



Sky Events Calendar • November & December 2018, and January 2019

All times listed are in Central Standard Time or Central Daylight Time, according to the time in effect on that date.

For more information, call the Museum at 337-291-5544 and ask to speak with someone in the planetarium. Some of these objects and events can be seen during Planetarium star parties — check the Museum web site to see a list of star parties and other events hosted by the Planetarium. Reminders of some of these events will appear on the Lafayette Science Museum Facebook page as the dates approach.

The Internet and media wildly over-hype non-events like “super moons” and “blue moons” and even some actual events like meteor showers. We’ll give you more realistic information!

November 2: The moderately bright star ***near the moon*** before dawn will be ***Regulus***, in Leo, the Lion.

November 5: The very bright starlike object ***below the moon*** during morning twilight will be ***Venus***, which will remain visible in the morning twilight for the rest of the year.

November 10 – 30: The moderately bright star near ***Venus*** before dawn will be ***Spica***, in Virgo, the Girl. It will make a nice celestial landmark for noticing the orbital motion of Venus!

November 11: The moderately bright starlike object ***near the moon*** tonight will be ***Saturn***.

November 15: The bright reddish, starlike object ***near the moon*** tonight will be ***Mars***.

November 16/17: The ***Leonid meteor shower*** will peak on the Acadiana afternoon of the 16th, with best viewing between about 2:00 and 5:00 a.m. on both the 16th and 17th. Meteors will seem to come from near the constellation Leo, rising from low in the east to high in the southeast during the observing period. The moon will set by 1 a.m., but the Leonids have become a fairly weak shower —even rural observers will probably see only about 5 to 10 meteors per hour and city observers will see almost none.

November 17 – 20: Watch for ***Saturn, Mars, and the moon*** to appear as if in a line, something that upsets some people. Actually the moon and planets *always* appear along that line, called the ***ecliptic***. It's approximately the plane of our planetary system but it's noticeable only when three or more solar system objects are visible across the sky.

November 29: The bright star ***near the moon*** before dawn will be ***Regulus***, in Leo, the Lion.

December 3: The bright object ***near the moon*** before dawn will be ***Venus***.

December 5: The moderately bright object ***below the moon*** in dawn twilight will be ***Mercury***. That planet will be seen low in the east-southeast during morning twilight for the rest of the year.

December 6 & 7: Before midnight on both nights ***Neptune will be in the same telescope view with Mars!*** Center your low power telescope on Mars both nights. On the 6th, Neptune will be the brightest object near Mars (still faint and starlike, though). On the 7th, Neptune will be the 3rd brightest object in the view other than Mars, and will be on the opposite side of Mars compared with the previous night. Small telescopes will not reveal detail on Mars or a disk on Neptune. By a happy coincidence, weather permitting the planetarium will have a telescope to show this at the Oil Center Festival of Lights on the 7th!

December 8: The bright starlike object low in the west ***near the moon*** tonight will be ***Saturn***. As Earth goes around the sun Saturn will get harder and harder to find, and by the end of the year may be lost in twilight on the far side of the sun.

December 13/14: The **Geminid meteor shower** will peak about 6:30 a.m. on the 14th. Perhaps the best meteor shower of the year, rural observers may see as many as 30 to 40 meteors per hour, with those numbers dropping as the number of lights around you increases. City observers will see very little. Other meteor showers are best seen after midnight but the Geminids can be seen from 8 p.m. on the 13th until dawn twilight on the 14th. The thick crescent moon will slightly hurt viewing before 11 p.m., but not by much. The very best viewing should be from 4:00 to 5:30 a.m. on the 14th as the shower peak approaches.

December 14: The moderately bright starlike object **near the moon** tonight will be **Mars**. Can you still notice its reddish color, or has it become too dim to notice that?

December 17 – 25: During morning twilight look for **Mercury and Jupiter**, the two brightest objects low in the sky in the southeast. Watch them seem change positions as they move around the sun. During this time they will be in the same binocular view, a pretty sight.

December 20: The year ends as it began, with the **nearly full moon** moving past the **Hyades Star Cluster**. The brightness of the moon will make it hard to see cluster stars even in binoculars, but telescope observers may see 5 to 10 **occultations** between 7:30 and 9:00 p.m. Occultations happen when the moon moves directly in front of a star, blocking our view of it. For night owls, there may be another pair of occultations, including a possible grazing occultation, between 11:10 and 11:30 p.m.

December 21: The **December solstice** occurs at 4:23 p.m., officially beginning Northern Hemisphere Winter.

December 26: The bright star **near the moon** between midnight and dawn will be **Regulus**, in Leo, the Lion.

January 1: In a pretty first dawn twilight of the year, the **moon** will appear **near Venus, with Jupiter and Mercury** below them. Venus will be the brightest of the three planets, and Mercury will be the faintest.

January 2: Earth will reach perihelion at 11:20 p.m., its closest point to the sun for this year.

January 3: The bright starlike object **by the moon** in dawn twilight will be **Jupiter**.

January 4: Look for the **thin crescent moon near Mercury** very low in the east in morning twilight.

January 6/7: The Quadrantid meteor shower will peak in the early evening. Although this can be a strong shower, it's very brief and the peak will be over by the time the radiant near the top of the constellation Boötes rises. Best viewing for Acadiana will be from about 2:00 – 5:00 a.m.. Rural observers can expect to see only a few Quadrantids per hour even though the moon will be long set by 2 a.m.

January 12: The bright starlike object **near the moon tonight** will be **Mars**. They might be visible in the same view in wide field binoculars.

January 17: The bright star **near the moon** tonight will be **Aldebaran** in Taurus, the Bull.

January 18 – 26: In the pre-dawn sky brilliant **Venus and Jupiter** will be in the same binocular view throughout this period, and will appear closest together on the 22nd.

January 20/21: Tonight's **total lunar eclipse** begins about 8:30 p.m. in Acadiana and will become most noticeable as the partial eclipse starts at 9:34. Totality will last from 10:41 to 11:43 p.m. with mid-eclipse at 11:12. The partial phase will end by 12:51 a.m. and little will be seen after that. During totality the moon will have a pretty reddish-orange color, but the exact hue is hard to predict. The Lafayette Science Museum planetarium will have telescopes in Parc Sans Souci for free public eclipse viewing (weather permitting). Don't be confused if you see this listed somewhere as January 21—the exact date and time depends on the time zone, and in Louisiana it starts on the 20th.

January 31: Watch the pre-dawn sky to see the **moon between Jupiter and brilliant Venus**. The moon and Venus will be in the same binocular view.