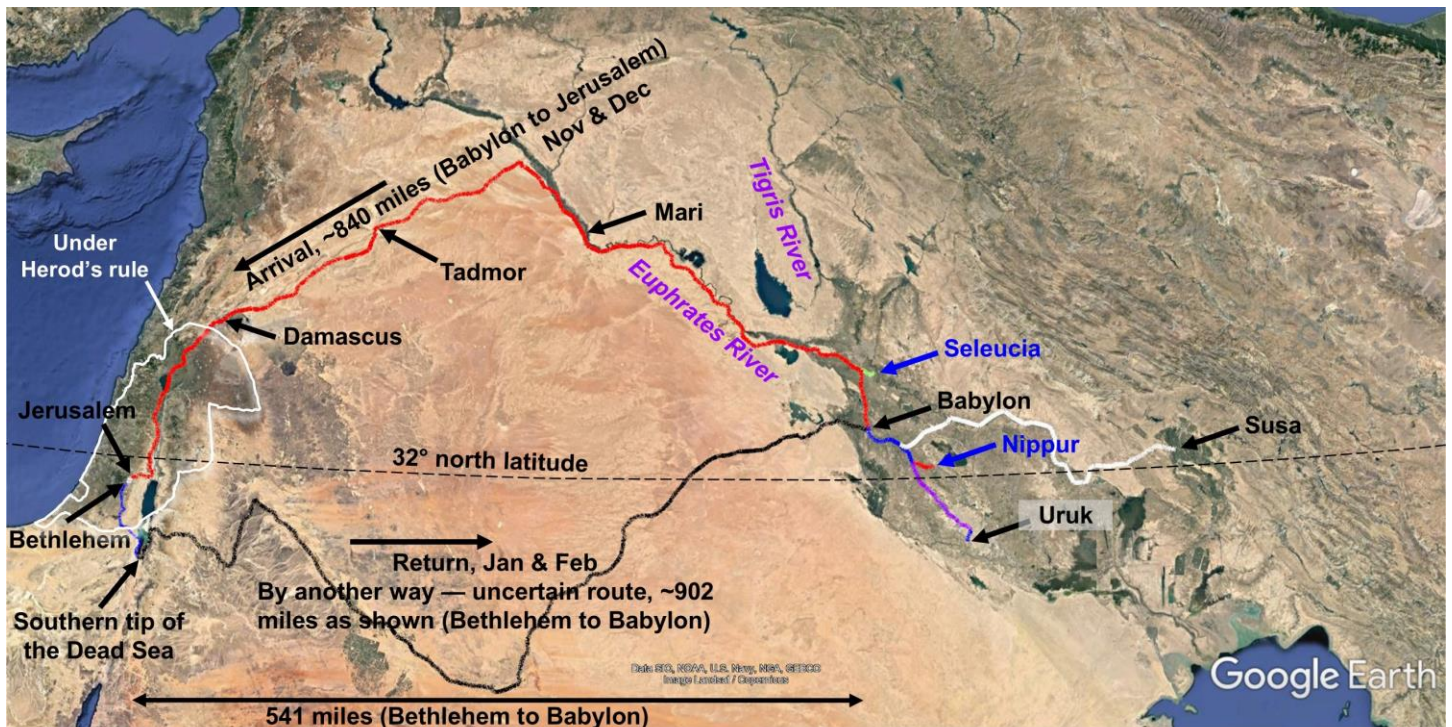


Slide 25: Brightness of all visually combined Jupiter-Venus conjunctions from 4150 BC to AD 2100 as viewed from Babylon using a 0.033° lit edge-to-lit edge separation criterion (2 arcmin, excellent-vision limit).

The pink line shows Christ's birth star, by far the most spectacular ever Jupiter-Venus conjunction seen from that region. The black line shows the "Bright Morning Star" that Noah, generation 10, saw at 181 years old. (Mahalalel, generation 5 was 884. Shem, generation 11, was born 320 years later.) The moon was below the horizon, making the 2884 BC merger stand out as more spectacular than the 3884 BC merger, which only generations 1 thought 3 saw.



Slide 26: No notes.



Slide 27: No notes.

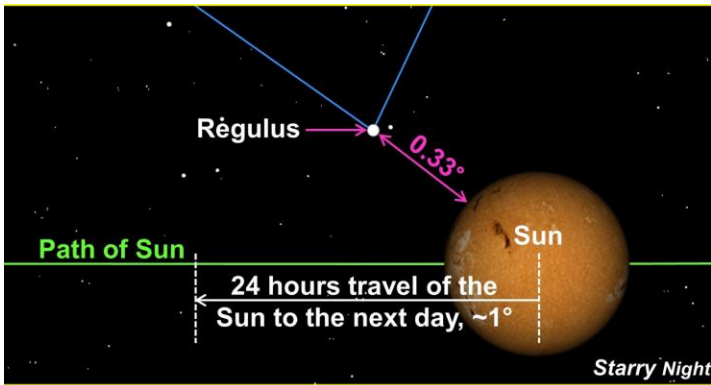


Figure 3.3. Sun and Regulus when 40-day-old Jesus was presented to the Lord; noon of July 28, 2 BC, without sunlight effects (Luke 2:22-38).

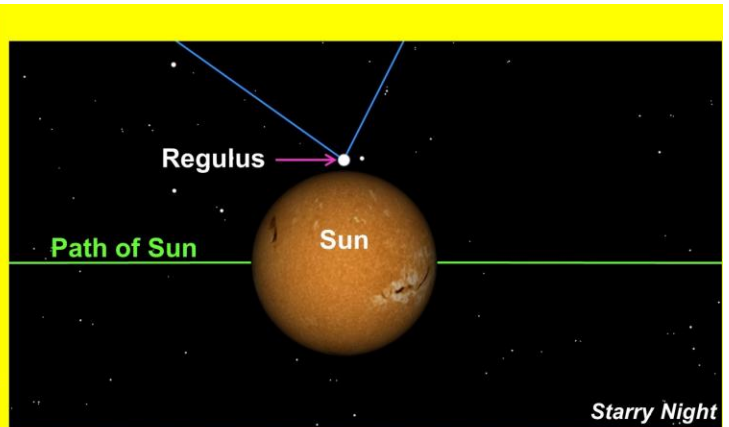


Figure 3.4. Sun and Regulus when the men of Israel were presented to the Lord; morning of July 19, 1448 BC, without sunlight effects (Ex 19:16-20a).

Slide 28: no notes.

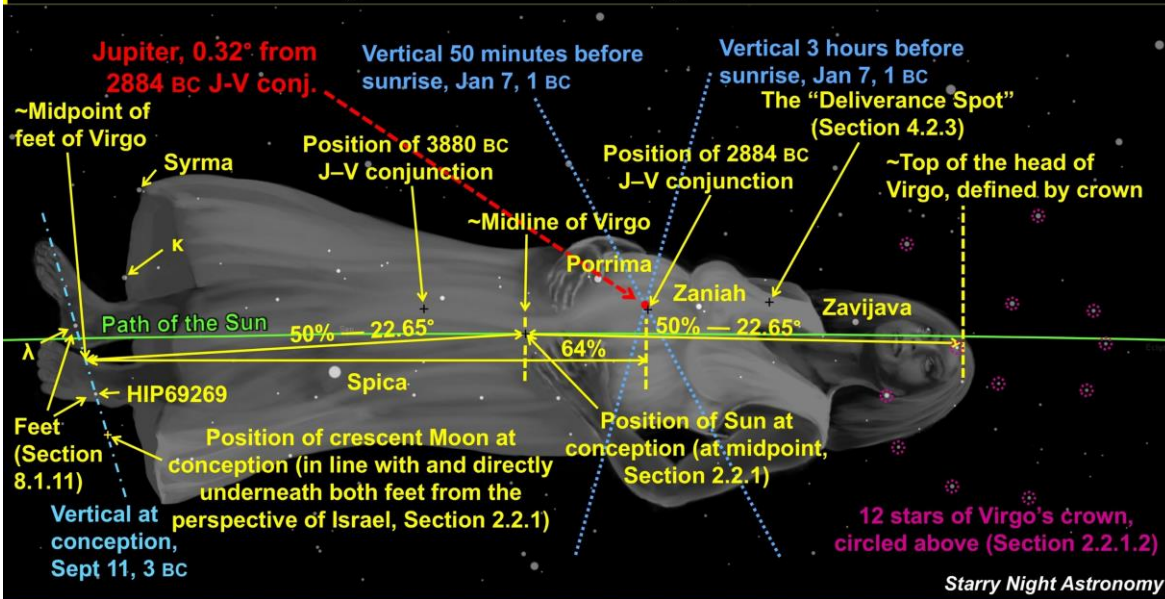
Matt 2:9 (the Child in Virgo)

After hearing the king, they went their way; and the star, which they had seen in the east, went on before them until it came and stood over *the place where the Child was.*

Slide 29: My best estimate for how this played out is:

1. King Herod met with the Magi on Tuesday evening, January 6, matching the early church tradition that the Magi arrived on January 6.
2. After Herod discharged the Magi, they probably bivouacked for the night, expecting to travel the five miles south to Bethlehem in the morning.
3. But to their surprise and great joy, someone noticed that the clouds cleared (vs 10). They could again see Jupiter, bright and high in the sky. It was directly in line with Bethlehem and still very close to the child in Virgo where they had last seen it many days prior.
4. They departed for Bethlehem probably about 3 hours before sunrise, when Jupiter was in line with Bethlehem.
5. They traveled by starlight covering 5 miles over about two hours. (The moon set 2 hours and 45 minutes before sunrise.)
6. They arrived as the dawn early light caused the background stars to fade from view with Jupiter directly over the location of the child in Virgo.

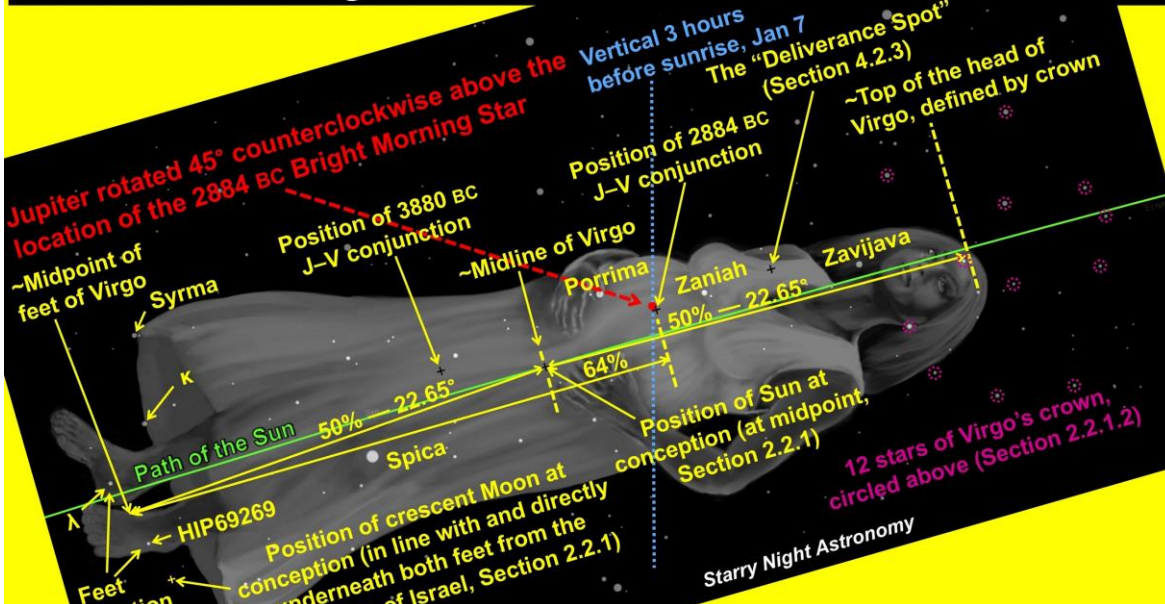
The Child in Virgo w/ vert. lines predawn, Jan 7, 1 BC



Slide 30: Jupiter stopping within 0.4° of this location in Virgo is an extremely rare event. It only happened nine times from 2884 BC to AD 1 (Table 5.1 in *Finding the Messiah*), all after 1603 BC. This was the fourth closest of those nine, and the third closest of the five that were morning stars. It had to be a pre-morning star for the

Magi to arrive at dawn with the star over the child and for Jupiter to go before them as they traveled to Bethlehem. (Jupiter rose 4 hours and 10 minutes after sunset on January 6.)

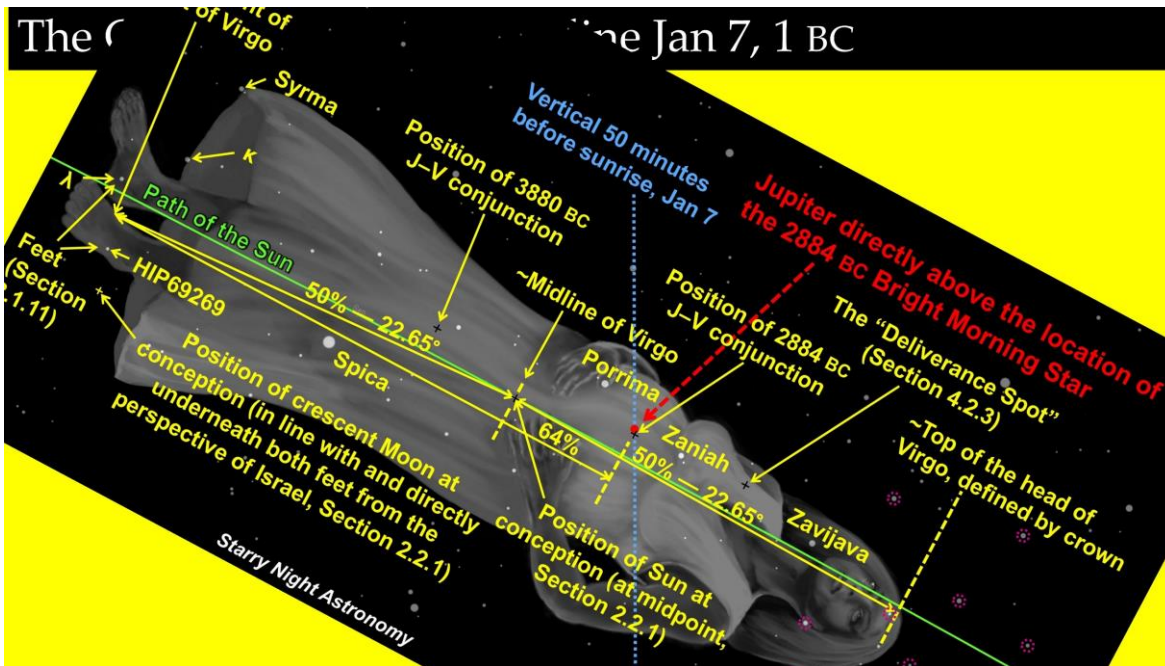
The Child in Virgo w/ vert. line ↑



Slide 31: On January 7, as the Magi started south towards Bethlehem about 3 hours before sunrise, Jupiter was directly in front of them (8° west of due south, 67° above the horizon), 0.32° from the child in Virgo (the location of the 2884 BC Bright Morning Star), and rotated to the left (45° counterclockwise relative to directly

above). The moon set soon after they started (2 hours and 45 minutes before sunrise).

Their early departure and travel by starlight prevented Herod's spies from knowing when the Magi departed and where they went.



Slide 32: The Magi traversed the five miles by starlight over about 130 minutes, arriving in Bethlehem about 50 minutes before sunrise as the background stars faded from view. As Virgo curved in the sky, Jupiter could last be seen 0.32° directly above the position of the historic Bright Morning Star, 50° above the horizon,

and 64° west of due south (244° azimuth).

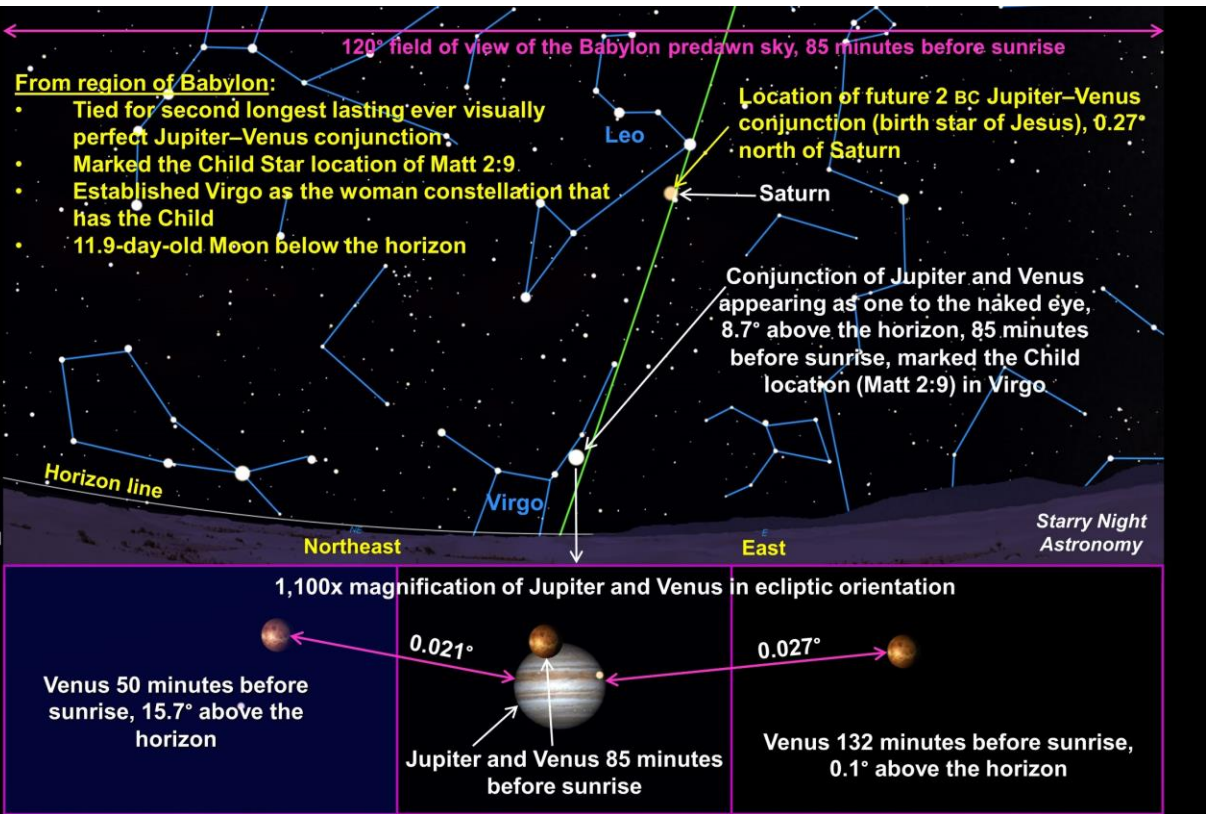
Note to Murray: Show Starry Night "1_7_13 hrs b4 Sun Jer 60 deg black vert orientation 9_4_24 w_ Jup and alt grid r2" and 1° version (1_7_13 hrs b4 Sun Jer 1 deg black vert orientation 9_4_24 w_ Jup and alt grid r2) showing the rotation over 130 minutes as the Magi approached Bethlehem. Use a setting of 8 for planets and a setting of 8 for star range in the 60° version.

Rev 22:16 (Jesus' last "I, I am," $\epsilon\gamma\omega\ \epsilon\iota\mu\iota$ statement)
 "I, Jesus, have sent My angel to testify to you these things for the churches. I am the root and the descendant of David, the bright morning star."

amount the seven golden lampstands (1:20–2:1, the churches), (c) Who is the first and the last, Who was dead, and has come to life (2:8), (d) Who has the sharp two-edged sword (2:12), (e) Who has eyes like a flame of fire and feet like burnished bronze (2:18), (e) Who has the seven spirits of God and the seven stars (3:1), (f) Who is holy and true and has the key of David, Who opens and no one will shut, Who shuts and on one opens (3:7), and (g) Who is the faithful and true Witness, the Beginning of the creation of God (3:14), in His last and final emphatic statement to the churches of who He is ($\epsilon\gamma\omega\ \epsilon\iota\mu\iota$) says this: I am ... the bright morning star.

Slide 33: This is Jesus' last statement to the churches, His fourth and final $\epsilon\gamma\omega\ \epsilon\iota\mu\iota$ statement to the churches of Revelation. Jesus, (a) Who holds the seven stars (the angels to the churches) in His right hand (2:1), (b) Who walks

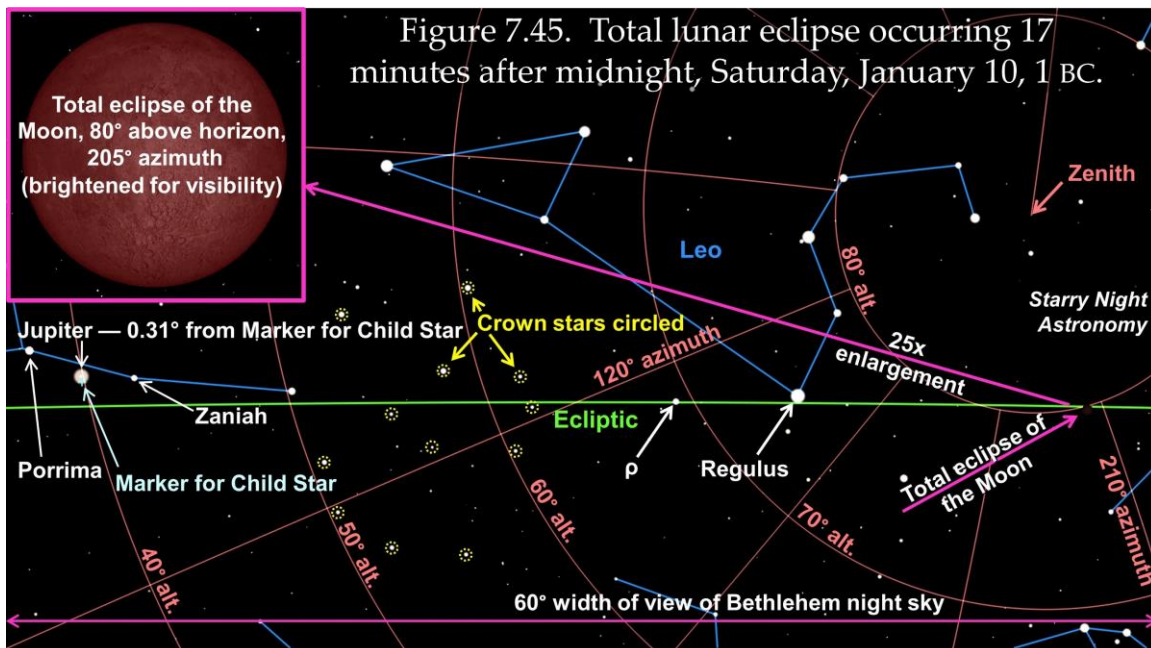
Figure 5.8 – Finding the Messiah The Bright Morning Star Sept 13, 2884 BC



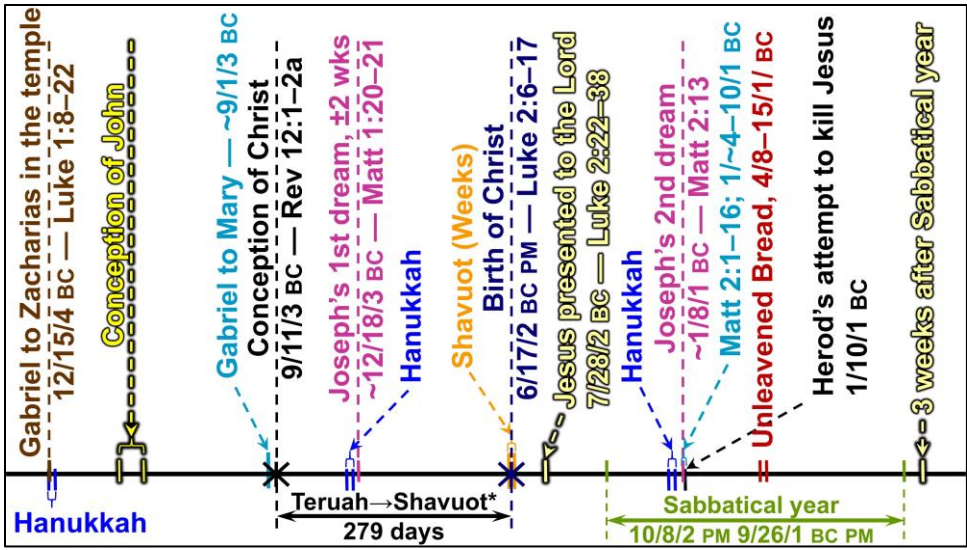
Slide 34: View from Babylon, 85 minutes before sunrise.

Notice, that Saturn simultaneously marked the location where His birth star would be 2,882 years later. Generations 5 through 10 (Mahalalel through Noah) in the line of Christ were alive, except Enoch (generation 7) was “taken” 251 years prior. This became the “bright morning star” that marked the location of the child in Virgo, the child of the virgin that would deliver mankind: Christ. Some of the eight persons on the Ark must have passed this on so that the Magi knew the exact location of the “child in Virgo.”

The moon was below the horizon making the conjunction and Saturn, which marked where Christ’s birth star would occur, stand out. In comparison, the 3880 BC conjunction was equally bright, but the 15.7-day-old moon was above the horizon so that conjunction didn’t stand out as much as the 2884 BC conjunction. Hence, the greatest J-V conjunction that preceded Christ’s birth was this one. It was the bright morning star of fame in Noah’s time and passed down to the time of the Magi as the child in Virgo, the virgin.



Slide 35: This eclipse coincides with Herod killing all the 2-year-old and under boys in Bethlehem and its vicinity. It was a sign of judgment against Herod and his co-conspirators.



Slide 36: Repeat Slide 7 with the same notes as that slide.