

Text for Tonight's Sky, July 2011

Your guide to constellations, deep-sky objects, planets and events.

Tonight's Sky, highlights of the July sky.

July Evening Planets

As the sky grows dark, Saturn begins to slip toward the western horizon, setting around midnight.

July Constellations and Deep-Sky Objects

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

Scorpius is a striking constellation, one of the few that 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."

The center of our galaxy lies in the direction of the great constellation Sagittarius the Archer.

This area of the sky overflows with stars, planetary nebulae, globular star clusters, and bright and dark nebulae.

Look for Sagittarius by finding the group of stars commonly known as the Teapot.

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The handle, top, and spout are easy to find. Under dark skies, the Milky Way seems to rise out of the teapot's spout.

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

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

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

The Lagoon Nebula's gas and dust is brilliantly illuminated by the energy of the hot young stars forming 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 also relatively nearby, only about 10,400 light-years distant.

July Morning Planets

In the morning, Jupiter makes a grand appearance, rising majestically out of the eastern horizon.

Mars follows about two hours later, with both planets gracing the sky just before sunrise.

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July Special Events

The annual Delta Aquarid meteor shower peaks on July 28 and 29. Watch for meteors radiating from the southeast after midnight. Expect to see about 20 small, yellowish meteors per hour.

Ending

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

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Credits

Produced by the Space Telescope Science Institute, Office of Public Outreach

Starfield images created with Stellarium

Mythological constellation forms from *Firmamentum Sobiescianum sive Uranographia* by Johannes Hevelius, courtesy of the United States Naval Observatory

M4 image courtesy of AURA/NOAO/NSF

Lagoon Nebula and Trifid Nebula images courtesy of Lucy Albert and the MicroObservatory Robotic Telescope Network

Omega Nebula image courtesy of Bill Keel/Lick Observatory

M22 image courtesy of Robert W. Provin and Brad D. Wallis

Jupiter image courtesy of Todd Gross

Mars image courtesy of Robert Gendler

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