
Step Outside:
Your Guide to Nature's Events

Nature Guides

2011 Fall Weather and Meteorology Notes

Fall 2011

Interesting tidbits to entice and amaze your students!

- As the 2011/2012 school year gets underway teachers and students might be wondering what's in store for fall weather and other autumn events. The Farmer's Almanac shows September as a month fluctuating between pleasant late-summer weather and violent thunderstorms and squalls. Fall is a great time to take part in harvest events such as apple-picking or to visit one of the many local fall fairs! Consider a fall foliage tour. You can anticipate colors to be at their peak from late September to early October. Autumn equinox, the time when day equals night, will occur on September 23, 5:05 A.M. EDT. The winter solstice, when we experience the fewest hours of sunlight in day, will occur on December 22, 12:30 A.M. EST.

Noteworhty celestial and meteorological events for fall 2011

- September 25 - Uranus at Opposition. The blue-green planet will be at its closest approach to Earth and its face will be illuminated by the sun. This is the best time to view Uranus, although it will only appear as a tiny blue-green dot in all but the most powerful telescopes.
- October 21, 22 - Orionids Meteor Shower. The Orionids is an average shower producing about 20 meteors per hour at their peak. This shower usually peaks on the 21st, but it is highly irregular. A good show could be experienced on any morning from October 20 - 24, and some meteors may be seen any time from October 17 - 25. Best viewing will be to the east after midnight.
- October 29 - Jupiter at Opposition. The giant planet will be at its closest approach to Earth and its face will be fully illuminated by the Sun. This is the best time to view and photograph Jupiter and its moons. A medium-sized telescope should be able to show you some of the details in Jupiter's cloud bands. A good pair of binoculars should allow you to see Jupiter's four largest moons, appearing as bright dots on either side of the planet.
- November 8 - Asteroid 2005 Yu55 Flyby. An asteroid known as 2005 YU55 will make a close approach to the Earth. The large space rock, about 1,300 feet in diameter will pass closer than the Moon at 0.85 lunar distances. While it is not expected to pose a threat to the Earth, this extremely rare event presents a unique opportunity for amateur astronomers to observe the asteroid as it makes its closest approach to our planet. Asteroids this large only pass close to the Earth about every 30 years.
- November 17, 18 - Leonids Meteor Shower. The Leonids is one of the better meteor showers to observe, producing an average of 40 meteors per hour at their peak. The shower itself has a cyclic peak year every 33 years where hundreds of meteors can be seen each hour. The last of these occurred in 2001. The shower usually peaks on November 17 & 18, but you may see some meteors from November 13 - 20. The nearly last quarter moon may hide some of the faintest meteors this year, but this should still be an excellent show. Look for the shower radiating from the constellation Leo after midnight.
- November 25 - Partial Solar Eclipse. This partial eclipse will only be visible over Antarctica and parts of South Africa and Tasmania. (NASA Map and Eclipse Information)
- December 10 - Total Lunar Eclipse. The eclipse will be visible throughout most of Europe, eastern Africa, Asia, Australia, the Pacific Ocean, and the North America. (NASA Map and Eclipse Information)
- December 13, 14 - Geminids Meteor Shower. Considered by many to be the best meteor shower in the heavens, the Geminids are known for producing up to 60 multicolored meteors per hour at their peak. The peak of the shower usually occurs around December 13 & 14, although some meteors should be visible from December 6 - 19. The radiant point for this shower will be in the constellation Gemini. The gibbous moon will definitely interfere this year by hiding the faintest meteors, but this should still be an excellent show. Best viewing is usually to the east after midnight from a dark location.

Source: NASA Eclipse Information