

The Star of Bethlehem

Was the Star of the Magi a Genuine
Astronomical Occurrence?



Hugh Welchel
NT508 Gospels
RTS Washington DC
November 21, 2007

The Star of Bethlehem

Introduction

*O star of wonder, star of night,
Star of royal beauty bright,
Westward leading, still proceeding,
Guide us to thy perfect light.*

There is no brighter symbol of the Christmas Story than the Star of Bethlehem. For over two thousand years, believers, scoffers and the curious have wondered at the Biblical account of the Star. The book of Matthew describes the unusual astronomical events that surround the birth of Christ. Skeptics easily dismiss the account of the Star as a myth devised by the early church, but for many believers, it is a mystery accepted on faith. Many modern theologians regard the reference to the star in Matthew's gospel as 'midrash', that is a story made up to satisfy an Old Testament prophecy.¹ This paper will try to answer the age old question, "What was the Star of Bethlehem?" by analyzing the text in the light of current historical scholarship and astronomy. This paper will focus on the thesis that the Star described in Matthew's account was a genuine astronomical occurrence observed by the Magi between 3 and 2 B.C.

The Text: Matthew 2:1-12

¹After Jesus was born in Bethlehem in Judea, during the time of King Herod, Magi from the east came to Jerusalem ²and asked, "Where is the one who has been born king of the Jews? We saw his star in the east and have come to worship him." ³When King Herod heard this he was disturbed and all Jerusalem with him. ⁴When he had called together all the people's chief priests and teachers of the law, he asked them where the Christ was to be born. ⁵"In Bethlehem in Judea," they replied, "for this is what the prophet has written: ⁶" 'But you, Bethlehem, in the land of Judah, are by no means least among the rulers of Judah; for out of you will come a ruler who will be the shepherd of my people Israel.' " ⁷Then Herod called the Magi secretly and found out from them the exact time the star had appeared. ⁸He sent them to Bethlehem and said, "Go and make a careful search for the child. As soon as you find him, report to me, so that I too may go and worship him." ⁹After they had heard the king, they went on their way, and the star they

¹ R. E. Brown, *The Birth of the Messiah*, (New York City: Chapman, 1977), 36-37.

had seen in the east went ahead of them until it stopped over the place where the child was.

¹⁰When they saw the star, they were overjoyed. ¹¹On coming to the house, they saw the child with his mother Mary, and they bowed down and worshiped him. Then they opened their treasures and presented him with gifts of gold and of incense and of myrrh. ¹²And having been warned in a dream not to go back to Herod, they returned to their country by another route.²

Only two of the four gospel accounts depict events surrounding the birth of Christ and only the gospel of Matthew describes the star of Bethlehem. Examining this biblical account provides us the following list of ten qualities which must be present before any natural celestial event could be considered to be the Biblical Star of Bethlehem.

1. The Star appears before the death of Herod (verse 1).
2. To the Magi the Star signified birth (verse 2).
3. To the Magi the Star signified kingship (verse 2).
4. To the Magi the Star had a connection with the Jewish nation (verse 2).
5. The Star rose in the east, as other stars (verse 2).
6. The Star appeared at a precise time (verse 7).
7. Herod did not know when The Star appeared (verse 7).
8. The Star endured over time (verse 9).
9. The Star was ahead of the Magi as they went south from Jerusalem to Bethlehem (verse 9).
10. The Star stopped over Bethlehem (verse 9).

Over the past two thousand years nearly everything in the night sky has at one time or another been proposed as the Star, usually with near complete disregard for the above Biblical criteria. Considering these qualifications, we are in a position to disqualify most astronomical phenomena. If any one of the ten Biblical features in Matthew's account is absent, then the phenomenon we are examining may be interesting, but is not likely the Star of Bethlehem.

Before we can begin our search in earnest, there are two additional questions that must be answered. The first is "Who were the Magi?" The answer to this question will give us great insight into Star's identify. Second, in order to find the Star we must also know the time period

² *The Holy Bible: New International Version*. electronic ed. (Grand Rapids: Zondervan, 1996), Mt 2:1-12.

in which to look. The answer to the question, “When was Jesus born?” will tell us the time period to look for this astronomical event in the night sky over Judea

Who Were the Magi?

What most people know about the Magi comes from popular traditions and Christmas carols most of which are unsupported by the biblical text. Matthew does not suggest that the Magi were kings, he does not say that they were three in number nor is it likely that they were from the Orient. Who then were these Magi and where did they originate? The Greek word μάγος is used by Matthew and translated Magi by the NIV. It is the name given to great, powerful men, who were priests and wise men among the Medes, Persians, Zoroastrians and Babylonians.³ Dr. Craig Chester, Past President of the Monterey Institute for Research in Astronomy gives the following description of the Magi:

Magi is the plural of Magus, the root of our word magic, and “court astrologers” is probably the best translation, although “wise men” is also a good term, descriptive of the esteem in which they were widely held. The group of Magi in question came “from the East.” They might have been Zoroastrians, Medes, Persians, Arabs, or even Jews. They probably served as court advisors, making forecasts and predictions for their royal patrons based on their study of the stars, about which they were quite knowledgeable. Magi often wandered from court to court, and it was not unusual for them to cover great distances in order to attend the birth or crowning of a king, paying their respects and offering gifts. It is not surprising, therefore, that Matthew would mention them as validation of Jesus’ kingship, or that Herod would regard their arrival as a very serious matter.⁴

The Magi were very important, powerful people of their day. The mention of their visit to Jerusalem was Matthew’s way of securing the testimony of top scientific authorities to authenticate the royal birth of Jesus.

“There are many references in ancient literature to Magi visiting kings and emperors. For example, Tiridates, the King of Armenia, led a procession of Magi to pay homage to Nero in

³Spiros Zodhiates, *The Complete Word Study Dictionary: New Testament*. electronic ed. (Chattanooga: AMG Publishers, 2000, c1992, c1993) G3097.

⁴Craig Chester, “The Star of Bethlehem,” *Imprimis*, December 1996 Volume 25, Number 12.

Rome in AD 66⁵ and Josephus records that Magi also visited Herod in about 10 BC.”⁶

Therefore a visit by the Magi to pay homage to a newborn king would not have appeared unusual to the original readers of Matthew's gospel but it would not have gone unnoticed. In fact, verse 3 says that not only was Herod disturbed but “all Jerusalem with him.” The Magi were such important significant individuals they would not have traveled alone. In fact, they probably traveled with a very large entourage including soldiers, even a small army for protection. So it should not be surprising that Herod and the citizens of Jerusalem were troubled when they arrived.

The Magi must have had an unmistakably clear astronomical/astrological message to urge them on such a long, dangerous journey. The Magi were neither astronomers nor astrologers in the modern sense. They brought together, science, poetry, art and religion to explain and to understand their universe. The Magi charted the stars, noting their movements and made predictions based on what they saw so in that sense they were astronomers. Yet they believed that the positions of stars and planets have special meaning and foretold significant future events and were seen in conjunction with existing prophecies so they also acted as astrologers. In Matthew 2:2 the Magi asked Herod, “*Where is the one who has been born king of the Jews? We saw his star in the east and have come to worship him.*” They saw something in the night sky that was so significant it convinced them to make the trip of over a thousand miles to Jerusalem to look for this new king.

How could seeing “signs in the sky” inform the Magi that a King of the Jews had been born? After the Babylonian exile (II Kings 24-25), many Jews continued to live in the Persian Empire and by the beginning of the first century there were over three million Jews were scattered throughout the Diaspora.⁷ Thus, by the time of Christ's birth the Hebrew religion would have long existed in the "east." This might explain how the Magi had knowledge of the Messiah, the King of the Jews. Another possibility may be found in the Old Testament story of Daniel and the Babylonian exile. We know from the Old Testament that King Nebuchadnezzar assigned the prophet Daniel to the high office of “chief of the magicians, enchanters, astrologers

⁵ Suetonius, Nero 13 and 30; Tacitus, Annals, 16:23; Dio Cassius, *Roman History*, 63:1.

⁶ Colin Humphreys, “The Star of Bethlehem,” *Science and Christian Belief*, Vol 5, (October 1995), 83-101.

⁷ Craig Blomberg, *Jesus and the Gospels* (Nashville: Broadman and Holman, 1997), 55.

and diviners.”⁸ Perhaps this association of Daniel with the early Magi in Babylon helps to explain why the Magi in question 600 years later expected a Jewish king to arrive in Judea near the end of the first century BC. In fact, there is evidence that Daniel’s prophesy of the coming of a powerful Jewish King was well know in most of the ancient world in the first century. Josephus wrote that it was shown in the “sacred writings that about that time one from their country should become governor of the habitable earth.”⁹ It seems that even the Romans were aware of the prophecies of Daniel. The Roman historian Tacitus said:

The majority of the Jewish people were very impressed with the belief that it was contained in ancient writings of the priests that it would come to pass that at that very time, the east would renew its strength and they that should go forth from Judaea should be rulers of the world.¹⁰

Matthew’s narrative would suggest that Magi observed an ordinary star that had unusual significance which they interpreted as the sign of the birth a Jewish king. The Magi were so impressed that they made their long, difficult journey to Jerusalem with costly gifts to present to the new king. After hearing their account, King Herod and all Jerusalem were equally persuaded that this “star” was significant.

When Was Jesus Born?

In order to identify the Star of Bethlehem we most know when to look which brings us to our second question, “When was Jesus Born?” Dionysius Exiguus the 6th century Roman monk who devised the Gregorian calendar which we use today, assumed that Jesus was born on the 25th of December just before year 1 or the first “Anno Domini”, literally the first full “year of the Lord” based on all the historical evidence available to him at the time. Most early Christian sources place the birth of Jesus after Passover in 4 B.C., with most of them placing it in sometime in late 3 or early 2B.C.¹¹

- Tertullian, *An Answer to the Jews* (c. 198 AD)
- Julius Africanus, *Chronographies* (c. 170-240 AD)

⁸ *The Holy Bible: New International Version*. electronic ed. (Grand Rapids: Zondervan, 1996, c1984), Da 5:11.

⁹ Josephus, *War* VI.313.

¹⁰ Tacitus, *History*, V. 13.

¹¹ Jack Finegan, *Hand book of Biblical Chronology*, (Princeton: Princeton University Press, 1964), 284-91, §486-500 and table 139.

- Hippolytus of Rome, *Chronicle*, (c. 170-236 AD)
- Origen, *Homilies on Luke*, (c. 185-253 AD)
- Eusebius of Caesarea *Church History*, (c. 325 AD)
- Epiphanius, *Panarion*, (c. 315-403 AD)

The majority of current theologians and biblical historians place the birth of Jesus before the spring of 4 B.C. They have insisted on this early date because of a reference in Josephus that King Herod died not long after an eclipse of the Moon and before a springtime Passover of the Jews. This eclipse has become an important chronological benchmark in reckoning the year of Herod's death and has led to a much earlier date for Jesus' birth. The following quote from *An Introduction to the New Testament* is typical of current scholarship on the subject:

According to Josephus an eclipse of the moon occurred shortly before Herod's death. It is the only eclipse ever mentioned by Josephus and this occurred on March 12/13, 4 B.C. After his death there was a celebration of the Passover, the first day of which would have occurred on April 11, 4 B.C. Hence, his death occurred somewhere between March 12th and April 11th. ...Therefore, for these reasons Christ could not have been born later than March/April 4 B.C.¹²

Carson and Moo list Harold W. Hoehner's *Chronological Aspects of the Life of Christ* as the reference for their statement. Hoehner¹³ gives Emil Schürer, *The History of the Jewish people in the Age of Jesus* as the source of his statements regarding the date for the birth of Jesus. In fact Emil Schurer's critical work *Geschichte des jüdischen Volkes im Zeitalter Jesu Christi* written in 1874 is given as the source of most 20th/21st century scholars for dating the information presented in Josephus regarding the date of the eclipse and therefore the date of Herod's death being no later than 4B.C. and subsequently the birth of Christ in 7/6 B.C.

The scholarly consensus, based on Josephus' *Antiquities of the Jews* is that Herod died at the end of March, or early April, 4 B.C. Josephus wrote that Herod died 37 years after being named as King by the Romans, and 34 years after the death of Antigonus. This would imply that he died in 4 BC. This is confirmed by the fact that his three sons, between whom his kingdom was divided, dated their rule from 4 B.C. For instance, he states that Herod Philip I's death took place, after a 37-

¹²DA Carson & Douglas J Moo, *Introduction to the New Testament* (Grand Rapids: Zondervan, 2005), 124.

¹³Harold W. Hoehner, *Chronological Aspects of the Life of Christ* (Grand Rapids Zondervan, 1977), 12.

year reign, in the 20th year of Tiberius, which would imply that he took over on Herod's death in 4 B.C. In addition, Josephus wrote that Herod died after a lunar eclipse, and a partial eclipse took place in 4 B.C.¹⁴

It is surprising that so many evangelical scholars adhere to Schürer's early estimate of Jesus' birth as fact when it brings into question the historicity of the Biblical account of the Nativity. Luke's account of the census that brings Joseph and Mary to Bethlehem and his statement of Jesus' age at the onset of his ministry both suffer with an earlier date of Jesus' birth.

Despite this widely held opinion that Herod died in 4 B.C., this was neither the consensus before Schürer nor has it gone completely unchallenged in the last half-century. Schürer consensus assigns only thirty-six years to Herod's reign, thirty-three of them in Jerusalem, whereas Josephus reports the figures as thirty-seven and thirty-four respectively.¹⁵ There are numerous other historical problems with the 4 B.C. date for Herod's death which have seemed to have gone unnoticed by all but a few of today's evangelical scholars.

There is, however, a major difficulty with this earlier year of 7/6 B.C.E. It is very early for the birth of Jesus. It is almost too early if one relies on the simple New Testament chronological statements as a guide. Accepting this earlier period also casts aside virtually all the testimony of the early scholars and historians of the Christian Church who said that Jesus was born in the period of 3 to 1 B.C.E.¹⁶

Based on Josephus own account, it would seem that Schürer choice to place Herod's death in 4 B.C. is questionable. According to Josephus, on the night of a lunar eclipse Herod executed two rabbis accused of inciting rebellion against the Roman Empire. This begins a chain of events recorded by Josephus¹⁷ that had to occur after the eclipse and before the following Passover. It appears impossible (or extremely unlikely) that they all occurred in only 30 days, as required by Schürer's 4 B.C. scenario. The events include:¹⁸

1. The day before the eclipse Herod had two prominent Jewish rabbis burned alive for tearing down a golden eagle he had erected over the temple's eastern gate.

¹⁴ Timothy David Barnes, "The Date of Herod's Death," *Journal of Theological Studies* ns 19 (1968), 204-19.

¹⁵ Josephus, Ant. 16.156-191.

¹⁶ Finegan, *Handbook*, 229.

¹⁷ Josephus, Ant. 16.156-191.

¹⁸ A. E. Steinmann, "When Did Herod the Great Reign?" (paper presented at the Twenty-First Annual Symposium on Exegetical Theology, Concordia Theological Seminary, Fort Wayne, Indiana, January 2006).

2. The day after the eclipse Herod's chronic illness worsened and his physicians tried many remedies but were not able to reverse his decline.
3. On the advice of his physicians, Herod traveled from Jericho to Callirrhoe, east of the Dead Sea, to bathe in the mineral waters.
4. When the treatment at Callirrhoe failed Herod returned to Jericho.
5. Now acknowledging that he was dying, Herod sent messengers to summon prominent Jewish elders from all areas of his kingdom. His plan was to place them in custody and order their execution when he died. This would ensure that there was mourning (instead of celebration) following his death.
6. Soon after the elders arrived, Herod received letters from Rome giving him authority to execute his son Antipater for the murder of Pheroras and other treasonous acts. Herod had Antipater killed immediately.
7. Five days later Herod died.
8. Herod had ordered that his burial be at Herodian, about twenty-three miles from Jericho. Arrangements for the funeral procession were begun after Herod died. Before it began, the crown jewels and royal regalia were brought from Jerusalem. The military throughout Herod's realm as well as relatives gathered for the procession. Spices to treat the body, requiring 500 domestics to carry them, were acquired.
9. The procession moved toward Herodian in stages of eight stades (0.9 miles) each for a total of twenty-five stages. Many scholars, noting the usual procedure for royal funeral processions, allow only one stage per day. This alone would have required twenty-five days, not counting intervening Sabbaths when travel probably would have been prohibited. But even if three stages per day were traveled, the procession took more than eight days, probably more than nine or ten days, because of intervening Sabbaths.
10. Following Herod's burial there was the normal seven-day period of mourning (Num 19:11–12).
11. After the end of the mourning period there was the customary feast in honor of the dead.
12. After the funeral feast was over Archelaus as the new king held an audience for the people. He made changes in the ranks of the military, conferring promotions on some.

He liberated many men made prisoners by his father. He decided a number of legal cases.

13. The Passover came and immediately afterward, Archelaus left for Rome to have his authority to rule confirmed by Augustus.

It has been suggested that these events would require a minimum of fifty-four days between the eclipse and the Passover if every event outlined above were accomplished as quickly as possible¹⁹.

If Schürer's date for the eclipse is wrong, are there other dates which could more appropriately fit the evidence? Two additional eclipses have been suggested, both of which seem to be more reasonable than the one suggested by Schürer. Ernest Martin in his book, *The Star that Astonished the World* suggests a total eclipse which occurred on January 10, 1B.C. and visible in Palestine²⁰. It takes place twelve and a half weeks before Passover allowing all of the events related by Josephus to comfortably fit into the ninety-two days between the eclipse and the following Passover. Martin also points out that it would have been unlikely that Herod would have had the rabbis executed on March 13, 4 B.C. because it falls on the second day of Purim. Even though Herod was angry about the act of the two rabbis, he certainly would not have been so politically insensitive as to have two popular leaders executed during the celebration of an important Jewish holiday. Astronomer Dr. John Pratt suggests yet another eclipse on December 29, 1 B.C.²¹ which also would have been widely seen in Palestine and occurs over three months before Passover.

As we have seen the consensus about the death of Herod that is built around Schürer's interpretation of Josephus is fraught with difficulties and fails to fit any of the verifiable chronological data external to Josephus. A much stronger case can be made for both of these 1 B.C. dates based on all the historical information we have available. It also suggests that the early church fathers date of Christ's birth in late 3 or early 2B.C. is much more credible. This earlier date also solves several of the problems of the historicity of the Biblical account of the Nativity which were mentioned.

¹⁹ Steinmann, "When Did Herod the Great Reign?"

²⁰ Ernest L. Martin, *The Star of Bethlehem: The Star That Astonished The World* (Portland: ASK Publications, 1996), 96-106.

²¹ John Pratt, "Yet Another Eclipse for Herod," *Planetarian*, Vol. 19, No. 4, Dec. 1990, pp. 8-14.

The problem of the census in Luke Chapter 2 is resolved with the later date of Jesus' birth. The year 2 B.C. marked the 25th anniversary of Caesar Augustus's rule and the 750th anniversary of the founding of Rome. Huge celebrations were planned and the whole empire was at peace. The doors of the temple of Janus were closed for only the third time in Roman history. To honor their emperor, the people were to rise as one and name him Pater Patriae, or "Father of the Country."²²

Historically, there is evidence that a registration was conducted throughout the Roman Empire and its subject states in 3 B.C. Although registrations were usually conducted in the Roman Empire for tax purposes, this registration was for an official declaration of political allegiance to Caesar Augustus. The purpose of this mandated registration was to record an official declaration of allegiance from all of his subjects to present to Caesar Augustus in celebration of his Silver Jubilee (25th anniversary – 27 B. C. to 2 B. C.) of supreme power. Which coincided with the seven hundred fiftieth anniversary of the founding of Rome, and Caesar Augustus' sixtieth birthday. The oath of allegiance was a part of the preparation for this festive time and set the stage for the 25 anniversary celebration in 2 B.C."²³

If we conclude that Herod did die in 1 B.C., we can now add the years 3 B.C. and 2 B.C. to our search for the Star of Bethlehem.

Astronomical Perspective

Using the Biblical criteria listed earlier we are now ready to look for something in the "normal" night sky of the ancient Middle East between the years of 7B.C. and 1B.C. which was startling when explained but also went undetected by most observers. By using the ten qualifications taken from our text in Matthew, we are in a position to disqualify most astronomical phenomena as being the Star of Bethlehem.

Could the Star of Bethlehem been a meteor or shooting star? A meteor is a small fragment of material or even celestial dust which burns up upon entering the Earth's atmosphere at great speed glowing brightly as it falls. While a "shooting star" can be beautiful viewed from

²² Werner Eck, *The Age of Augustus* (Oxford: Blackwell Publishing, 2003), 65-66.

²³ V. P. Wierwille, *Jesus Christ our Promised Seed*, (New Knoxville: American Christian Press, 1982), 200-204.

Earth and could be a dramatic means of making an announcement in the heavens it would fail most of the nine tests. Meteors don't rise in the east as other stars and don't endure long enough to satisfy our Biblical criteria. The Star was very likely not a meteor.

Could the star of Star of Bethlehem been a comet? A comet is a small body in the solar system composed of rock, dust, and ice that orbits the Sun over a number of years. Origen himself suggested a comet, for comets appear sporadically, move, and can even seem to point down to the earth. Although comets do rise in the east and endure over time, there are problems with a comet being the star. First, comets were regarded as heralding important events but usually seen as omens of doom and destruction and would not be associated with the birth of a king. Second, records kept by Chinese astronomers through this period do not record any spectacular celestial object that would obviously be a comet. Finally, comets are usually obvious even to the casual observer. Anyone could and would have seen a comet. Herod would not have needed to ask the Magi when such a thing appeared. The Star was very likely not a comet.

Could the Star of Bethlehem been a nova? A nova is an exploding star and can be quite spectacular. A nova appears suddenly at a point in time, endures over time and rises in the east as do other stars. Like a comet, a nova would have been obvious and seen by everyone. Once again, the Chinese kept very good records during this period and no novas were reported. If the Star was a real astronomical event, it was very likely not a nova.

If the Star was not one of the spectacular astronomical events we have examined, what is left? Could the Star of Bethlehem have been a conjunction of planets? A conjunction is a close apparent approach between two celestial objects and has long been considered good a possibility.

Probably no other star in history has been sought after more than the Star of the Magi. What star could this have been? The ingenious Kepler in the early 17th century suggested that it might have been a conjunction of Jupiter and Saturn appearing near some other star. In the last century, Ideler found that three conjunctions of Jupiter with Saturn in the constellation of Pisces occurred in the year 7 B.C.E. and there was Mars coming into their vicinity in early 6 B.C.E. that gave a triangular positioning of the planets to one another. It was also found that a Jewish rabbi named Abarbanel, commenting on the Book of Daniel (C.E. 1437–1508), said that a conjunction of Jupiter and Saturn within Pisces had messianic

meaning. Several scholars in the last century felt that the occurrences of 7/6 B.C.E. were probably the ones that inspired the Magi to go to Jerusalem.²⁴

If we add 3/ 2 B.C. to our search we find an impressive series of planetary motions and conjunctions fraught with a variety of astrological meanings such as the world had never see before or since involving all the visible planets: Mercury, Mars, Jupiter and Saturn. During this period there was a series of close conjunctions involving Jupiter, the planet that represented kingship, coronations, and the birth of kings. In Hebrew, Jupiter was known as Sedeq or “Righteousness,” a term also used for the Messiah. The astrological significance of these impressive conjunctions would not have gone unnoticed by the Magi. This was one of the most remarkable periods in terms of celestial events in the last 3000 years. The following is a list of major conjunctions seen by the Magi in the night sky over a period of fourteen months.²⁵

1. **August 12, 3 BC** - They saw the two planets Jupiter and Venus rise in conjunction. Jupiter signified kingship or Messiah and Venus meant birth and motherhood. This occurred in the constellation of Leo, which is the symbol of the Hebrew tribe Judah. Since the Magi were studied in the Hebrew Scriptures, they probably knew from Genesis 49:10 that the Messiah would come from the tribe of Judah.
2. **September 3 BC** - They saw Jupiter rise in conjunction with Regulus. Regulus is the star of kingship, the brightest star in the constellation of Leo. Leo was the constellation of kings, and it was associated with the Lion of Judah. The royal planet approached the royal star in the royal constellation representing Israel.
3. **February 2 BC** - A second time they saw Jupiter rise in conjunction with Regulus. This double conjunction would have been seen as unusual and would have been seen as significant by the Magi.
4. **May 2 BC** - A third time they saw Jupiter rise in conjunction with Regulus. This triple conjunction would have been seen as a very rare event. Over a period of months the Magi would have seen the Planet of Kings dance out a halo above the Star of Kings and understood it to be a royal coronation.

²⁴ Martin, *The Star of Bethlehem*, 26.

²⁵ Martin, *The Star of Bethlehem*, 34-47.

5. **June 2 BC** - A second time they saw Jupiter and Venus rise in conjunction. Again, Jupiter referred to kingship or the Messiah and Venus meant birth and motherhood. This was even a closer encounter when their disks appeared to touch; to the naked eye they became a single object above the setting sun, the brightest star to ever shine in the evening sky. This exceptionally rare spectacle could not have been missed by the Magi as they looked out toward Judea.
6. **September 2 BC** - A third time they saw Jupiter and Venus rise in conjunction. This occurred again in the constellation of Leo, which again is the symbol of the Hebrew tribe Judah from which Jesus came.
7. **3 and 2 BC** - On these two occasions, Jupiter was located directly in the womb area of the constellation of Virgo the virgin. September 11 is perhaps the most interesting date of all. Not only was Jupiter very close to Regulus in the first of their conjunctions, but the sun was in the constellation of Virgo, together with the new moon, in a configuration that fits a plausible interpretation of a passage in the Book of Revelation describing the birth of a male child who is to be the ruler of the universe. Significantly, September 11, 3 B.C., also marked the beginning of the Jewish New Year, traditionally regarded as the anniversary of Noah's landing after the Great Flood.

The planet Jupiter appears to be a strong candidate for the Star of Bethlehem and a component of the event that triggered the visit of the Magi meeting the first nine of our biblical criteria. But how can we explain the final appearance of the Star and the fact that it stopped over Bethlehem?

It (Jupiter) would have been in the southern sky, though fairly high above the horizon. Could the Star have stopped over Bethlehem? The answer is yes. The word "stop" was used for what we now call a planet's "stationary point." A planet normally moves eastward through the stars from night to night and month to month, but regularly exhibits a "retrograde loop." After it passes the opposite point in the sky from the sun, it appears to slow, come to a full stop, and move backward (westward) through the sky for some weeks. Again it slows, stops, and resumes its eastward course. It seems plausible that the Magi were "overjoyed" at

again seeing before them, as they traveled southward, “his star,” Jupiter, which at its stationary point was standing still over Bethlehem. We do know for certain that Jupiter performed a retrograde loop in 2 B.C. and that it was stationary on December 25, interestingly enough, during Hanukkah, the season for giving presents.²⁶

Conclusion

In the second chapter of Matthew we read about the Magi’s visit to Palestine to worship and give gifts to the one they believed to be the king of the Jews. This long and dangerous journey of over 1000 miles took place because of astronomical occurrences they observed regarding the planet Jupiter during an eighteen month period during 3 and 2 B.C. What they witnessed over the next months was the fulfillment of God’s purpose through the great celestial dance of stars and planets, set in motion by His hand at the beginning of time to announce the birth of the one who would make all things new. It may have been the planet Jupiter that led the Magi to Bethlehem but it was God’s Word that revealed to them the meaning of the signs they saw in the heavens. Without it, they would never be able to understand what they saw in the night sky over 2000 years ago. Wise men still use it today to guide them in their journey.

“Your word is a lamp to my feet and a light for my path.”²⁷

²⁶ Chester, “The Star of Bethlehem.”

²⁷ *The Holy Bible: New International Version*. electronic ed. (Grand Rapids: Zondervan, 1996, c1984) S. Ps 119:105.

SELECTED BIBLIOGRAPHY

Bidelman, Dr. William P. *The Bimillenary of Christ's Birth: The Astronomical Evidence*. Reprinted from the *Planetarian*, September 1991.

Chester, Craig. *The Star of Bethlehem*. Monterey Institute for Research in Astronomy. Reprinted from *IMPRIMUS*, December 1993, 22(12). Hillsdale, MI

The Holy Bible, NIV (New International Version) 10th Anniversary Edition.

Josephus, Flavius. *Antiquities of the Jews* ca 100 AD. <http://wesley.nnc.edu/josephus>

Josephus, Flavius. *War of the Jews* ca 100 AD. <http://wesley.nnc.edu/josephus>

Martin, Ernest L. *The Star of Bethlehem: The Star That Astonished The World*, Portland: ASK Publications, 1996

Mosley, John. *Common Errors in "Star of Bethlehem" Planetarium Shows*. Reprinted from the *Planetarian*, Third Quarter 1981.

Pratt, John P. *Yet Another Eclipse For Herod*. Reprinted from the *Planetarian*, 19(4):8-14. 1990. <http://www.griffithobs.org/IPSPlanPlatt.html>

Strobel, Nick. *The Star of Bethlehem: An Astronomical Perspective*. December 1995. University of Washington, Department of Astronomy, Box 351580, Seattle, WA 98195-1580.

Beyer, David W., "Josephus Re-examined: Unraveling the Twenty-Second Year of Tiberius" in *Chronos, Kairos, Christos II*, edited by E. Jerry Vardaman (Macon: Mercer University Press, 1998). This work was originally a paper presented at Society for Biblical Literature, 1996.

Brown, R.E., *The Birth of the Messiah* New York: Doubleday, 1977

Bullinger, E.W., *The Witness of the Stars* Grand Rapids: Kregel, 1972

Finegan, J., *Handbook of Biblical Chronology* Princeton: University Press, 1964, Revised Edition, 2001.

Hendriksen, W., *New Testament Commentary* Grand Rapids: Baker Book House, 1973

Hoehner, H.W., *Herod Antipas* Cambridge: Cambridge University Press, 1972

Kittel, G., *Theological Dictionary of the New Testament* Grand Rapids: Eerdmans, 1964

Martin, Ernest L., *The Birth of Christ Recalculated* Pasadena: FBR Publications, 1978, 1980 second edition

- Mosley, John, *The Christmas Star* Los Angeles: Griffith Observatory, 1987
- Nicoll, W.R., *The Expositor's Greek Testament* Grand Rapids: Eerdmans, n.d.
- Parker and Dubberstein, *Babylonian Chronology* Providence: Brown University Press, 1969
- Schurer, E., *History of the Jewish People in the Time of Jesus Christ* (Edinburgh: Clark, 1896);
Rev. Ed. (The New Schurer), G. Vermes & F. Millar, Edinburgh: Clark, 1973
- Humphreys, Colin, "The Star of Bethlehem," *Science and Christian Belief* , Vol 5, (October 1995)
- Blomberg, Craig, *Jesus and the Gospels* Nashville: Broadman and Holman, 1997
- Carson, DA & Moo, Douglas J, *Introduction to the New Testament* Grand Rapids: Zondervan, 2005
- Hoehner, Harold W. *Chronological Aspects of the Life of Christ* Grand Rapids Zondervan, 1977
- Barnes, Timothy David, "The Date of Herod's Death," *Journal of Theological Studies* ns 19 (1968)
- Steinmann, A. E. "When Did Herod the Great Reign?" paper presented at the Twenty-First Annual Symposium on Exegetical Theology, Concordia Theological Seminary, Fort Wayne, Indiana, January 2006