

Chautauqua Watershed Notes
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Was the Christmas Star a Planet?
By Tina Nelson



You can view the planet Jupiter, which, perhaps, figured into the story of the Magi's journey to visit the Christ child, right here in the Chautauqua Watershed. Look for it in the southern sky on a clear, cloudless night.

Clouds often enshroud the Chautauqua Watershed in winter so good nights for stargazing are few and far between. But when the skies are clear, out away from sources of light pollution, the night sky in winter is a sight to behold. The nights are longer, of course, and cold air holds less moisture, making the atmosphere more transparent. This is also the time of year those in the Christian tradition remember the wise men's quest to find the Christ child, as told the Gospel of Matthew.

“We three kings of Orient are
Bearing gifts we travel afar
Field and fountain, moor and mountain
Following yonder star
O Star of Wonder, Star of night
Star with royal beauty bright
Westward leading, still proceeding
Guide us to thy Perfect Light”

The "kings," or Magi as they are called in Matthew's account, literally translates as astronomer/astrologist. The "Star of Wonder" may have been a planet, according to the following theory:

At the time of Christ's birth the planet Jupiter was a celestial object to be wondered at. In December of 3 B.C. this royal beauty bright planet (Jupiter is the king of the Roman Gods and

the largest planet in our solar system) came into conjunction (conjunction is when two or more objects appear very close to one another in the sky) with Regulus, the king star in Leo, the constellation of the Lion of Judah. On June 17 of that year Jupiter and Venus, the planet of female fertility came into conjunction. The Magi, as astronomers, no doubt observed this unique phenomenon and as astrologists interpreted it to signify the prophesized birth of the King of the Jews. So they followed yonder planet Jupiter as it proceeded, shifting its apparent position each night due to the earth's changing view of the heavens as it revolves around the sun.

First the Magi came to Jerusalem. Then as they continued their journey their celestial guide for a brief time appeared no longer to shift its position and "stood still." While stars always appear fixed in their positions, planets seem to move about. (The name, planet, means "wanderer.") This apparent standing still arises from the combined motion of the planets and Earth. As the Earth overtook Jupiter in its revolution, Jupiter's motion against the backdrop of the stars as seen from Earth appeared to stop for a few nights, go back and then resume its regular procession. Jupiter, about two thousand years ago, appeared to have stopped and stand still over the town of Bethlehem to guide the Magi to "thy Perfect Light," Christ the King of the Jews.

Whether or not Jupiter was the "Star of Wonder," if the skies are clear you may be able to view it tonight. Look south in the evening for the royal planet. It will be relatively low on the horizon. Jupiter is bright and you should be able to differentiate it from the stars because like all planets it does not twinkle. Even if you don't see the famous Christmas "star" do take time to wonder at the magic and beauty of the night sky as the Magi did so long ago.

By the way Jupiter next reaches *opposition* to the Sun (when it is closest to the Earth and brightest in the sky for the year) on September 21, 2010. Around opposition, the planet will be due south at midnight on that date. Jupiter's 2010 opposition will be the brightest and best opposition of its entire 11.8-year orbit, so you should try not to miss it.

CWC's mission is to preserve and enhance the water quality, scenic beauty and ecological health of the lakes, streams and watersheds of the Chautauqua region. CWC's 2009-2010 membership campaign is underway. Persons, businesses and organizations are encouraged to join the CWC by calling 716-664-2166 or joining online at chautauquawatershed.org.