# **Biblical Astronomy**

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#### **NEW MOON REPORT**

Nehemia Gordon from Jerusalem, Israel compiled the following New Moon Reports for the months of December 2010 and January 2011 and the beginnings of the Tenth and Eleventh Biblical Months in the Biblical Year 5971.

**December** – "On December 7, 2010 the new moon was sighted from Israel. The new moon was first sighted from Jerusalem at 4:42pm by Devorah Gordon and then shortly thereafter by Nehemia Gordon, Yoel Halevi, Miriam Fauth, Elana Fauth, and Agnes Blanchard. Photographs of the new moon sighted are posted at:

http://www.facebook.com/pages/Nehemia-Gordon/371892568628

**January** – "On Wednesday January 5, 2010 the new moon was sighted from Israel. The moon was sighted by three observers from the Mount of Olives beginning at 17:13. The moon was also sighted by an observer from Samaria at 17:24 and another observer from Aqaba, Jordan."

"The next New Moon is expected to be visible from Jerusalem near sunset on February 4, 2011 when the moon will be 2.12% illuminated and 15.12° above the horizon at 5 minutes past sunset.

Here again is another late newsletter. There was an attack on my computer and someone tried to piggyback off of it. I pray that the problem is now solved. Everything seems to be working fine and I completed five thorough scans for viruses and unwanted cookies and came up clean. For a while I had to uninstall Norton's and reinstall it to get my computer to work for a short time. That problem seems to be fixed finally. I shut the computer off for a few days at a time to make it inconvenient for someone to piggyback off from it. I think they

finally gave up. I originally planned to finish and send this newsletter to you around January 3<sup>rd</sup>. I am lost for words. Again, it seems that every month it is something. I plan on starting the February newsletter shortly after this one is finished.

I noticed that I forgot to mention in the December newsletter that the Total Lunar eclipse that occurred in December occurred on the Winter Solstice. I thought I included that fact, but found that I didn't. I thought it to be interesting but did not see any astounding Biblical significance to it. Though I suppose it created much speculation. However, it is a rare event. Astrologers would have much to say about it since they make much to do about the solstices and equinoxes, but in my observations to date, I can only speculate on a possible meaning. Your guess is as good as mine. Sun god worshippers make hay out of it and most likely worship such events. Until Yahweh gives me direct revelation on it, I will not speculate.

I did check all the eclipses that occurred on the Winter Solstice since January 1, 1500 and found three partial eclipses, a couple of penumbral eclipses (not really worth mentioning) and one other Total eclipse that occurred on December 21, 1638. So a total eclipse on the Winter Solstice is quite rare and most likely occurs every 350 to 400 years. To do an accurate frequency of such an event I would need to go back to 4000 BC and check them all through the present. That will take some time. I spent a couple of hours checking all the eclipses from 1500 until present using the Dance of the Planets astronomy program, which is a great research tool for checking the frequency of celestial events. It is the best program that I have found for such research. It is a DOS program that is still available from ARC Science Simulations. I believe it is now sold for \$75.00. I paid over \$200 for it in 1993. You can find it at the following website: http://www.arcscience.com/otherProducts/danceOf ThePlanets.html

The picture below of the Total Eclipse on December 20/21 was taken during the peak of the eclipse from Cochranville, PA.



There were cloud issues where I am so I could not view the eclipse. I suppose that is the price I pay at times for living in the Northwest. But I still like it here.

## **QUADRANTID METEOR SHOWER**

The *Quatrantid* Meteor Shower peaks every year on the evening of January 3/4. This year's shower was predicted to be an excellent show. The article below concerning this shower is from Astronomy.com.

# Hot flashes for a cold winter's night

"Observing prospects look excellent for this year's Quadrantid meteor shower, which peaks before dawn January 4, the same morning as New Moon. The Quadrantids can produce up to 120 meteors per hour under perfect conditions. With the Moon out of the sky, this has the potential to be the finest shower of 2011.

The Quadrantids typically have a sharp peak, with the number of meteors dropping by about half 6 hours from the peak. Astronomers predict the maximum should occur around 1h UT January 4 (8 p.m. EST January 3). This timing works out best for those in Europe, but observers everywhere should keep an eye out.

The shower's radiant lies in the northern part of Boötes the Herdsman. The Quadrantids got their name from a defunct constellation, Quadrans Muralis, which used to occupy this region."

Again, cloud issues prevented me from observing the meteor shower. I did not hear of any reports from the United States of anything spectacular. But they must have put on a splendid display in Europe, and perhaps Israel.

Chart 543 shows the radiant of the shower in the constellation *Bootes*. It is between the constellations *Bootes* and *Draco*. It is named after the constellation *Quadrans Muralis*, which is not one of the original 48 constellations. You will notice on the chart a radiant for another meteor shower that takes place in June, which is the *June Bootids* named after the constellation *Bootes*.

The main theme for the constellation *Bootes* is *He Cometh*, referring to the coming of Messiah both when he first came into the world and also to His second appearing. It is a picture of a man or the likeness of the Son of Man with a sickle in his hand. This is the picture given in Revelation 14:14 and 15.

"Then I looked, and behold, a white cloud, and on the cloud sat One like the Son of Man, having on His head a golden crown, and in His hand a sharp sickle. And another angel came out of the temple, crying with a loud voice to Him who sat on the cloud, 'Thrust in Your sickle and reap, for the time has come for You to reap, for the harvest of the earth is ripe."

For more information on the constellation *Bootes* see the February 2006 issue of *Biblical Astronomy* where it was the feature constellation for that issue.

The constellation *Draco*, above *Bootes*, represents the Dragon.

#### PARTIAL SOLAR ECLIPSE

A partial eclipse of the sun took place on January 4, 2011. The moon covered about 80 percent of the sun at the peak of the eclipse. The eclipse as a whole was visible from Europe and northern Africa. It was also visible from Israel where the moon covered about 60 percent of the sun at the peak of the eclipse. You can see the areas where the eclipse was visible from on the following link:

 $\frac{http://eclipse.gsfc.nasa.gov/OH/OHfigures/OH2011}{-Fig01.pdf}$ 

**Chart 544** shows the positions of the sun and the moon in the constellation *Sagittarius* at the time of the eclipse on January 4, 2011.

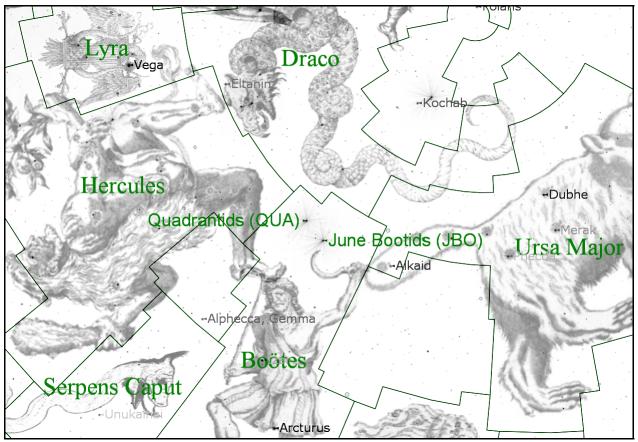


Chart 543 – Radiant of the Quadrantids Meteor Shower that peaks on January 3/4 every year.

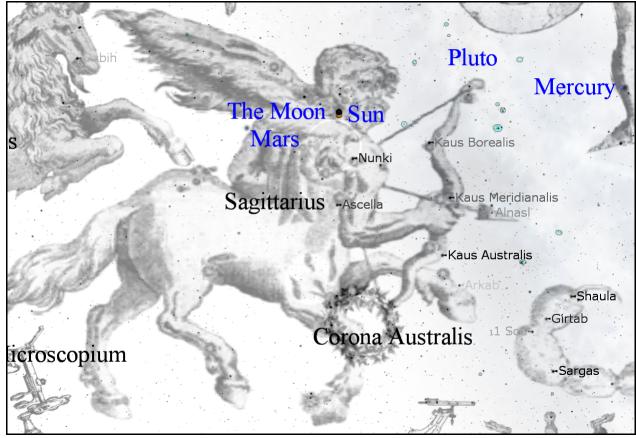


Chart 544 – The positions of the sun and moon in Sagittarius during the partial solar eclipse on January 4, 2011.

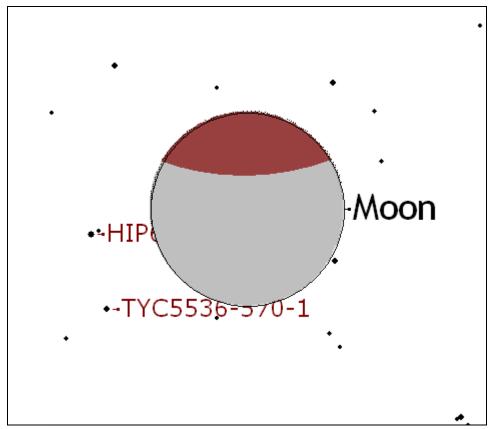


Chart 545 – Peak of the partial eclipse at 3 a.m. JST as seen from Jerusalem on March 13, 4 B.C.

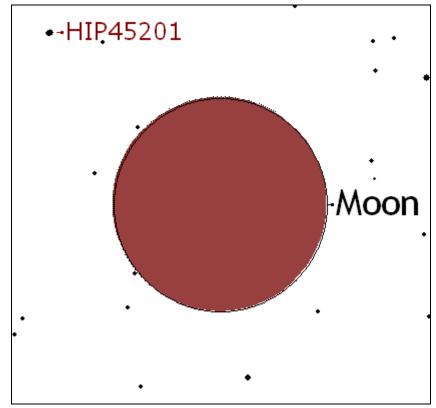


Chart 546 – Peak of the total eclipse at 1 a.m. JST as seen from Jerusalem on January 10, 1 BC

The main theme of *Sagittarius* is *The Redeemer's triumph*. The arrow in the bow is aimed at the heart of the scorpion (*Scorpius*), which is another form of the dragon or part of the dragon's (or serpent's) seed.

Both the solar eclipse and the meteor shower occurred on January 4, and both were most likely well seen from Israel. Both constellations where these events occurred portray Messiah's second appearing and his war with the adversary.

For a more Biblically accurate picture of *Sagittarius*, see Michele Abraham's drawing of the constellation in the July 2006 issue of *Biblical Astronomy*.

# JOSEPHUS' ACCOUNT OF HEROD'S DEATH

I have received a number of inquiries of late pertaining to the year that Messiah was born. I believe that the latest round of inquiries stems from a recent teaching from J.R. Church who states that Jesus was born in 7 B.C according to certain conjunctions that took place in that year, and the death of Herod occurred in 4 B.C. after an eclipse that is mentioned by Josephus in his *Antiquities of the Jews*.

The celestial events of 7 B.C through 6 B.C. include the massing of Jupiter, Mars and Saturn in the constellation *Pisces* and the triple conjunction of *Jupiter* and *Saturn*. I stated in my book and in the *Biblical Astronomy DVD Set* that these signs were part of the signs that occurred pointing to the birth of Messiah. These particular events took place about three years before He was born. There were also great signs that occurred shortly before and after His birth on September 11, 3 B.C.

There were also very similar signs that took place about 3 years before Moses was born. There was a massing of Jupiter, Mars and Saturn in Taurus, and also a triple conjunction of Jupiter and Saturn. I cover this in the Biblical Astronomy DVD Set as well.

Richard Hinkley Allen writes of the events that occurred in 7 B.C. in his book Star Names, and Their Meanings (1899), p. 341 – Within their boundaries (Pisces) took place three distinct conjunctions of Jupiter and Saturn in the year 747 of Rome, - the year to which for a long time was assigned Christ's birth; these phenomena strikingly agreeing in some of their details with Saint Matthew's account of the Star of Bethlehem.... It is

noticeable that the Rabbis held the tradition, recorded by Abrabanel in the 15<sup>th</sup> century, that a similar conjunction took place three years previous to the birth of Moses, and they anticipated another at their Messiah's advent.

Both series of events occurred three years before the birth of Moses and three years before the birth of Yahshuah.

For more complete details on the birth of Moses with star charts of the celestial events that took place three years before he was born, see the article *The Birth of Moses and the Exodus* in the March/April 2004 issue of *Biblical Astronomy* and the second DVD in the *Biblical Astronomy DVD Set*. I believe that I covered the events that occurred three years before the birth of Yahshuah on the same DVD and I may have done an article on it many years ago, but I cannot find it.

There is an eclipse mentioned in Josephus' *Antiquities of the Jews*, XVII, vi, 4 that occurs shortly before the death of Herod. Below is what was written by Josephus.

- 4... "But Herod deprived this Matthias of the high priesthood, and burnt the other Matthias, who had raised the sedition, with his companions, alive. And that very night there was an eclipse of the moon. (8)
- 5. But now Herod's distemper greatly increased upon him after a severe manner, and this by God's judgment upon him for his sins; for a fire glowed in him slowly, which did not so much appear to the touch outwardly, as it augmented his pains inwardly; for it brought upon him a vehement appetite to eating, which he could not avoid to supply with one sort of food or other. His entrails were also ex-ulcerated, and the chief violence of his pain lay on his colon; an aqueous and transparent liquor also had settled itself about his feet, and a like matter afflicted him at the bottom of his belly. Nay, further, his privy-member was putrefied, and produced worms; and when he sat upright, he had a difficulty of breathing, which was very loathsome, on account of the stench of his breath, and the quickness of its returns; he had also convulsions in all parts of his body, which increased his strength to an insufferable degree."

Many believe that this eclipse occurred on March 13, 4 B.C. They most likely get this from a footnote in Josephus' account of the eclipse, shown below. But this footnote came from a commentator on the book many centuries after Josephus wrote of

the account. It did not come from Josephus. The commentator was in error on choosing this eclipse.

Footnote (8): "This eclipse of the moon (which is the only eclipse of either of the luminaries mentioned by our Josephus in any of his writings) is of the greatest consequence for the determination of the time for the death of Herod and Antipater, and for the birth and entire chronology of Jesus Christ. It happened March 13th, in the year of the Julian period 4710, and the 4th year before the Christian era..."

The late Dr. Ernest L. Martin shows in his book *The Star that Astonished the World* that Herod died about four weeks after the total lunar eclipse, which occurred around 1:00 a.m. (Jerusalem Time) on January 10, 1 B.C. He also shows the errors in calculating the eclipse that occurred on March 13, 4 B.C. as being the correct eclipse mentioned by Josephus.

Dr. Martin dedicated a whole chapter on this subject. The chapter in which this is covered is *Chapter 13 – The Chronology of Josephus*. There is a free online version of *The Star of Bethlehem*: *The Star that Astonished the World* at the following link:

http://www.askelm.com/star/index.asp

You can also listen to an audio reading of the chapter that is available on the same link (above). Or you can go directly to Chapter 13 in the book using the following link:

http://www.askelm.com/star/star015.htm

There are other things to consider in choosing the most likely candidate for the correct eclipse. The eclipse that occurred on March 13, 4 B.C. was a partial lunar eclipse in which the shadow of the earth only covered about 25% of the moon's surface at the peak of the eclipse. That eclipse started around 1:30 a.m. Jerusalem Standard Time and peaked at 3:00 a.m. JST. It most likely was not noticeable to most of the population. **Chart 545** shows the shadow of the earth (in red) at the peak of the eclipse. There would not have been a red shadow projected onto the moon since it was a partial eclipse. You only have a blood red moon when it is a total eclipse.

The eclipse that took place on January 9/10, 1 B.C. started to take place before 11:00

p.m. on January 9, and came to a peak around 1:00 a.m. on January 10. This eclipse was a total blood red eclipse. **Chart 546** shows the total eclipse of January 10, 1 B.C.

Many certainly would have noticed this eclipse. This blood red moon may have represented the innocent blood that was spilt shortly before this (within a few weeks) by Herod when he ordered all the children two years old and under to be slaughtered in Bethlehem and its surrounding area. And also the killing of the two rabbis ordered by Herod that evening.

### **Chronology of Events**

Mary conceived Yahshuah in December 4 B.C. (Hanukkah)

Yahshuah was born on September 11, 3 B.C. (Day of Trumpets)

Magi came and found the young child Yahshuah in a house on December 25, 2 B.C. (Hanukkah and two years from when Yahshuah was conceived. Yahshuah was 1 year and 3 months old at this time and in his second year after he came out of the womb.

Magi were warned by an angel to return to their country by a different route, and Joseph also warned to flee to Egypt with Mary and the child.

Herod became gravely ill shortly after the eclipse that occurred on January 10, 1 B.C. (16 days after the Magi came to see Yahshuah). Most likely as punishment for slaying all the children in Bethlehem and also to protect Yahshuah.

Herod died on January 28<sup>th</sup> (Schebat 2) in 1 B.C.

Angel told Joseph that Herod had died and that he could take his family back to Israel. This most likely took place at least one month after Joseph and his family escaped to Egypt.

If you do not have access to the Internet, you can purchase *The Star of Bethlehem: The Star That Astonished the World* from: Associates for Scriptural Knowledge, P.O. Box 25000, Portland, OR 97298-0990 – Phone 503-292-4352. It sells or \$18.95 US; \$23.95 Canada; \$28.95 other. You can contact them to see about shipping costs.