

Tonight's Sky Transcript: September 2012

(Intro)

Constellations, deep-sky objects, planets and events, Tonight's Sky, Highlights of the September Sky

Evening Planets

Just after sunset, Saturn and Mars appear low above the western horizon. Try to catch a glimpse of them before they disappear.

Constellations and Deep-Sky Objects

September nights feature the "wet quarter" of the sky. Two neighboring constellations bear ancient references to water.

Aquarius is one of the oldest constellations, recognized even by early civilizations. In ancient mythologies, Aquarius is the god of the waters. Look for the Water Jar, a group of stars shaped like a Y.

A rich, compact cluster of stars can be seen in Aquarius. Known as M2, it contains about 150,000 stars located about 37,500 light-years away.

Binoculars present it well, but a small telescope reveals much more detail in the cluster's compact center.

Nearby lies the great constellation Capricornus. Known in mythology as the Water Goat, it represents a creature that fed and watered the infant Zeus, ruler of the Greek gods.

Algedi is the brightest star in Capricornus. It's visible in binoculars as an elongated star.

This odd shape is due to a visual trick. From our distant vantage point, two unrelated stars appear to be close together.

Capricornus also hosts a dense cluster of stars, M30. A small telescope easily resolves individual stars in the cluster.

Morning Planets

Majestic Jupiter rises in the east around midnight and goes on to dominate the southern sky in the hours before dawn. A telescope exposes the planet's colored cloud bands.

Brilliant Venus makes its appearance before sunrise. Look for Venus in the eastern sky.

Events

This month's full Moon is known as the Harvest Moon. It rises in the east just before the end of twilight on September 29th in North America (September 30th in Europe and Asia).

The added bright moonlight lengthens the evening to give farmers extra time to harvest their crops.

(Ending)

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

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

Saturn image courtesy of John Endreson

Mars image courtesy of Matt Wedel

M2 image based on images courtesy of 2MASS/UMass/IPAC-Caltech/NASA/NSF and the MicroObservatory Robotic Telescope Network

Algedi image courtesy of the Digitized Sky Survey, AURA

M30 image courtesy of 2MASS/UMass/IPAC-Caltech/NASA/NSF

Jupiter image courtesy of Todd Gross

Venus image courtesy of Mario Weigand

Narrated by Nancy Calo

Music written by Jonn Serrie

Production: Lucy Albert, Greg Bacon, John Bintz, John Godfrey, and Vanessa Thomas