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SPACE EVENTS- DECEMBER

Astronomy & rockets

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01

THE MOON AND JUPITER

Only a few degrees apart in the sky, the Moon makes a close approach to Jupiter the night of Dec. 1, at approximately 11pm EST, facing west-southwest.

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THE MOON OCCULTS MARS

The Moon will be passing in front of Mars, totally blocking it for up to an hour. Look up your location on Sky & Telescope's December issue for exact times based on location, but generally aim for looking between the hours of 9-12am EST.



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THE MOON, MARS AND PLEIADES

These three celestial objects will all be next to each other in our night sky, 12am EST, directly overhead in the zenith.

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SATURN RISES AT DUSK

Catch gas giant planet Saturn, rising just after dusk, once the sky gets dark and twilight begins you can catch Saturn over your Southwest horizon, west of bright star Fomalhaut and south of the bright gas giant neighbor, Jupiter.

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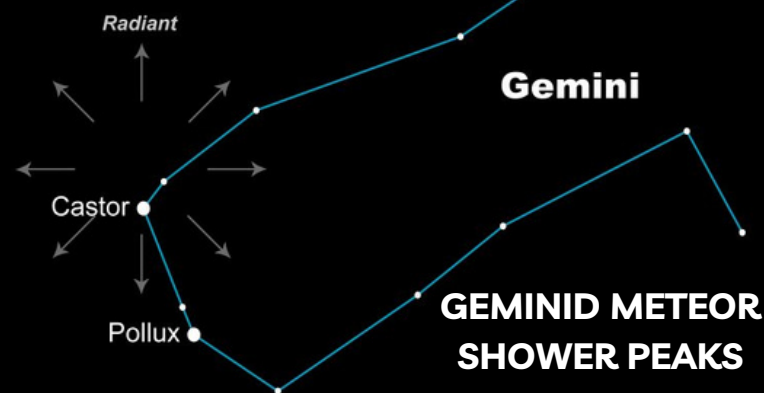
Catch the Arianespace launch of the Ariane 5 rocket carrying onboard their customer's commercial satellites. Intelsat with the Galaxy 35 and Galaxy 36 satellites, which will provide C-band TV and radio broadcast services over the United States. And Eumetsat with their MTG-I1 satellite will provide weather imagery over Europe for the European Weather satellite agency, Eumetsat.

ARIANE 5 ROCKET LAUNCH - GALAXY 35/36, EUMETSAT



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The meteor shower peaks tonight, however because of the bright 70% illuminated waxing gibbous Moon, your best chance to spot meteors will be from 6-9:30pm EST (nightfall-moonrise) looking 40 degrees above your Eastern horizon. Be sure to avoid light pollution, and go to a high altitude to increase your chances of seeing meteors!



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DEEP SKY OBJECT - NGC 1981 IS VISIBLE!

This open star cluster in the Orion constellation is visible in North America 9pm to 6am EST, reaching a peak height of 55° over your southern horizon at 1:30am EST.

Tip - These two deep sky objects are right next to each other in the sky.

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MARS AND THE PLEIADES

A close encounter will happen with the red planet Mars and the open star cluster, the Pleiades. Both will be located in the zenith, which is directly overhead of the observer, 90° above any horizon, at approximately 11pm EST.

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DEEP SKY OBJECT - NGC 2232 IS VISIBLE!

This open star cluster in the Monoceros constellation is visible in North America between 9pm to 6am EST, reaching a peak height of 54° over your southern horizon at 1:30am EST.

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STARSHIP ORBITAL TEST FLIGHT

SpaceX will be launching its latest configuration of the Starship rocket into orbit around the Earth to conduct what's known as an orbital test flight. Which is to ultimately prove that this rocket can take off, orbit, and land back on Earth (or other celestial bodies too).



THE MOON PHASES



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FULL MOON



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LAST QUARTER



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NEW MOON



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FIRST QUARTER