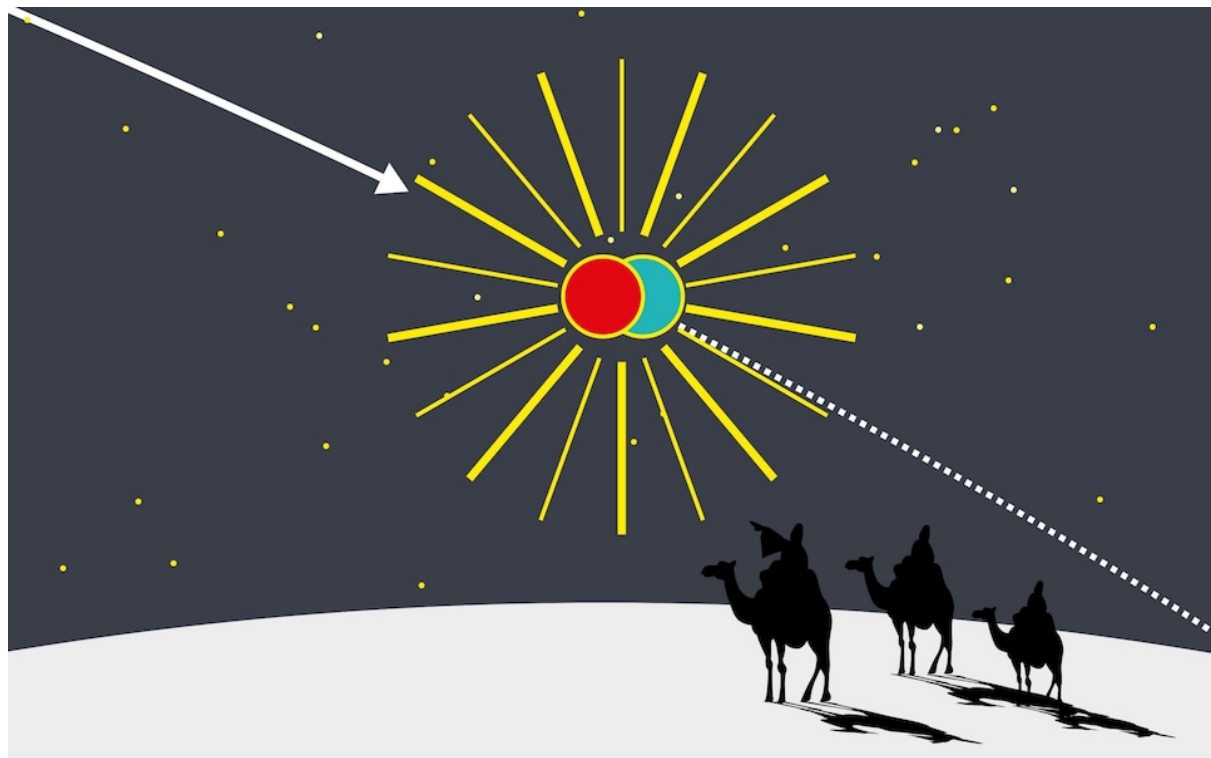


# Has the Star of Bethlehem returned? How to watch the Great Conjunction of Jupiter and Saturn on Monday

Phenomenon of planets aligning to give impression of bright star will be seen as it was at birth of Jesus

By [Patrick Sawyer](#), SENIOR NEWS REPORTER and [Jessica Carpani](#) 17 December 2020 • 9:10pm



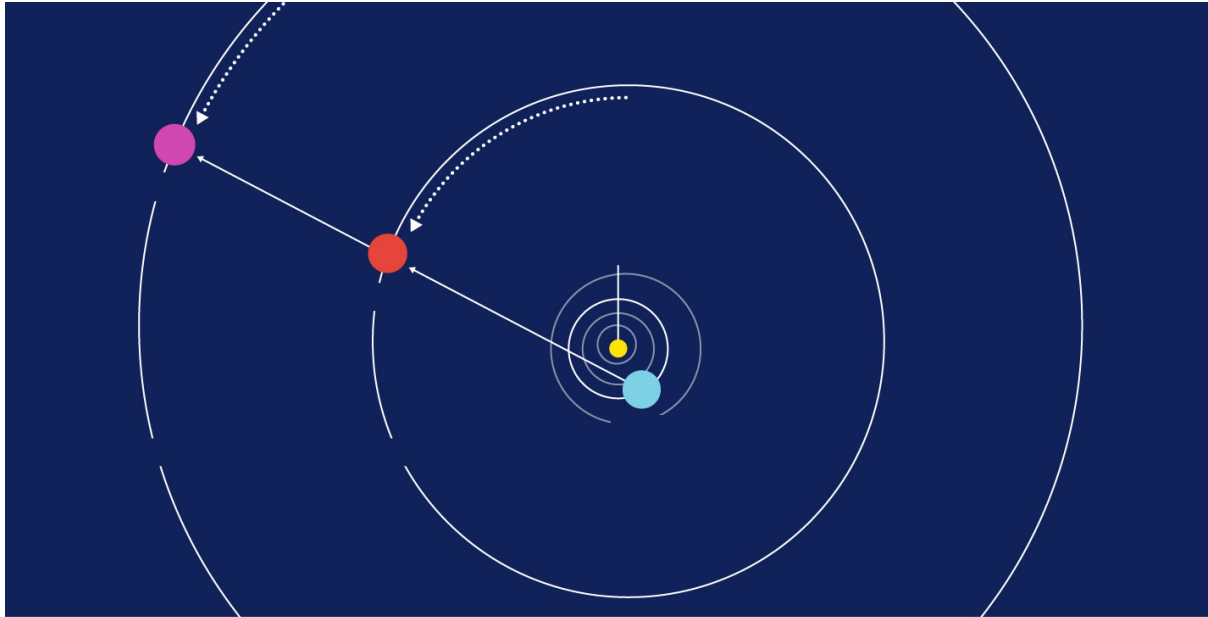
It is one of the central and most enduring elements of the Christmas story – the sighting of a bright star in the skies guiding the Wise Men to Bethlehem and heralding the birth of Jesus Christ.

The Vatican now believes one explanation for the Star of Bethlehem may have been what is known as a 'Great Conjunction' of planets, in this case bringing Venus and Jupiter in close alignment and creating an unusually bright light in the sky above the Holy Land.

And the cosmic phenomenon, which could have caused such awe and wonder more than 2,000 years ago, is set to take place once again – just four days before Christmas as it happens.

The closest approach of two planets since 1226 will take place on Monday, December 21, when Jupiter and Saturn come into alignment, creating what astronomers predict will be the marvellous spectacle of an apparently single bright 'star'.

## How the planets will align to form a bright light



In an online lecture on Thursday evening one of the Catholic church's most eminent scientists said the latest Great Conjunction may provide us with significant clues to enhance our understanding of the story of the Star of Bethlehem, chronicled in the Gospel of Matthew.

Brother Guy Consolmagno SJ, planetary scientist and Director of the Vatican Observatory, said in a BBC Sky at Night magazine virtual lecture, said: "Every year, people ask us astronomers, what was the star?"

"This year is special because one of the more popular explanations for the star is a close conjunction of bright planets and it is going to be visible to anybody with a clear sky."

Several conjunctions of the planets occurred within 10 years of the chronological point now taken as the beginning of the Christian era and may have been responsible for the phenomenon of the bright star above Bethlehem.

One was a conjunction of Venus and Jupiter in 2BC, which, according to the Encyclopedia Britannica "would have appeared to observers in Babylon to have merged just before setting in the general direction of Bethlehem to the west".

Another was a conjunction of Jupiter and Saturn in 7BC.



*The Adoration of the Magi, 1450 by Giovanni di Paolo depicts the Star of Bethlehem CREDIT: Alamy*

Speaking to the Catholic News Agency before Thursday night's lecture, Brother Consolmagno said: "Is this really what the Star of Bethlehem was? No one knows for sure what the star was, and until we have a time machine where we can go back and interview Matthew with a video recorder, no one ever will know for sure!"

"The important thing to remember is that the Star of Bethlehem is just a small part of the infancy narrative in Matthew's Gospel. The point of his story isn't the star. It's the baby."

### **What time will Jupiter and Saturn align on Monday?**

The alignment of Jupiter and Saturn will occur on Monday, December 21, and will be visible from anywhere on Earth - though conditions will be best near the equator.

As Jupiter's and Saturn's 12- and 29-year orbits bring them together they will appear low in the western sky.

**About 45 minutes after sunset observers should look 10° above the south-southwest horizon to see Jupiter and Saturn shining almost as one.**

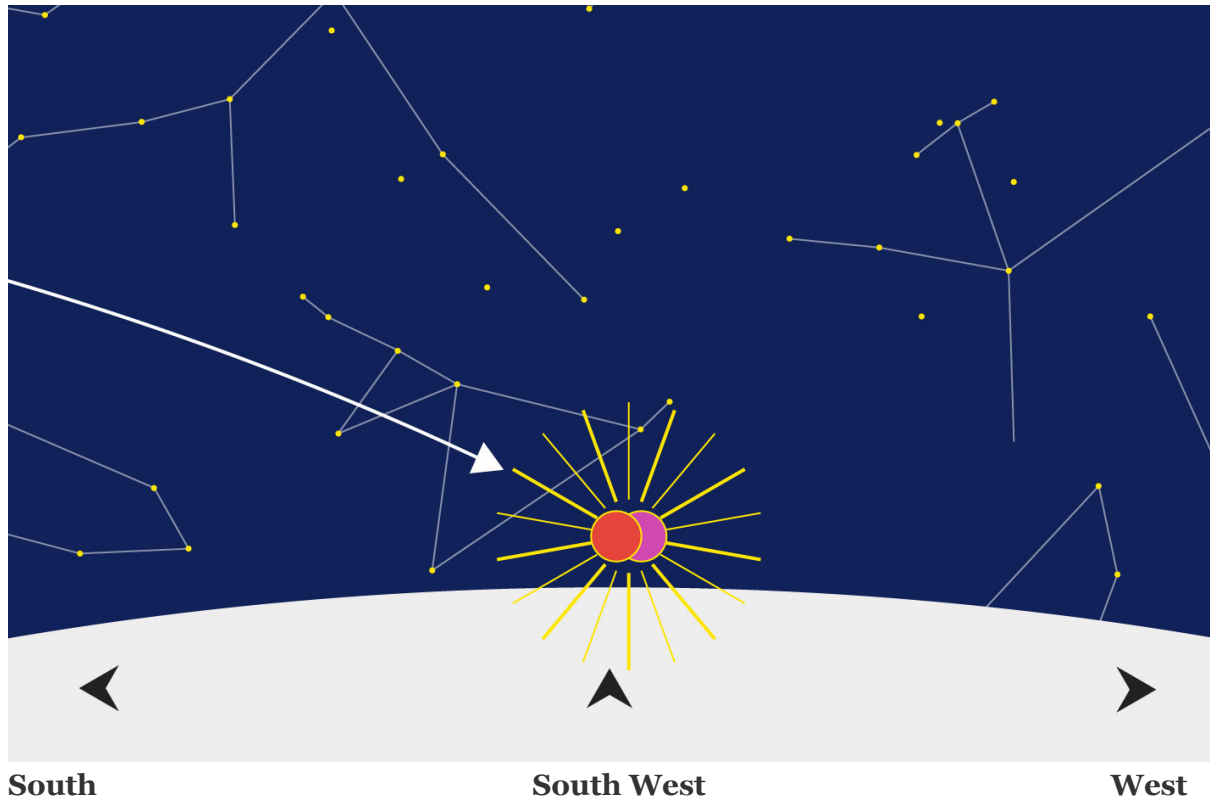
Sunset will take place at 15:53 in London, 16:06 in Cardiff, 15:59 in Belfast and 15:39 in Edinburgh. **Ballyhea: 16:24.**

### **How do I watch the planetary alignment?**

Even before Monday observers standing at a vantage point with a clear horizon will be able to see the planets already edging closer together, provided there are clear skies.

Nasa, the US space agency, said people should look for them low in the south-west in the hour after sunset when “the two giant planets will appear just a tenth of a degree apart – that’s about the thickness of a coin held at arm’s length.”

## Where to spot the bright light in the sky on Dec 21



Dr Brad Tucker from the Australian National University, who has described the phenomenon as a ‘Christmas kiss’, said observers should look for “a thin crescent moon and two bright objects right next to it”.

### When was the last time this happened?

The last great conjunction was in May 2000, but its position in the sky that year meant it was difficult to see. The great conjunction of 1623 was also hard to spot because it appeared close enough to the sun that it would have been lost in the glare.

Patrick Hartigan, an astronomer from Rice University in Texas, said: “Alignments between these two planets are rather rare, occurring once every 20 years or so, but this conjunction is exceptionally rare because of how close the planets will appear to one another.

“You’d have to go all the way back to just before dawn on March 4, 1226, to see a closer alignment between these objects visible in the night sky.”

### When have other Great Conjunctions occurred?

**2BC:** Conjunction of Venus and Jupiter during the height of the Roman Empire and the period Biblical scholars have identified as the time of Christ’s birth. The Aqua Augusta is built in Rome to supply water to the city, named after the Emperor Augustus.

**7BC:** Conjunction of Jupiter and Saturn, also a period also estimated to have seen Christ's birth. It was at this time that Augustus' second census recorded a total of 4,233,000 Roman citizens across the empire.

**March 4, 1226:** The last time a 'Great Conjunction' occurred that was as easy to see as this year's. That year the English town of Nuneaton was granted chartered market status by King Henry III and King Sancho II of Portugal launched a large offensive against the Muslims, taking the Portuguese city of Elvas.

**July 16, 1623:** The last time Jupiter and Saturn were as close as they will be on Monday. In the same year the "First Folio" edition of William Shakespeare's Comedies, Histories, & Tragedies is published and the English settlers at the Plymouth Plantation in Massachusetts celebrate their second Thanksgiving.

**19 February, 1961:** Jupiter and Saturn were a mere  $0.14^\circ$  apart, during what was a momentous year, with John F Kennedy inaugurated as the 35th president of the United States, Soviet cosmonaut Yuri Gagarin becoming the first human to fly in space, the Freedom Riders challenge segregation in the southern states of the US and East Germany erecting the Berlin Wall

**May 28, 2000:** Conjunction of Saturn and Jupiter obscured by the Sun's glare, a few months after the world celebrated the start of the new millennium.

### **So does this explain the Star of Bethlehem?**

For Christians science alone may still not be enough to explain the phenomenon of the Star of Bethlehem.

Brother Consolmagno said that despite astronomy being able to provide an answer to what caused the bright star, on other levels its appearance remains a mystery.

“Either there was something remarkable in the sky at the time that Jesus was born, or there wasn't.

“And if something did happen, it would be fun to find out what that was - all we've got though, is the opening part of Matthew's Gospel. That's it. 12 verses. That's all the data we've got to work with.

“Historians have no idea when the birth of Jesus really was, the historians have no idea what constellation really represented the King of the Jews.

“But in any event, it's not that modern astronomy can't find an explanation for the star Bethlehem. It's that we've got too many candidates [of explanations],” he said.

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