

Our Night Sky for the week of October 1

It has been officially Fall now since September 23 a bit more than a week. You have probably noticed it's just a bit cooler and you are probably turning up the furnace just a bit. This is of course because as the earth continues its year long journey around the sun, the northern hemisphere is gradually receiving less solar energy and shorter daylight hours.

Visualize the tilted earth following the circular orbit around the sun and the northern and southern hemispheres taking their time in the sun, alternately warming or cooling the ground, the water, the air, creating the weather and all the complexities of that delicate balance. Now we will add the moon following a mostly circular path around the earth, but its orbit is at a different angle than our solar rotation so the moon adds much more complexity, shifting water and air and affecting the rotation and orbit of the earth. Last week we had a full moon. That is when the moon is on the side of the earth away from the sun and fully illuminated. By October 14 the moon will be between us and the sun and we will see the dark of the moon or New Moon. Midway between those regular events when the moon is ahead or trailing the earth is first and last quarter moon.

Coming soon [NASA International Observe the Moon night](#) on Saturday October 21