

Tonight's Sky: 2017

July

Your guide to constellations, deep-sky objects, planets, and events. Tonight's Sky, highlights of the July Sky.

Evening Planets

Giant planets rule the evening skies in July.

The solar system's largest planet, Jupiter, dominates the southwestern sky.

Use a telescope to spy its cloud bands or perhaps even the Great Red Spot.

The next-largest planet, Saturn, presides over the southern sky.

Its splendid rings are an awe-inspiring sight.

Constellations and Deep-Sky Objects

The summer night sky is filled with a treasure chest of bright jewels.

Scorpius is a striking constellation, one of the few that distinctly resembles the object after which it was named.

The Scorpion is easy to trace in the sky. Its head, curved tail, and venomous stinger are prominent.

At the Scorpion's heart lies a reddish star. Its color closely resembles that of Mars, known to the Greeks as Ares.

Ancient Greek stargazers, contemplating these two crimson objects, named the star Antares, which means "rival of Ares."

A prominent and lovely globular cluster in small telescopes, M4 lies just to the right of Antares in Scorpius.

Globular clusters are collections of hundreds of thousands of closely packed and gravitationally bound stars.

The center of our galaxy lies in the direction of the great constellation Sagittarius, the Archer. This area of the sky overflows with stars, globular star clusters, and bright and dark nebulae.

Look for Sagittarius by finding the group of stars commonly known as the Teapot. The handle, top, and spout are easy to find. Under dark skies, the Milky Way seems to rise out of the Teapot's spout.

Many deep-sky targets reside in this area of the summer night sky. A quick glance with binoculars reveals some spectacular objects.

The Lagoon Nebula's gas and dust is brilliantly illuminated by the energy of the hot, young stars inside it.

In the three-lobed Trifid Nebula, dark dust lanes appear etched against the radiance of glowing gas.

The Omega Nebula glows brightly but we cannot see its hottest stars, embedded deep inside. Infrared telescopes, peering through the gas and dust, can detect them.

M22, one of the brightest globular clusters in the sky, is visible to the naked eye. It is a relatively nearby globular cluster, only about 10,000 light-years distant.

Morning Planets

Low in the east, Venus shines like a beacon in the pre-dawn sky. Try to identify its phase with the aid of a telescope.

Events

The annual Delta Aquarid meteor shower peaks on the night of July 27th to the 28th. Look for meteors radiating from the southeast after midnight. Expect to see 10 to 15 faint, yellowish meteors per hour.

Ending

The night sky is always a celestial showcase. Explore its wonders from your own backyard.