

Night Sky Viewing at Widener University

October 2017

Sunrise & Sunset Times (EDT)

	Sunrise	Sunset
Begin Month	6:58 am	6:43 pm
End Month	7:30 am	6:00 pm

Lunar Phases



Naked Eye Planets This Month in the Evening & Morning Sky

Jupiter (*in Virgo*): After having ruled the evening sky since last spring, Jupiter takes its final bow before vanishing into the evening twilight during the second week of October. At the start of the month, Jupiter is dipping below the western horizon by 7:30 pm, or less than an hour after sunset. By mid-October, Jupiter becomes lost in the glow of dusk; it reaches conjunction with the Sun on the 26th, and eventually reappears at dawn in mid-November.

Saturn (*in Ophiuchus*): Saturn is still well placed for viewing as night falls on October evenings. The ringed planet stands low in the southwest and resembles a bright cream-colored star above and to the upper left of the orange star Antares. Saturn sets around 10:30 pm EDT at the start of October, and by around 8:30 pm on Halloween night.

Venus (*in Leo-Virgo*): During the pre-dawn hours, Venus beams with a yellow-white brilliance in the east-northeast during the pre-dawn hours. It rises a few minutes before 5 am in early October, and at 6 am, which is only 1½ hours before sunrise, on the 31st. During the closing days of 2017, Venus will vanish into the morning twilight and slowly reappear in the evening sky during early 2018.

Mars (*in Leo-Virgo*): As October begins, Mars has emerged from the dawn twilight, resembling a modestly bright orange star near the border of Leo and Virgo. On the 1st, Mars rises around 5 am EDT, or about 2 hours before sunrise, which is just a few minutes later than Venus and well before the start of morning twilight. By month's end, Mars is rising a half hour earlier, just after 4:30 pm. On the morning of the 5th, Mars and Venus are in conjunction, only ½ the width of the full Moon apart.

Mercury (*in Virgo-Libra*): Mercury is too close to the Sun to see this month. It will become visible in the evening sky by the second half of November.

Sun (*in Leo-Virgo*): On October 30th, the Sun leaves the constellation Virgo and enters Libra.

Orionid Meteor Shower: Best visible during early mornings of October 21st and 22nd. Source: minute particles from Halley's Comet. Typically about 10-12 meteors per hour are seen, appearing to emanate from Orion, which will be rising in the east just before midnight.

Constellations & Bright Stars Visible Around 9 pm EDT in October

Boötes – very low in WNW, setting
Bright yellow-orange star *Arcturus*

Lyra – just W of overhead
Bright blue-white star *Vega*

Aquila – moderately high in SW
Bright white star *Altair*

Cygnus – nearly overhead
Bright star *Deneb*

Vega, Altair, & Deneb* form the **Summer Triangle

Sagittarius – low in SW, setting
"Tea Pot" asterism

Pisces Austrinus – low in SE, getting higher
Bright white star *Fomalhaut*

Cetus – very low in ESE, rising
Bright orange stars *Diphda, Menkar*

Pegasus (Great Square) – high in ESE, nearing the meridian
Bright stars *Scheat, Markab, Algenib*

Andromeda – high in E, to left (E) of Pegasus
Bright stars *Alpheratz* (NE corner of Great Square),
Mirach, Almach

Aries – low in ENE, rising
Bright stars *Hamal, Sheratan*

Cassiopeia – "W" high in NNE
Bright stars *Shedar, Caph, Ruchbah*

Perseus – rising in NE, to lower right of Cassiopeia
Bright stars *Mirfak and Algol*

Auriga – low in NNE, rising
Bright star *Capella*

For more information on the night sky, visit the Widener Observatory Stargazing website at www.widener.edu/stargazing/. A set of free sky maps can be obtained at www.skymaps.com/.