

Summer has officially arrived. The Summer Solstice on June 21 marked the longest day and shortest night of the year when the sun reached its most northern extreme. For Phoenix, the Sun rose on June 21 at 5:19a.m. and set at 7:41p.m. - resulting in a 14h22m37s day. However, the hottest days of the year do not occur until August. This is because the oceans and land heat up slowly. It takes awhile for the long days to have an effect on the temperature of the land and seas. The lag between the longest day and the hottest temperatures is about four to six weeks.

Hot or not, the summer skies are beautiful! Cygnus the Swan, sometimes referred to as the Northern Cross, is an easily seen summer constellation. Cygnus' brightest star, Deneb, is one of the three bright stars of the Summer Triangle. In late June and early July, Cygnus and the Summer Triangle can be seen low in the northeast after sunset, but will rise higher and higher throughout the summer. The second brightest star in the swan is Albireo. It looks like a single star, but is in reality a double star. The light of the two stars blend together to make it appear as if it were one. Albireo is a beautiful blue star and a gorgeous gold star. It is one of the most spectacular color combinations in all the sky.

According to some legends, Cygnus was originally human. He was a close friend of Phaethon. Phaethon wanted to drive Apollo's Sun Chariot across the sky. Apollo had reservations but eventually relented. The horses for the Sun Chariot were very powerful and Phaethon soon lost control. Zeus put a stop to the mayhem by striking down Phaethon with his lightning bolt, and Phaethon fell into a river. In an attempt to save his friend, Cygnus dove into the raging river. Because of that display of friendship, Cygnus was placed in the sky by Zeus.

On July 2, the comet McNaught will make its closest approach to the Sun. It will be visible in the early morning sky for several weeks prior to July 2. To see the comet, find a dark location far away from city lights. The comet will appear as a dim, fuzzy spot of light. A good pair of binoculars or telescope will help to make it clearly visible.

This summer, there are three planets that are visible in the early evening hours. The brightest of these is Venus. It is the third brightest object in the sky, only the Sun and Moon are brighter. Because it is nearly the same size and mass as Earth, Venus is called its twin. However, those are the only similarities they share. Venus has a very thick carbon dioxide atmosphere, which is a greenhouse gas responsible for the planet's surface temperature of 900°! You can find this planet visible in the west after sunset.

Mars can be seen in the constellation of Leo the Lion (in the west during summer). It is a planet that is only one half the diameter of the Earth. However, for such a small planet it is full of wonders. Including, Olympus Mons, the largest volcano in the solar system – it could cover the entire state of Arizona and stretch twenty miles into the sky (three times taller than Mount Everest!).

Saturn is also visible in the night sky. It is located in Virgo the Maiden of Spring (just east of Leo). Approximately 1,000 Earths could fill this giant gas planet, which is known for its spectacular ring system. Those rings are easily seen through a small telescope.

All three planets will be near the Moon on August 13th. Look to the west right after sunset, and you will see them crowded near the thin crescent Moon.

The summer sky is beautiful! If you are new to the night sky or a seasoned veteran stargazer, we encourage you to come join us at the Dorrance Planetarium.