

What year did 'Christmas star' appear?

LOOK TO the southeast, shortly after sunset in December, and you'll see a bright star. It's actually not a star at all; it's the planet Jupiter.

Look to the southeast 45 minutes before sunrise, and you cannot fail to see a brilliant "star." This is Venus. It dominates the sky whenever it is visible. Only the sun and moon are brighter.

When seen before sunrise, a planet might be called the "morning star." Seen after sunset, it's the "evening star."

In December, it is often given another name: the "Christmas Star." And that makes people wonder about a special "star" that appeared nearly 2,000 years ago.

What was the "star" that guided the wise men to Bethlehem? That question has puzzled people for centuries.

TO DETERMINE the nature of the Christmas Star, we must look back in time. Of all the astronomical objects that were visible to the wise men, what did they actually see? Looking into the past gives rise to another question: how far into the past do we look? When was the time of the wise men and birth of Jesus? That's very difficult to determine. In antiquity, birth records for only the most important people were



skywatch
Raymond E. Bullock

made, so we can't simply look up a record of birth.

Besides, the calendar in use at the time was very different from the one we use today. It was based on the legendary founding of the city of Rome.

IN OUR ATTEMPT to calculate a date for the birth, we must take clues from early historical records. The first clue is a direct statement from the Bible:

"Now when Jesus was born in Bethlehem of Judea in the days of Herod the king, behold, there came wise men from the east to Jerusalem" (Matthew 2:1).

We know when Herod was king. The Jewish historian Flavius Josephus wrote that Herod died shortly after an eclipse of the moon, which occurred just after the feast of Purim, and shortly before the Passover.

Astronomers understand the motions of the moon well enough to calculate eclipses. Calculating backwards, it was determined that an

eclipse was visible to that part of the world on March 14, in the year we call 4 B.C. Herod died after that eclipse, so Jesus must have been born before that year. But how much before?

ANOTHER CLUE explains why Mary and Joseph traveled to Bethlehem:

"... (There went out a decree from Caesar Augustus, that all the world should be taxed. (And this taxing was first made when Cyrenus was governor of Syria.) And all went to be taxed, every one into his own city." (Luke 2:1-3)

It is also possible to determine when that taxation (actually a census) occurred. In 1923, archaeologists discovered an ancient tablet in the ruins of a Roman temple. On it were inscribed three dates for taxations demanded by Caesar Augustus.

One was in 28 B.C., the next was 8 B.C., and the third in 14 A.D. Assuming the decree of 28 B.C. to be too

early and the decree of 14 A.D. to be too late for our consideration (remember Herod died around 4 B.C.), we are left with the decree of 8 B.C.

Allowing for the slowness of communication in those days, the news of the decree may not have reached Mary and Joseph until 7 B.C. It would have taken them a good deal of time to travel to Bethlehem.

Perhaps the birth occurred in late 7 or early 6 B.C. That would be a few years before the eclipse of 4 B.C., and coincide with the death of Herod. We can almost be certain the birth did not occur on Dec. 25.

ANOTHER CLUE (Luke 2:8) tells us there were shepherds tending their flock by night when they learned of the birth.

Shepherds watch the flock at night only when lambs are being born in spring and the flock is vulnerable to attack by predators.

If the birth occurred in spring, why is it celebrated in December? For safety.

In order to avoid Roman persecution, early Christians had to practice their religion in secret. The best time to have a Christian celebration was when the Romans were having a pagan festival. The Roman Saturnalia was held around the end of December, so if the Christians chose to celebrate an event, such as the birth of Jesus, during the same time, they

would not be noticed.

It wasn't until more than 400 years later that Dec. 25 was made the official date, and that date may have been chosen only because, after 400 years, it would have become a major tradition.

SO LET US consider the spring of 7 B.C. and see if anything spectacular was occurring in the sky that might have been interpreted as the star.

Could the "star" the wise men saw have been what we call a "falling star"? Probably not. Falling stars are not stars at all; they are bits of rock and dust that fall into our atmosphere from space. As they fall, they heat up because of friction and burn, producing streaks of light.

Most falling stars, more commonly called meteors, are not very spectacular. At certain times of the year, there are meteor showers when dozens of "falling stars" can be seen, but only if you are a patient observer.

Most meteor showers do not attract much attention, although in 1833 one shower produced an estimated 30,000 meteors in a single minute. Sometimes a large meteor, called a fireball, falls into our atmosphere and it may explode in the air.

That would be a startling sight, but only for a few seconds, and meteor showers last only a few days

at best. That would not be enough time to guide anyone on a long journey.

A "HAIRY" STAR, or comet, would last long enough. Comets can appear in any part of the sky, at any time of the year, and last for several weeks. They were called "hairy" stars because the comet's tail looked like a wispy beard.

It turns out that Halley's Comet was visible in 11 B.C. Even though that is four years before 7 B.C., it could have been an event many people could have seen and remembered.

But they would have remembered it for the wrong reason. The appearance of a comet terrified people. Because the appearance of a comet is rare, disturbing the constant harmony of the heavens, a comet was considered an omen of evil. Comets were blamed for the deaths of kings and the falling of empires.

A comet is not a good candidate to be used to herald a birth and it is unlikely that anyone would have followed a comet anywhere.

The writer is former coordinator of the planetarium and observatory at Cranbrook Institute of Science for seven years and current works at Image Engineering Corp., a company specializing in laser displays and effects.

County-OU interns lauded

An Oakland County program for high-risk youth has won national acclaim through an article in the 1988 Juvenile and Family Court Journal.

The county program provides student interns who help young offenders, said Joyce Esterberg, program manager of Oakland University's Internship program.

She said a key feature of the early offender program, as recognized by

the county, is the use of paid paraprofessional interns, all OU upperclassmen. Each of the five interns works 20 hours a week for a

full year. The high-risk youth project includes service by county supported OU interns.

Happy Holidays...
from
Brent FURNITURE
1914 Telegraph Road
Farmington Hills, MI 48334
Tel: 462-1111
Fax: 462-1111
We have everything you need for the holidays.

AERO PACIFIC DRAPERIES
OVER 1500 PAIR OF CUSTOM MADE DRAPERIES
YOU STILL HAVE TIME
TO REDECORATE FOR THE HOLIDAYS!
Bring In Your Measurements!
ENJOY YOUR DRAPERIES TONIGHT!
AERO DRAPERIES: 12121 Telegraph Road, Suite 100, Farmington Hills, MI 48334
PACIFIC DRAPERIES: 12121 Telegraph Road, Suite 100, Farmington Hills, MI 48334
We Honor MASTERCARD and VISA

ALL SCIENCE 20% OFF
Telescopes, Microscopes & Slides, Chemistry Sets, Experiments, Books, Models
PLUS 1000's of Unusual Gift Ideas
The Doll Hospital & Toy Soldier Shop
3947 W. 12 Mile • Berkley • 543-3115
Mon.-Sat. 10-5; Sun. & Fri. 10-6

Peace Lutheran Church
CHRISTMAS EVE WORSHIP
7:30 P.M. and 11:00 P.M.
Both Services Feature:
CANDLE LIGHTING CEREMONY
HOLY COMMUNION AT 11:00 PM ONLY
Christmas Day Service 10:00 AM with Communion
17029 W. 13 Mile Road
Southfield, MI 48076
Phone: 642-7047
Celebrate the Season

Getting settled made simple.
New-town dilemmas fade after a WELCOME WAGON call.
As your hostess, it's my job to help you make the most of your new neighborhood. Our shopping areas. Community opportunities. Special attractions. Lots of facts to save you time and money. Plus a basket of gifts for your family, I'll be listening for your call.

Welcome Wagon
CALL 356-7720

OUR CUT CRYSTAL FRAME IS A PICTURE-PERFECT GIFT
This sparkling frame truly distinguishes a special portrait. Diamond design is hand cut for extra brilliance. Full lead crystal, holds 5x7" photograph, easel back. \$50. Gift wrapped in our famous silver box.
CHARLES W. WARREN
JEWELERS SINCE 1901
308121st Ave. S.E. • 35111
BATTLESEA • FURNACE
Extended Shopping Hours throughout the Holiday Season.

Northwest Baptist Church
23045 Middlebelt Road
115 Bkts. S. of 10 Mile 474-3393
SPECIAL CHRISTMAS DAY SERVICE - 10:30 a.m.
NEW YEAR'S DAY Morning Worship 11:00 a.m. Evening Service 7:00 p.m. Film: "The Way of the Cross" Rev. Richard, Ken, Pastor Maryann Prosser

GRACE CHAPEL
Evangelical Presbyterian Church
Worshiping at 12121 Telegraph Road, Farmington Hills 48334
Christmas Eve Worship Services: 5:00-6:30 p.m. 7:00-8:30 p.m.
Sundays December 14th
"A CHRISTMAS JOY THAT TRANSFORMS" Rev. Douglas Lee Klein
Christmas Morning Worship Service: 11 a.m. Sunday, December 25th
"HOW TO CELEBRATE CHRISTMAS" Dr. Anthony de Ono
"Merry Christmas and Happy New Year!"

Northbrook Presbyterian
22055 W. 14 Mile Road
at Lahser Road
642-0200
Saturday, December 24, Christmas Eve
5:00 p.m. - Family Worship Service
8:00 p.m. - Candlelight Worship Service & Communion
11:00 p.m. - Candlelight Worship Service & Communion
Singing of Christmas Carols at All Services
Nursery Provided for 5:00 p.m. Service Only
Sunday, December 25, Christmas Day
11:00 a.m. - Family Worship Service
Nursery Provided

The spirit of Christmas
Illustration of two doves.

Christmas Eve, Dec. 24th 6:30 & 11:00 PM
Christmas Day, Dec. 25th 10:00 AM
New Year's Eve, Dec. 31st 7:00 PM
New Year's Day, Jan. 1, 1989 10:00 AM
Our Shepherd Lutheran Church
2225 E. 14 Mile Road
Birmingham, MI 48009
Rev. Ray E. Scherbarth, Pastor

ORCHARD UNITED METHODIST CHURCH
30450 Farmington Rd., Farmington Hills, MI (Between 13 & 14 Mile Roads) 626-3620
Pastors: Paul F. Blomquist Director of Music: Jan Brachel
James E. Greer II Christian Education: Sandra Prince
CHRISTMAS EVE
5:00 p.m. - "Star Shine" Family Service
Children's Choirs
Candlelight Ending
9:00 p.m. - Traditional Worship Service
Chancel Choir
Candlelight Closing
11:00 p.m. - Holy Communion
Quiet Worship Service
Candlelight Closing
CHRISTMAS DAY
10:00 a.m. - Family Worship Service
No Church School
Nursery for Crib thru 2 year olds at 5:00 p.m. only Christmas eve.

Joy To The World
HOLIDAY WORSHIP SCHEDULE
Lutheran Church of the Redeemer
1800 West Maple Road
Birmingham, Michigan 48009
644-4010
December 24, 1988 - CHRISTMAS EVE SERVICES
"We've Got News For You!"
5:30 P.M. Family service of worship and praise
featuring the children of the Sunday School.
8:00 P.M. Candlelight and Carol Service
10:00 P.M. Candlelight and Carol Service
December 25, 1988 - CHRISTMAS DAY SERVICE - 11:00 A.M.
December 31, 1988 - NEW YEAR'S EVE - 8:00 P.M.
Special Service of worship and praise including the Celebration of Holy Communion
January 1, 1989 - NEW YEAR'S DAY SERVICE - 11:00 A.M.
NURSERY PROVIDED FOR ALL SERVICES
Rev. Duane T. Wiggazzer, Pastor

FIRST UNITED METHODIST CHURCH BIRMINGHAM
1589 West Maple at Pleasant
Ministers: Robert Paul Ward • William R. Wright
Bruce M. Denton • Charles H. Beynon
CHRISTMAS EVE
4:00 p.m.
Family Service
All Ages Welcomed!
8:00 & 11:00 p.m.
Traditional Communion Services
Child Care at 4:00 & 8:00 only
Christmas Day
9:30 a.m. Worship Service only