

## Star of Bethlehem Presentation<sup>1</sup>

### 1. The Star in the 21<sup>st</sup> Century.

- a. I think it is fair to say that, aside from the Sun, Moon, and perhaps Venus and Jupiter, the Star of Bethlehem is the best-known astronomical entity.
- b. The beloved Star is a prominent feature of our Christmas celebrations, on our trees, in our Nativity plays, and on our cards. Sometimes we forget that the lights on the Christmas tree, whether candles or electrical bulbs, are supposed to represent the stars, but it is harder to forget that the Star on top of the tree represents the Bethlehem Star. If you go to Bethlehem itself in the next month,<sup>2</sup> you can stay at the Bethlehem Star Hotel, do some shopping at the annual Christmas Market on Star Street, have a coffee at Stars & Bucks Café, and visit Manger Square, where images of the Bethlehem Star abound. On Christmas Eve pilgrims can watch the annual procession<sup>3</sup> to the Church of the Nativity. The climax of that procession, and of every tourist's visit to Bethlehem, is a visit to a grotto (cave), where, according to some, Jesus was born. Appropriately marking this spot is a large silver 14-pointed star inscribed with the words 'Here Jesus Christ was born to the Virgin Mary.
- c. The Mystery of the Star of Bethlehem has tantalized the world, particularly over the last few centuries, as our knowledge of the heavens has grown. The quest to identify the Star has been described by one astronomer<sup>4</sup> as "the greatest of all detective stories" and "perhaps the greatest of all astronomical mysteries" (Kidger). That is a big claim and it is justified. Little wonder that planetariums like to put on Star of Bethlehem specials in the run-up to Christmas, confident that they will draw in the crowds. They know that people really want to know what happened in the heavens at the time of Jesus' birth.
- d. Indeed it is hard to escape the conclusion that the Star was the most extraordinary and important astronomical phenomenon in history (David Hughes).
- e. What can we really say about the Star? Was it the "brightest and best of the sons of the morning"? "Star of the east, the horizon adorning"? Is it true that "to the earth it gave great light, and so it continued day and night", and that "No clouds can obscure that kindly star, nor brightness of noonday its glories mar"? Did it shine with "royal beauty bright"? Was it so bright that "all the stars above were paling, all their luster slowly fading, as the Christmas Star drew nigh"? Did the Magi alone see the Star or is "The First

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<sup>1</sup> Slide 1: Title.

<sup>2</sup> Slide 2: Bethlehem today.

<sup>3</sup> Slide 3: Procession and 14-pointed Star.

<sup>4</sup> Slide 4: Mark Kidger.

Noel” correct in saying that the shepherds might also have “looked up and [seen] a star shining in the East beyond them far”? When the Magi were traveling to Judea, was the Star “westward leading, still proceeding”? So many descriptions of the Star that we love to sing each Christmas, but are they correct?

2. The importance of the Star. Maybe for some of you this discussion is nothing more than idle curiosity. But I need to advise you that this is a momentous discussion, particularly in our 21<sup>st</sup> century context. Its implications are huge. In fact, investigating this mystery could cost you a lot. And that is no exaggeration, because a lot is at stake.
  - a. The reliability of the Gospels. Can you trust the Gospels in what they say about Jesus? This is a key question. And it is worth noting that no part of the Gospels is more held up to ridicule and contempt than Matthew’s account of the Star of Bethlehem. Some have even claimed that no scientific explanation of the Star is possible—they particularly object to the portrayal of the Star’s movements within the sky and its standing over the place where the child was. Even some NT scholars have dared to wade into the debate. For example, Bart Ehrman<sup>5</sup> has written: “...How is it that a star—or any celestial body—can lead anyone to a particular town? And how can it then stop over a particular house?” Some atheists are quick to back such verdicts. One recent skeptic’s book on the Star seriously presents Matthew as looking out the window when he is writing his Gospel and, seeing Halley’s Comet, incorporating it into his story! Obviously if that were true, you couldn’t trust the Gospels! But if it could be shown that Matthew’s account is historically credible or even verifiably true, that would be powerful evidence for the reliability of Matthew’s Gospel. It would force us to approach his account of Jesus’ life with respect, giving it a full and proper hearing.
  - b. Of course, the biggest thing at stake in any discussion of the Star is—was Jesus who he claimed to be? He claimed to be the Messiah, the One prophesied about in the Old Testament? Were Moses, Isaiah, Micah, Daniel, Ezekiel, Zechariah, and Malachi all speaking about Jesus when they prophesied about the Messiah? Is it Jesus who is the Saviour of the World, who died as the ultimate sacrifice for the sins of all who believe and who is the Lord and rightful King of the Earth? The denial of the Star’s authenticity is part of broader attack on Jesus’ claim to be the Messiah. Obviously, it is difficult to deny Jesus’ messianic status if what Matthew says about the Star is true. And if he is Messiah, then we must respond as the Magi did, with nothing short of submission and worship.
  - c. And if Matthew’s Star did what he reports that it did, then that has radical implications that stretch into every sphere of our lives. It would highlight to a

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<sup>5</sup> Slide 5: Bart Ehrman.

world in which science is regarded as the touchstone of all reliable knowledge that God is the Creator and Sustainer of the universe, the owner of the world, the source of all mathematical knowledge and physics, who calls all humans everywhere to follow him. So there is a lot at stake here; indeed there could hardly be more at stake!

3. The account of the Star.

a. We need to start by briefly considering our primary source—Matthew’s Gospel.<sup>6</sup>

- i. A number of recent studies of the Gospels have demonstrated that they are biographies of Jesus based on eyewitness accounts and early written sources.
- ii. Matthew’s Gospel was probably written around the year AD 70 by one of Jesus’ twelve disciples. Most scholars today believe that, among other sources, Matthew used Mark’s Gospel, which was dependent on the chief apostle Peter.
- iii. The story of the Star is in perfect accord with what we know of the period. For one thing, toward the end of his life a paranoid Herod the Great was increasingly ruthless and was capable of the most heinous crimes, even against his own family. He even arranged to have the top noblemen killed at his death to ensure weeping at his funeral. And we also know that 70 years later other magi made a long journey westwards to honour a king, Emperor Nero.
- iv. Moreover, no early Christian, especially not a devout Jewish one, would, in a bid to strengthen Jesus’ messianic claims, invent an endorsement by, of all people, pagan astrologers!
- v. Indeed the author would have lost his credibility as a truth-teller if he invented myths—who then would trust his account of Jesus’ ministry, death, and resurrection?
- vi. The Star is mentioned in a number of independent sources. The early church father Ignatius, writing a few decades after Matthew, probably citing a first-century hymn, describes the Star:<sup>7</sup>

“A star shone in heaven with a brightness beyond all the stars; its light was indescribable, and its newness caused astonishment. And all the rest of the stars, together with the Sun and the Moon, formed a chorus to the star, yet its light far exceeded them all. And there was perplexity regarding from where this new entity came, so unlike anything else [in the heavens] was it.”

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<sup>6</sup> Slide 6: Matthew’s Gospel.

<sup>7</sup> Slide 7: Ignatius.

It is also mentioned in the apocryphal Gospel of James from the first half of the second century and other sources too....

- vii. Recent research on the psychology of memory (see Bauckham) supports the conclusion that Matthew's account of the Magi and the Star is accurate—the events would have been likely to be remembered accurately, since they were memorable, vivid, unique, and deeply emotional, and would have been repeatedly rehearsed by Mary and the Magi themselves.
  - viii. So all the evidence suggests that we approach Matthew's account with a confidence that it is reporting history. We can trust it.
- b. When was Jesus' birth? We know that Herod the Great died in the Spring of 4 BC, because all three of his sons date the start of their reigns from then and Josephus tells us that Archelaus' 10-year reign ended in AD 6. Herod died a most horrific death in late March or early April of 4 BC, a few weeks after a partial eclipse of the Moon (March 12/13), which was regarded as a terrible omen, and not long before the Passover on April 10 or 11. So Jesus was clearly born before that. Most Biblical scholars agree that Jesus was born sometime in the preceding two years, hence in 6-5 BC. (In case you're wondering why 6-5 BC rather than 0, the 6<sup>th</sup>-century monk whose calculations were the basis for our BC/AD dates, neglected to allow for a year 0 and left out four years of Caesar Augustus' reign, when he ruled under the name Octavian!).
- c. Matthew 2:1-18:<sup>8</sup> Now after Jesus was born in Bethlehem of Judea in the days of Herod the king, behold, magi from the east came to Jerusalem, saying, "Where is he who has been born king of the Jews? For we saw his star at its rising and have come to worship him." When Herod the king heard this, he was troubled, and all Jerusalem with him; and assembling all the chief priests and scribes of the people, he inquired of them where the Christ was to be born. They told him, "In Bethlehem of Judea, for so it is written by the prophet: 'And you, O Bethlehem, in the land of Judah, are by no means least among the rulers of Judah; for from you shall come a ruler who will shepherd my people Israel.'"<sup>9</sup> Then Herod summoned the Magi secretly and ascertained from them what time the star had appeared. And he sent them to Bethlehem, saying, "Go and search diligently for the child, and when you have found him, bring me word, that I too may come and worship him." After listening to the king, they went on their way. And behold, the star that they had seen at its rising went before them until it came and stood over the place where the child was. When they saw the star, they rejoiced exceedingly with great joy. And going into the house they saw the child with Mary his

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<sup>8</sup> Slide 8: Matthew 2:1-6.

<sup>9</sup> Slide 9: Matthew 2:7-12.

mother, and they fell down and worshiped him. Then, opening their treasures, they offered him gifts, gold and frankincense and myrrh. And being warned in a dream not to return to Herod, they departed to their own country by another way.<sup>10</sup> Now when they had departed, behold, an angel of the Lord appeared to Joseph in a dream and said, “Rise, take the child and his mother, and flee to Egypt, and remain there until I tell you, for Herod is about to search for the child, to destroy him.” And he rose and took the child and his mother by night and departed to Egypt and remained there until the death of Herod. This was to fulfill what the Lord had spoken by the prophet, “Out of Egypt I called my son.” Then Herod, when he saw that he had been tricked by the Magi, became furious, and he sent and killed all the male children in Bethlehem and in all that region who were in their second year or under, according to the time that he had ascertained from the Magi.<sup>11</sup> Then was fulfilled what was spoken by the prophet Jeremiah: “A voice was heard in Ramah, weeping and loud lamentation, Rachel weeping for her children; she refused to be comforted, because they are no more.”

d. Questions arising from Matthew’s account.

i. Who were the Magi?<sup>12</sup>

1. They were Gentile scholars engaged in various activities, in particular astronomy, astrology, and divination. From Matthew we can see that the Magi kept records of their observations—they were able to tell Herod the precise date when they first spotted the Star. They also observed the Star “rising” and made an interpretation of this event.
2. Now it is important to realize that the mere fact that the Magi were doing astronomy in the service of astrology does not mean that the Star communicated to them through astrology. As one old commentator, Alfred Plummer, observed, “There is not one word in the narrative to indicate that the Magi did wrong in drawing inferences from what they saw in the heavens, or that their knowledge of the birth of the Messiah was obtained by the practice of any black art.” Astrology is strongly condemned in the Bible (Jer. 10:1-2; cf. Deut. 18:9-14; Isa. 47:13). Matthew would hardly have made so much of the Magi and the Star if the key to their understanding was astrological.
3. Where did the Magi come from? Some have suggested Arabia or Persia, but neither seems likely. Arabia is based largely on a

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<sup>10</sup> Slide 10: Matthew 2:13-16.

<sup>11</sup> Slide 11: Matthew 2:17-18.

<sup>12</sup> Slide 12: Tissot’s “Journey of the Magi.”

misunderstanding of Isaiah 60:6's reference to Arabs coming with gold and frankincense—that refers to the era when the Messiah is reigning, not to his birth. Gold and frankincense were widely available in the broader area. Arabia was mostly south of Judea. As for Persia/Parthia, we know unfortunately little about Persian astronomy at the time. The most likely homeland of the Magi is Babylon, then in Parthia. Not only did the city have a long history of astronomy and astrology, it was still the centre of astronomical knowledge in the first century BC and continued to be well into the second half of the first century AD. Babylon was due east of Judea and Origen, Jerome, and Augustine all claimed that the Magi came from there. (On a side note, we know the name of one Babylonian Magus at the time of Jesus' birth—Teukros.) The fact that there was a significant Jewish population in Babylon helps to explain how the Magi, prompted by the Star, became so familiar with the Old Testament's oracles about the Messiah.

- ii. What did the Star do before the Magi's journey? First, it first 'appeared' at least a year before Herod's massacre of the babies of Bethlehem. Please observe that Herod decided to kill infants in their second year based solely on the fact that the Star had first appeared over a year before. Second, many months later, in fact, just a couple of months before the Magi arrived in Jerusalem, the Star had a 'rising.' This word 'rising' is a technical term that reveals that, after being obscured by the Sun, the Star rose over the eastern horizon in advance of the rising Sun. This was regarded as the most important point in a celestial body's career. Clearly it was the focus of the Magi's awe.
- iii. What information did the Magi derive from the Star's behaviour, particularly what it did at the time of its "rising"? They deduced that the King of the Jews, the Jewish Messiah, had been born, that he was divine in nature, and that they should travel to Judea to find him and worship him right then.
- iv. The Magi's route from Babylon to Jerusalem.<sup>13</sup> Since the Magi are described as coming 'from the East' and were obviously traveling with a sense of urgency, they probably took the direct route across the stony, barren wilderness to Judea. That meant a very long trip, almost certainly by camel caravan, which would have taken about a month. The desert was extremely dangerous, with many bandits roaming around looking for well-provisioned travellers to rob. They

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<sup>13</sup> Slide 13: Syrian Desert.

may well have elected to sleep during the heat of the day and travel when the Sun set. If you want to get a feel for what they experienced, read some of the stories of travellers through the Arabian and Syrian deserts from the 18<sup>th</sup> to early 20<sup>th</sup> centuries.

- v. Gold, frankincense, and myrrh.<sup>14</sup> These expensive gifts could have been purchased in the Magi's homeland, but it seems more likely that they were purchased by the Magi as they travelled through Arabia. Their choice of gifts is interesting. Gold is certainly associated with kings and with the worship of God in the Jerusalem Temple. The prophet Haggai stated that gold belonged to the Lord. The sweet balsamic-smelling frankincense, from southern Arabia, also had a special association with the worship of God in the Temple. Isaiah 60:6 prophesies that Arabs would come to the Lord in the new age, bringing gold and frankincense. It seems likely that the Magi were reflecting on that text, seeking to be forerunners of the Gentile pilgrims of the last days. Myrrh was used in perfumes and in the manufacture of holy anointing oil (Exod. 30:23) as well as being used as a burial spice, most famously for Jesus (John 19:39). A good number of scholars believe that Matthew is alluding to Isaiah's oracle about the Messiah's suffering and death on behalf of his people in Isaiah 53. Granted how influenced the Magi are by Isaiah, it is very possible that they shared the same perspective.
- vi. Could the Magi see the Star as they travelled from their homeland to Jerusalem? Although the text does not explicitly say so, the Star probably did accompany the Magi all the way from Babylon to Jerusalem. Had it disappeared for the duration of their long journey to Jerusalem, the Magi could not have been sure that the Star in the southern sky was the very same one they had seen earlier in the east. Moreover, a "rising" is, by definition, the start of a long period of visibility, not of invisibility. Of course, for travellers heading westwards, an astronomical body that sets in the west is very capable of giving the impression of going ahead of them. So the carols are probably correct in speaking of the Star as "westward leading."
- vii. Had Herod and the People of Jerusalem seen the Star themselves? Almost certainly, yes. The strangely strong response of the King and his people to the report of the Magi indicates that they had indeed seen it but not previously interpreted it in the way the Magi had. It is doubtful if they'd all have been so troubled by something only seen by foreign Gentiles and not at all by the Jewish people, to whom the Messiah was to come.

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<sup>14</sup> Slide 14: Gold, frankincense, and myrrh.

- viii. What did the Star do on the last leg of the Magi's journey to the Messiah? It "went before them" as they travelled southwards to Bethlehem. Then, later that night, after descending ("coming"), it "stood over" one particular house in Bethlehem, which the Magi took to be a powerful indication that the Messiah was there. Some have tried to say that it only stood over Bethlehem, but the natural reading of text is pretty clear—the Star pinpointed the very house where Jesus was. As "The First Noel" says, "Then did they know assuredly, within that house the King did lie." Sure enough, going inside, they found baby Jesus and Mary his mother. They fell down and worshipped the Child, presenting their luxury gifts to him.
4. The theories concerning the Star. If you've ever been to a planetarium Christmas Special or watched a documentary on the Star in the run-up to Christmas or Epiphany, you will have been exposed to some of the major astronomical views. At the same time, many in Christian circles have preferred to hold to...
- a. Supernatural views.
- i. Miraculous view: This view maintains that the Star was not a natural, astronomical phenomenon, but rather a non-natural, "miraculous" phenomenon visible only to the Magi. This view is popular partly because it sounds pious and partly because it looks like it is immune from criticism (I speak as one who used to hold this view). But it is actually very problematic.<sup>15</sup>
1. Everything in Matthew indicates that the Star was an astronomical object—it was called a "star" (astros), had a "rising," and was observed by professional astronomers who kept records.
  2. And everything in Matthew's account and in Ignatius' account indicates that it was an astronomical event and a public phenomenon visible to all. Herod and the people of Jerusalem would hardly have reacted so strongly to the Magi's arrival if they hadn't seen the Star themselves.
  3. As for the view that the Star was a ball of light stationed immediately over the house in Bethlehem, there is no way the Magi could have identified such a body as the very same one they had seen rising a couple of months beforehand.
  4. And why would a supernatural Star have been visible for over a year, particularly if only appearing to one group of men?
  5. If this was the fulfilment of Balaam's oracle concerning a sceptre star, then are we really to believe that the Jews didn't see it?

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<sup>15</sup> Slide 15: Miraculous view.

6. And the miraculous theory offers no explanation for how a miraculous, non-natural Star could have persuaded the Magi that the Messiah had been born.

If we take the Biblical text seriously, we must treat the Star as a publicly visible, astronomical phenomenon. I think that the miraculous view has its source for many in a lack of faith and conviction that Matthew's account can withstand the most rigorous historical scrutiny. At best, we should resort to the miraculous view only if it is our last resort.

- ii. Angelic view:<sup>16</sup> The idea that the Star was an angel is obviously wrong, not just for the reasons above, but also because Matthew isn't reluctant to specify angels when they are involved. Besides, why would an angel be playing the role of a "star" for over a year? And why would an angel's activity be described in astronomical terms like "rising"? Besides, angels are only equated with stars in certain apocalyptic works, and Matthew is not writing in that genre.
  - iii. The evidence indicates that the Magi and Matthew thought the Star was an astronomical object. They were obviously better positioned to identify it than we are. Ironically, the "supernatural" views leave the story enshrouded in fog and sap the wonder out of what God did to attest to Jesus. The occurrence of such a remarkable, divinely orchestrated natural phenomenon in connection with Jesus' birth is truly astonishing and momentous, underlining God's lordship over his creation, the messianic credentials of Jesus, and the cosmic and universal significance of what was unfolding!
- b. Larson's Jupiter theory.<sup>17</sup>
- i. Among the many theories, one that has attracted a lot of attention over the last decade is the one espoused by U.S. attorney Rick Larson in his bestselling DVD documentary on the Star. He claims that the planet Jupiter played the part of the Star of Bethlehem—the Magi, he maintains, were enthralled by the planet's regular movements in the sky in 3-2 BC and, because of them, eventually travelled to Judea, arriving in Bethlehem on 25<sup>th</sup> December, 2 BC. According to Larson, Jupiter's apparent motion in the sky stopped then, when the Magi were at Bethlehem.<sup>18</sup> Something like this view is promoted by multi-million-dollar *The Nativity Story* movie produced by Mike Rich. It portrays the planets Venus and Jupiter merging over the star Regulus, which is said to have royal significance; as a result, the "star" became

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<sup>16</sup> Slide 16: Angelic view.

<sup>17</sup> Slide 17: Jupiter.

<sup>18</sup> Slide 18: Nativity Story movie DVD cover.

blindingly bright. This sudden brightness occurred just as the Magi entered Bethlehem and Mary was delivering Jesus; but the conjunction did not occur over the star Regulus, and the brightness would never have been anything like that intense.

- ii. Unfortunately, the Larson theory itself is deeply flawed on many levels.<sup>19</sup> Jupiter, as a planet, is a regular and predictable feature of the sky and doesn't ever suddenly appear, as the Star of Bethlehem did. And, although the highlight of the Star's time in the sky was its 'rising,' Jupiter didn't have a rising in 3-2 BC. Moreover, without an iPad or the like, ancient astronomers couldn't have known when precisely Jupiter 'stopped' (on December 27/28, by the way) and certainly wouldn't have based their itinerary on this event. I should also point out that Larson offers a completely implausible chronology, with an absurdly long journey time, and a month-long stay of the Magi in Jerusalem, and the Magi arriving in Bethlehem in 2 BC, which is far too late.
- c. Three 7 BC Jupiter-Saturn conjunctions (David Hughes).<sup>20</sup> Others have suggested that the Star was three alignments of Jupiter and Saturn in the constellation Pisces in 7 BC. This is the view promoted by a BBC film "The Nativity," supposedly after they phoned up NASA scientists. However, they claimed that Jupiter and Saturn came together over the star Regulus, all forming one single star. But that simply didn't happen—Regulus was far away from the action at the time, and Jupiter and Saturn never came anywhere close enough to appear one. So, when one magus, hearing of this, says, "That's not possible!", he is correct. It is ironic and perhaps tongue-in-cheek when the other magus responds, "I know, but it's happening anyway!" The film then presents the perfect conjunction as happening at the very moment the Magi arrive in Bethlehem, when Mary is giving birth! That is clearly wrong. The normal theory suggests that Jupiter was the planet of the ruler of the world, Saturn the planet of the Jews, and Pisces a constellation closely associated with the Jews. Unfortunately, there is no evidence that this view of Pisces was shared by anyone in the first century BC or AD in or outside Judea. And, it must be said, that any magus arriving in Bethlehem in 7 BC would have got there well before Mary and Joseph did!
- d. Star or supernova. So, then, what was the Star? An ordinary star couldn't have suddenly appeared, communicated so much information at its 'rising,' 'stood over' a particular house, or been taken as seriously as the Star of Bethlehem was. A super-bright exploding 'star' (supernova) can be ruled out because there are no suitable 2,000-year-old remnants (nebulae). Besides,

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<sup>19</sup> Slide 19: Larson theory.

<sup>20</sup> Slide 20: Hughes book and BBC DVD cover.

no fixed star could pull off what the Star did—move so rapidly across the sky (from east to south within a couple of months).

- e. Meteors.<sup>21</sup> The famous monocled astronomer, Sir Patrick Moore, claimed that two meteors performed the part of the Star of Bethlehem—one over Babylon and one over Bethlehem. But Matthew makes it clear that there was one Star of Bethlehem that was seen in both locations; no ancient astronomer would have thought for a second that two fleeting meteors separated by a couple of months were a single body. And no meteor could have gone before the Magi to Bethlehem and then stood over one particular house.
- f. Molnar.<sup>22</sup> A few years ago a large international colloquium was held to investigate one particular theory regarding the Star. It maintained that the Star of Bethlehem was Jupiter, focusing on two occasions when the planet was eclipsed by the Moon in March-April of 6 BC. However, these were run-of-the-mill celestial phenomena. And, really, can a planet hidden behind the Moon be regarded as a 'star'? And what about the fact that Matthew explicitly states that the Magi saw the 'star'? Neither of these two eclipses would have been visible to Babylonian Magi!
- g. Combination Views. Realizing that none of these views is convincing by themselves, quite a few scholars have combined different ones, imagining that a cord of three strands is not easily broken. But as a number of unfortunate bungee jumpers have discovered for a brief moment or two, some cords aren't as strong as they're purported to be. The scenario they envision is as follows: the Magi watch the three conjunctions of Jupiter and Saturn in Pisces the Fish in 7 BC, then a grouping of planets in Pisces in 6 BC, and then a nova/comet in the constellation of Capricornus the Goat in 5 BC, and then set off looking for the Messiah. But Matthew speaks only of one 'star' that appeared, rose, led the Magi to Bethlehem, and then stood over the house where Jesus was. Moreover, since each strand of the cord is badly frayed, this cord of three strands is strikingly threadbare. None of the three theories is persuasive and combining them only multiplies the number of problems. [HALFWAY POINT]

##### 5. The True Star of Bethlehem.

- a. Comet: The comet view has a long history, stretching back to the early centuries of the church. You'll see it on some Christmas cards and decorations and on artistic portrayals of the Nativity through the centuries. But...

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<sup>21</sup> Slide 21: Meteors.

<sup>22</sup> Slide 22: Moon and Jupiter.

- i. What is a comet? Comets were counted ‘stars’ by the ancients.<sup>23</sup> At their core comets are icy dirt-balls that whip around the solar system, going around the Sun in very eccentric oval tracks. When these dirt-balls (nuclei) come close to the Sun any exposed ices may evaporate explosively towards the Sun, taking lots of dust with them.<sup>24</sup> The dust erupting off the dirt-ball towards the Sun may catch the sunlight and form a bright head (coma) that is visible from Earth. The Sun pushes most of the dust behind the dirt-ball, which also catches the sunlight and can be seen as a dramatic tail. A dirt-ball may also produce large quantities of gas that may form a head and tail.
- ii. Comets, like earthlings, are varied in almost every respect: their glory, age, size, shape, colour, and orbit. Most comets are invisible to the naked eye, but over the course of a century there will be something like 81-99 that are observable without binoculars or telescopes. Among these are a handful of extraordinarily great comets. The most famous one is, of course, Halley’s Comet,<sup>25</sup> which has returned every 75-80 years for well over 2,000 years now. But most of the great comets of history have had schedules that do not bring them back for hundreds, thousands, or millions of years, if at all. Among the ingredients of greatness<sup>26</sup> are making a close pass by the Sun and/or Earth and having lots of volatile gases and plenty of dust and dirt, which give rise to bright comets with long tails.
- iii. The Babylonian astronomers were interested in comets and took records of them.
- iv. How does a comet cast fresh light on the mystery of the Star of Bethlehem?<sup>27</sup>
  1. The Age of the Infants. It explains why Herod killed infants up to those in their second year based on when the Star had first appeared. A large comet like Hale-Bopp (40-60km) may remain visible to the naked eye for well over a year (Hale-Bopp: 18 months). These kinds of comets are the most extraordinary in brightness and in size.
  2. The Rising. The Magi’s mention of the comet’s rising and attributing so much meaning to it makes sense only if a comet is in view. No other astronomical body has a surprising or impressive or potentially meaningful rising. But many of the greatest comets in history give forth their most magnificent

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<sup>23</sup> Slide 23: Comet Tempel 1 nucleus.

<sup>24</sup> Slide 24: Comet heads and tails.

<sup>25</sup> Slide 25: Halley’s Comet.

<sup>26</sup> Slide 26: Greatest comets.

<sup>27</sup> Slide 27: Case for Comet A.

displays at risings and settings,<sup>28</sup> because they are emerging from their closest encounter with the Sun and hence are at their brightest, are moving fastest through the constellations, and are large. If their orbit takes them close to the Earth after rounding the Sun or if the Sun causes the comet to fragment, the size can be even more remarkable. No ancient could predict the orbit or behaviour of comets.<sup>29</sup>

3. Rich Meaning. The Star revealed that the Messiah had been born and that he was worthy of worship. Comets alone were capable of communicating a great deal of information because they moved within the starry sky, seeming to interact with planets, stars, and especially constellations, and they changed appearance. Their form and locations and the timing of their appearance/phases might seem loaded with meaning and significance.
4. When we look at comet records<sup>30</sup> of astronomers in Babylon, we find that they took special note of the comets at five points in the comet's careers. Two of these five points are mentioned in Matthew regarding the Star—the first appearing and the rising. That is a remarkable coincidence!<sup>31</sup>
5. Comets were sometimes taken as wonderfully positive omens (see Chaeremon as cited by Origen), for example, marking the birth or coronation of great leaders. For example,<sup>32</sup> a comet appeared around the time of the birth of Mithridates the Great, Rome's great enemy (135/4 BC) and one around the time of his coronation (120/119 BC), and his propaganda made much of this. A bright comet during funeral games<sup>33</sup> held in honor of the recently deceased Julius Caesar in 44 BC was universally interpreted as a great omen, by many as an omen that Caesar had been divinised and by Octavian as an omen for his own career.
6. Ancient sources show that comets could be described as "going before" someone. First-century BC Greek historian Diodorus Siculus relates how a comet 'went before and led' the Greek general Timoleon as he sailed westwards to the boot of Italy on his way to Sicily.

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<sup>28</sup> Slide 28: Comets rising and setting.

<sup>29</sup> Slide 29: Case for Comet B.

<sup>30</sup> Slide 30: Stephenson.

<sup>31</sup> Slide 31: Case for Comet C.

<sup>32</sup> Slide 32: Mithridates.

<sup>33</sup> Slide 33: Comet of 44 BC.

7. Ancient sources also describe comets as standing over particular places. For example, Josephus<sup>34</sup> tells of how a comet ‘stood over’ Jerusalem in the period prior to its destruction, its sword-like appearance heralding its impending doom. Likewise, Cassius Dio tells of a comet in 12 BC “hanging” or “raised up” over Rome for several days. This way of speaking, by the way, is the language of appearance (phenomenological)—it was standard in the ancient world and is still widely used today when lay people and professional astronomers speak of the Sun, Moon, and other celestial phenomena.
8. The pinpointing of a precise location by a comet<sup>35</sup> is beautifully explained by a comet setting with its tail streaming upwards the other side of the place from where the observers are. As one astronomer has written, Only a tailed comet can appear to stand over a place, its long upward-streaking tail seeming to point downwards to one particular location on the earth below (Wickramasinghe).<sup>36</sup>
9. Only a comet can explain the movement of the Star so quickly (within a couple of months!) from the eastern morning sky, where it was when it rose, to the southern evening sky, where it was when the Magi were heading from Jerusalem to Bethlehem. Because it is a solar system object, moving at its greatest speed as it nears and retreats from the Sun, it typically moves rapidly from one region of the sky to another.
10. Everyone agrees that Numbers 24:17<sup>37</sup> played a key role in enabling the Magi to interpret the Star. After all, there was no oracle in the Old Testament that more closely linked the Messiah’s coming with the appearance of a celestial body. Balaam’s oracle speaks of the Messiah’s coming in terms of a sceptre-star that rises: “I see him, but not now; I behold him, but not near: a star shall come out of Jacob, and a scepter shall rise out of Israel.” What should be noted is that many of the top Hebrew linguists point out that the Hebrew word “sceptre” (*šê-bet*) here probably refers to a comet. In fact, the Revised English Bible translation renders the word “sceptre” “comet” in Num. 24:17. Notably the Rabbis called comets

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<sup>34</sup> Slide 34: Josephus and Cassius Dio.\*

<sup>35</sup> Slide 35: Comets as pointers.

<sup>36</sup> Slide 36: Case for Comet D.

<sup>37</sup> Slide 37: Numbers 24:17.

“sceptre stars”. Where “sceptre” occurs in parallel with “star”, it is difficult to avoid the conclusion that Balaam is employing double entendre here—speaking literally and metaphorically of the sceptre-star. The literal sceptre-star would announce the birth of the metaphorical sceptre-star, the Messiah, who would wield sovereign and military authority over Israel and its neighbours. This implies that a comet, presumably one that looked like a sceptre, would attend the Messiah’s birth. The Magi and Matthew, in claiming “we have seen his star at its rising,” are widely regarded as alluding to Balaam’s oracle, clearly focusing on the literal aspect. Second-century Justin Martyr and Irenaeus state that the Magi came to their conclusion about the significance of the Star through Numbers 24:17, which they interpreted both literally and metaphorically. Origen, in the 3<sup>rd</sup> century, made the same claim.<sup>38</sup>

11. The uniqueness of the Star suggests that it was a comet—it was very uncommon for magi to take a long trip to pay homage to a foreign dignitary. Comets are unique—no two comets are identical in chemical constituency, size, orbit, etc. Even the same comet never puts on the same show, because the Earth is at different stages of its orbit.
  - v. Retrograde direction.<sup>39</sup> To move from the eastern morning sky to the southern evening sky, the comet must have been going on an orbital direction opposite that of Earth, and hence been retrograde.
  - vi. Earliest. The comet view is the earliest astronomical view—it is strongly defended by Origen in the 3<sup>rd</sup> century.<sup>40</sup> The mid-2<sup>nd</sup> century apocryphal Gospel of James speaks of it in terms that are consistent with it being a comet. And Ignatius in the early second century, quoting a first-century source, describes the Star in terms that make it sound like a large comet.
  - vii. What comet was it?
    1. Some have suggested Halley’s Comet<sup>41</sup> in 12 BC, in truth mainly because it is the only comet most people have heard of. We happen to have a detailed description of it because the Chinese thought it was a very significant comet. But it wasn’t the Star of Bethlehem—it appeared too early and remained

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<sup>38</sup> Slide 38: Case for Comet E.

<sup>39</sup> Slide 39: Retrograde orbit.

<sup>40</sup> Slide 40: Origen.

<sup>41</sup> Slide 41: Halley’s Comet.

visible for only 56 days and didn't have a rising or ever appear in the southern sky.

2. Others have suggested that it was a comet mentioned in surviving Chinese records in the year 5 BC. But this comet was only visible for 70 days and didn't have a rising. The Star was a different comet, much greater than these comets, a comet more like Hale-Bopp<sup>42</sup> than Halley's Comet!
- viii. But why isn't there a record of the Star? The assumption that the Star would have been mentioned in some extant set of astronomical record or in some Greco-Roman writing is the big fallacy in the historical quest for the Star. If truth be told, we have records of only a paltry bunch of astronomical phenomena from this period—less than one third of comets. Unfortunately we have no comet records from Babylon after 87 BC. Of these about half are found in scattered references in Greco-Roman literature and half in surviving Chinese records. In each case the records were preserved because they were perceived to have some significance to those who preserved them. The Chinese preserved some comets because of their perceived astrological and/or ideological significance. The Greeks and Romans mentioned comets when they were relevant to the story they were trying to tell or the point they were trying to make. For example, if Josephus hadn't perceived in the year-long comet that stood over Jerusalem an omen of Jerusalem's judgment, that phenomenal comet would have been lost to history. It is the same with the Star: had the early Christians not perceived this comet to be extremely significant, all record of it may well have been similarly lost. That is not to say that a record might yet be discovered....
6. What did the Star do? The big question is: what did the comet do in connection with its rising in the eastern sky that convinced the Magi that the Jewish Messiah had been born and could be found in Judea? It had to be an astonishing celestial phenomenon to have communicated so much information so powerfully. No proposal regarding the Star has ever come close to explaining this. But, as mentioned earlier, a comet may explain it, because comets as they round the Sun are at their most active, growing a head and tail. Comets famously may take a variety of forms<sup>43</sup> (looking like fans, horse's manes, serpents, swords, fountains, glasses, rabbits, arrows, people, humans, and angels) and move around the constellations, and ancient astronomers regarded its forms and locations as keys to interpreting a comet's significance. A serpent-shaped comet in a serpentine constellation would have been a bad omen for a ruling dynasty. A sword-shaped comet over a city would have meant destruction for that city (as in the run-up to AD

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<sup>42</sup> Slide 42: Hale-Bopp.

<sup>43</sup> Slide 43: Comet forms.

70). So we can safely assume that the Star communicated its message to the Magi by its form(s) and interaction with the constellations, particularly the so-called zodiacal constellations (through which the Sun passes). Now the fact that the Magi speak of what the Star did at its “rising” indicates that the phenomenon occurred in a constellation that was itself rising in the eastern sky, escaping its annual encounter with the Sun. But which constellation? The fact that the rising was in the eastern sky favours a zodiacal constellation. And what might the Star have done and where within the constellation to convince the Magi that the Jewish Messiah had been born?

7. Are we left to wonder what the Star of Wonder was? Simply to speculate as to possible explanations? As strange as it may seem to say, we are not. Few have taken any notice of the fact that in the Book of Revelation we have a most peculiar description of the Nativity of Jesus—an astronomical depiction of his birth. I want you to notice all the astronomical language: heaven, sun, moon, constellations,, stars, a meteor storm (stars being thrown from their places), even the word “sign”, which significantly can mean “constellation”.
  - a. In Revelation 12:1-5<sup>44</sup> we read: “And a great **sign** appeared **in heaven**: a **woman** clothed with the **sun**, with the **moon** under her feet, and on her head a crown of **twelve stars**. She was pregnant and was crying out in birth pains and the agony of giving birth. And another **sign** appeared **in heaven**: behold, a great red **dragon**, with seven heads and ten horns, and on his heads seven diadems. His tail **swept down a third of the stars of heaven** and cast them to the earth. And the dragon stood before the woman who was about to give birth, so that when she bore her child he might devour it. She gave birth to a male child, one who is to rule all the nations with a rod of iron, but her child was caught up to God and to his throne....”
  - b. Here very mysteriously the Messiah’s birth story is portrayed as occurring in the heavens and involving two major constellations, the zodiacal constellation Virgo the Virgin<sup>45</sup> (the only female constellation that hosts the Sun and who has 12 stars visible to the naked eye in her miter-style crown) and the neighboring constellation Hydra the serpentine dragon. Why does John’s great overview of history from Jesus’ birth until the end of the age begin with an astronomical version of the Nativity story? Note that Jesus is born on earth at the very time when the Virgin gives birth in heaven.
  - c. Surely there is an obvious explanation of this peculiar fact: that John is describing the phenomenon that the Magi witnessed and that persuaded them that the Messiah had been born and that they should go on a pilgrimage to Judea to find and worship him. The implication is clear that at the point when the Virgin Mary was giving birth to the Messiah on the earth,

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<sup>44</sup> Slide 44: Revelation 12:1-5.

<sup>45</sup> Slide 45: Virgo and Hydra.

the constellation figure Virgo the Virgin was giving birth to a comet playing the part of the baby Messiah in heaven. That is, the heavens were declaring his birth as it happened on earth, but in such a way that only those viewing them through the correct interpretive paradigm could discern its true meaning. Certainly such a wonder might have convinced magi that someone of incredible significance was being born.

- d. But does Rev. 12:1-5 fit Matthew 2 astronomically? The fact that the Sun is first described as being located over the Virgin's belly while the Moon is under her feet indicates that the unfolding birth scene is occurring when the constellation figure is rising in the eastern sky, emerging from its annual encounter with the Sun. That is in remarkable accord with what Matthew said about the Star and strengthens our suspicion that Revelation 12 is revealing what the Magi saw at the time of Jesus' birth.
- e. Such is the detail of the description in verse 1 that we can identify precisely the very day and year in view: September 15, 6 BC.<sup>46</sup> That was the only point in the years 7-1 BC when the Moon could properly be said to be under Virgo's feet while the Sun was clothing her. In the weeks following this, the Sun would move down within Virgo, steadily allowing her to re-emerge over the eastern horizon. The birth scene described thereafter can therefore be dated to the month or so after that. This is exactly when most historians date Jesus' birth (6-5 BC).
- f. Ok, let's consider this further. If indeed Revelation 12 is describing the great celestial wonder that announced Jesus' birth, then how did it happen astronomically? How could the Virgin appear to be pregnant and deliver a baby? There is only one way in which the drama described here can be pulled off—by a very large comet. You see, the heads of large comets, like Hale-Bopp, are elliptical or oval in shape.<sup>47</sup> In the context of a womb, such a form would naturally be regarded as a foetus. Of course, as we have already seen, Matthew 2 requires that the Star of Bethlehem was a very large comet. That is an astonishing similarity, because relatively few historical comets are large. In recent centuries no large comet has come particularly close to the Sun. But in the case of the Star, this is what we have. That is, for the baby to become larger and larger and then give birth,<sup>48</sup> the comet would have to have been on a retrograde orbital path (remember Matthew's portrayal of the Star also suggests a retrograde comet) that brought it close to Earth after it had made a close pass by the Sun. In order to stay in the same narrow zone of Virgo, her belly, its movement on its orbit would have had to be such that it was largely offset against the movement of Earth on its orbit. They

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<sup>46</sup> Slide 46: Sept 15, 6 BC.

<sup>47</sup> Slide 47: Hale-Bopp's coma.

<sup>48</sup> Slide 48: Christ Comet orbit.

were essentially moving in consort. The Virgin's pain in labour was presumably because the baby looked large as it was weighing down on her pelvic floor just before birth.<sup>49</sup> The baby's birth was naturally the moment when it fully emerged from the Virgin's womb. Then the baby was born.\*

8. We can see that the profiles of the Star of Bethlehem comet and of the Revelation 12 comet are identical: a very large and intrinsically bright retrograde comet that came close to the Sun and had a remarkable rising in the eastern sky. And both are related to the birth of the Messiah. If you know anything about comets, you'll appreciate how utterly astonishing this match is, because such comets are extremely uncommon! The mathematical probability of a match is mind-bogglingly infinitesimal. Trust me, this is extremely powerful evidence that they are two accounts of the very same astronomical body and the Star was truly historical!
9. But we can go further than this: based solely on the data derived from Revelation 12, we can produce an orbit for the comet.<sup>50</sup> This will allow us to confirm definitively that Revelation 12 is an independent record of the Star of Bethlehem and that the Star was a large retrograde comet. Based on the latest astronomical research, we can recreate the full story of the Star—where it first appeared, through which constellations did it travel, how bright it became, how close to the Sun and Earth it came, what it looked like when it ushered the Magi to Bethlehem and then pinpointed the very house where Jesus was. That, of course, is a moviemaker's dream.
10. It took me many months of research but eventually, in collaboration with some of the world's top comet astronomers, I did determine the orbit of the comet that played the part of the baby in the celestial Nativity drama. Accordingly, you can see for yourself what the Magi saw the comet's coma at the time of its rising.<sup>51</sup> [VIDEO]
11. So would Revelation 12's comet, about 30-40 days after the baby's birth (the normal duration of a 550-mile journey by camel), have been in the southern evening sky to usher the Magi from Jerusalem to Bethlehem? Yes, indeed it would. They would have seen it steadily moving in front of them towards the SSE, where they were heading.
12. Would the comet then have gone on to set (in the west), so that it could stand over the house, pinpointing it as where the Messiah was? Yes, it would. From the perspective of the Magi where they were standing, the comet was standing immediately over one particular house.
13. Let's now recreate the whole story of the Star:
  - a. Where did it first appear? Remarkably, when it first appeared in 7 BC, it would have been in the constellation Pisces the Fish or Aquarius the Water-Carrier close to the planets Jupiter and Saturn. We recall that they had three

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<sup>49</sup> Slide 49: Labor.

<sup>50</sup> Slide 50: Orbital elements.

<sup>51</sup> Slide 51 (VIDEO): Pregnancy and labor.

near-alignments that year, and it is very possible that the Star appeared during the last one. Curiously, one respected Matthew commentator wrote<sup>52</sup>: “One might speculate that a new star appearing close to a near conjunction of Jupiter and Saturn might be taken to herald a key royal birth among the Jews, on the basis that Jupiter was the royal planet and that Saturn, as the Star of Saturday, was at times associated with the Jews because of their Sabbath observance” (Nolland). Isn’t it amazing that this is exactly what emerges from my research?

- b. Only when they detected movement of the Star, which probably took weeks, would they have realized that this new body was a comet (cf. the similarly large comet—Sarabat’s Comet of 1729).
- c. You can read about everywhere the comet went and how its behaviour might have been interpreted in my book. But it would have become a prominent part of the sky from the Spring of 6 BC, around the time when John the Baptist was born.
- d. Jumping forward to the rising, it became incredibly bright at that time—one of the brightest comets in recorded history, brighter than the full Moon!
- e. As the baby grew—the comet heading towards Earth—the coma maintained its apparent brightness even as it grew larger.
- f. The labour pain attributed to the woman in Revelation 12 was because the coma was large relative to the constellation figure of Virgo on October 15, 6 BC.
- g. The baby would have been born—the coma entirely below Virgo’s groin—around October 20, 6 BC. At this point the tail would have been enormous, stretching across the entire sky from low on the eastern sky right over the zenith to the western horizon, reminding us, in the words of Revelation 12:5, that Jesus will rule all nations with an iron sceptre.
- h. Thereafter the comet came scarily close to Earth on October 24/25, cutting between the Sun and Earth on its way out of the inner solar system.<sup>53</sup> This is the kind of event that freaks astronomers out—it is a massive comet that in astronomical terms comes dangerously close to Earth, approaching at great speed from the opposite direction, so that any collision would be especially devastating!
- i. During the following month, each night as the comet set, it would have made its way from the SE to the West, setting in front of the Magi as they crossed the desert, heading westwards to Judea. That must have been a huge inspiration to keep ploughing on.
- j. At the end of November, when the Magi discovered from Herod that the Messiah was to be born in Bethlehem, they may well have wondered at the

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<sup>52</sup> Slide 52: Nolland.

<sup>53</sup> Slide 53: Comet between Earth and Sun.

fact that the town's name means "House of Grain," which was very reminiscent of Virgo, which as a zodiacal constellation could be called a "House" and had long been known as "the Grain-ear," because of Spica, its brightest star. Bethlehem therefore may well have seemed to them an excellent earthly equivalent to the celestial House of Grain.

- k. When the Magi set out from Jerusalem to Bethlehem around sunset,<sup>54</sup>[VIDEO] it would have been in the SE sky, steadily advancing to SSW, the direction of Bethlehem relative to Jerusalem. Its tail would have been approximately 40 degrees long. It would still have been bright, straight, and very long. Later that same night it set with its tail upright.<sup>55</sup> From the Magi's perspective, it was immediately behind and over one particular house. They regarded this as God's way of enabling them to complete their mission by pinpointing the exact location of the Messiah on Earth and hence identifying the one whose birth the Star had earlier announced. Sure enough, they found baby Jesus and the Virgin Mary inside, and they bowed down to worship Jesus and present their gifts of gold, frankincense, and myrrh to him.
14. So how does the Star compare to other comets?<sup>56</sup> I confess that I had given no thought to this when I did my research. But when I was visiting with my friend, comet astronomer David Asher, he was eager to see how close the comet came to Earth. He was taken aback by how close it came, particularly because it was a large comet traveling in the opposite direction to planet Earth. That got me thinking—how did the Bethlehem Star comet compare to the great comets of history? When I investigated it, I discovered that...
- a. It was the most intrinsically bright comet in recorded history.
  - b. Its long period of visibility (in excess of a year) puts it in the super league of the greatest comets, along with Josephus' year-long comet and Hale-Bopp.
  - c. It had the largest nucleus in recorded history—larger even than Hale-Bopp. Only one comet rivals it in size—Sarabat's Comet of 1729.
  - d. At its peak—at the time of its rising—it achieved levels of brightness that put it in the super league of comet brightness, brighter than the full Moon. Only the great comets<sup>57</sup> of 1577, 1680, 1865, and 1882, and Ikeya-Seki in 1965 rivalled it in brightness. Commenting on the Star, cometographer Gary Kronk wrote that it would have been "a spectacular object that was visible in daylight for a time" and commented that its brightness was akin to two of the brightest comets in history.

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<sup>54</sup> Slide 54 (VIDEO): Comet going ahead.

<sup>55</sup> Slide 55: Comet over house.

<sup>56</sup> Slide 56: Comparison.

<sup>57</sup> Slide 57: Great Comets' brightness.

- e. Many comets have come closer to the Sun and many others have come closer to Earth, but no comet has come as close to both the Sun and the Earth. This combination alone marks it as a truly magnificent comet.
  - f. In size its head rivalled that of the largest ever, Comet Holmes in 2007/8.
  - g. In length its tail was among the longest ever recorded.
  - h. We can safely conclude that the Star was the greatest comet in human history. That is precisely what we'd expect of the Star—that it was the most extraordinary and important astronomical phenomenon in history.
15. What is the Star's proper name? Since it is a great comet and is inextricably associated with Jesus' birth, I named it "The Great Christ Comet."
16. Why does the Star matter?
- a. God is an enthusiast for astronomy. He elected to bless the efforts of ancient astronomers by giving them an inside track on his plan of salvation. He wants all of us to look up and enjoy the heavens, his glorious handiwork. The People of the Word should also be People who honor God for his Work in the World. Many influential comet astronomers are believers; let there be more Christians in astronomy!
  - b. Many have poked fun at Matthew's account of the Star, ridiculing it as a patently absurd invention of Matthew. However, our study demonstrates that Matthew's account of the Star is not only believable, but certainly authentic, utterly beyond the capacity of any ancient to invent! The most mocked part of the Gospel ends up powerfully confirming the reliability of Matthew as a historian and biographer.
  - c. It underlines that God is the Creator and Sustainer of the Universe, who stakes his claim to ownership and expects humans to honour him as such. The Star of Bethlehem ends up being God's fingerprint on his Creation.
  - d. It also demonstrates that Jesus is who he claimed to be—the prophesied Son of God and Son of David, the Messiah, whose death atones for the sins of all who look to him.
  - e. It underlines God's foreknowledge—this Star was on course for thousands of years, destined to signal Jesus' birth, but no human knew.
  - f. It highlights that God wants to lead humans all across the world to himself and there are no boundaries. His calling the Magi indicates that he wants Gentiles, even the most despised among them (astrologers), to be part of his great work relating to Jesus.
  - g. God reserves the right to employ unorthodox means to help draw people to himself—dreams in Islamic countries, etc.
  - h. You remember I said that there is a lot at stake in this discussion of the Star. I hope you can see that now. The Star pushes each of us for a response, just as it did the Magi 2000 years ago. Will we follow it all the way to the feet of the great Messiah? Will we bow the knee before baby Jesus?