Chagrin Valley Astronomical Society

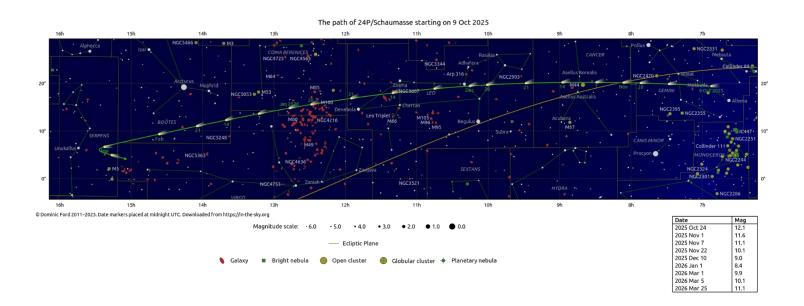
Sky Report October 2025 – by Laz Ilyes

Note: In NE Ohio, we are currently observing Eastern Daylight Time (UTC -4)

Comets and Meteor Showers

Comet 24P/Schaumasse is a periodic comet discovered by Alexandre Schaumasse on 1 December 1911. Its period is approximately 8 years and it next comes to perihelion on 8 January 2026 and is expected to be the brightest comet visible in the Northern Hemisphere in the remainder 2025, though it will likely require binoculars to see. The comet is presently at approximate magnitude +15.3 and not expected to reach its peak brightness until the very end of the year. As of October 1, 2025, Comet 24P/Schaumasse is in the constellation Gemini, at a distance of 204,950 kilometers from Earth.

Comet 24P/Schaumasse's path as of October 9th 2025 is illustrated below. For an up-to-date ephemeris, please refer to the following link: https://www.cobs.si/comet/56/



Comet C/2025 N1 (formerly known as 3I/ATLAS) is a rare interstellar visitor. Discovered on July 1, 2025, C/2025 N1 is the third known object from outside our solar system to be discovered passing through our celestial neighborhood. Astronomers have categorized this object as interstellar because of the hyperbolic shape of its orbital path (it does not follow a closed orbital path about the Sun.) It will be closest to the Sun this month passing just inside the orbit of Mars. Despite its proximity and size, it is not considered likely that this comet will ever be visible to unaided vision. At best, a pair of binoculars or a small telescope will be required to see this comet. At the beginning of this month, the comet is around magnitude +12.

NASA's Hubble Space Telescope captured the image below of interstellar comet **3I/ATLAS** on July 21, 2025, when the comet was 277 million miles from **Earth. Hubble** revealed a teardrop-shaped cocoon of dust coming off of the comet's solid, icy nucleus. Because **Hubble** was tracking the **comet** moving along a hyperbolic trajectory, the stationary background stars are streaked in the exposure.

NASA is using optical sources already in place to get a better view, and a visualization of this object is available here.



Comet 3I/ATLAS as imaged by the Hubble Space Telescope on July 21, 2025

Comet C/2025 N1 will not be visible during the month of October because, as seen from Earth, it will be on the opposite side of the Sun (solar conjunction). As soon as the comet will pass the perihelion on October 29, it will move at its maximum speed, allowing it to become quickly visible again in the early morning sky during the first days of November. For up-to-date ephemeris and light-curve, please refer to the following link: https://www.cobs.si/comet/2643/

A wonderful surprise in our sky this month is the **comet C/2025 R2 (SWAN)**. Formerly known as **SWAN25B**, **C/2025 R2 (SWAN)** is a long-period comet, first spotted in images from the **SWAN** instrument onboard the **Solar and Heliospheric Observatory (SOHO)** by amateur astronomer **Vladimir Bezugly** on **September 11**, **2025**. The presence of the comet was confirmed by other amateur astronomers, having an estimated magnitude of 7.4 and featuring a tail about 2 degrees long. As of now, the comet has an apparent **magnitude of +6.3** with a solar elongation of 30 degrees and is observable near **Mars** in 50 mm binoculars. It is better seen from the Southern hemisphere.

C/2025 R2 (SWAN) came to perihelion one day after discovery on September 12, 2025 at a distance of 0.5 AU (75 million km) from the Sun. Earth will cross the comet's meteoroid stream around October 5, 2025 and it may produce a meteor shower. The comet will make its closest approach to Earth at a distance of 0.26 AU (39 million km; 24 million mi) on October 20, 2025, and will cross the celestial equator on November 3, 2025.



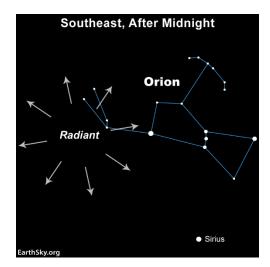
Comet C/2025 R2 SWAN near Spica, captured by Gerald Rhemann and Michael Jäger on September 15.

The **comet** attained an apparent **magnitude +6.2** on **September 16, 2025**, and it may hopefully reach **magnitude 4** at its **closest approach to Earth** on October 20, 2025, (at which time it will be in the constellation **Serpens**). It is currently unknown how quickly **C/2025 R2 (SWAN)** will dim but it is expected to quickly fade from view by early **November**. The path of **C/2025 R2 (SWAN)** is shown in the illustration below. For a complete ephemeris, please refer to https://cobs.si/comet/2659/



Path of C/2025 R2 (SWAN) © Vito Technology, Inc.

The **main meteor shower** visible in **October 2025** is the **Orionid meteor shower**, which peaks on the night of **October 21–22 during a New Moon**, offering dark sky conditions ideal for viewing. The **Orionids**, produced by debris from **Halley's Comet**, are known for being fast and bright meteors that seem to radiate from the constellation **Orion**. The radiant of the **Orionids** is illustrated below.



You can also look for the minor **Draconid meteor shower**, which peaks on **October 8–9, 2025**, but provides fewer meteors per hour than the **Orionids**.

Moon

October

2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
			Waxing gibbous	Waxing gibbous	Waxing gibbous	Waxing gibbous
			66.4%	75.8%	84.4%	91.6%
			10 days	11 days	12 days	13 days
5	6	7	8	9	10	11
Waxing gibbous 96.9%	Full Harvest Moon	Waning gibbous 99.6%	Waning gibbous 96.6%	Waning gibbous 90.8%	Waning gibbous 82.8%	Waning gibbous 73.0%
14 days	11:48 P.M.	16 days	17 days	18 days	19 days	20 days
	15 days					
12	13	14	15	16	17	18
Waning gibbous 62.3%	Last Quarter 2:14 P.M.	Waning crescent 40.4%	Waning crescent 30.3%	Waning crescent 21.2%	Waning crescent 13.6%	Waning crescent 7.5%
62.3% 21 days	2:14 P.IVI. 22 days	40.4% 23 days	30.3% 24 days	21.2% 25 days	13.6% 26 days	7.5% 27 days
21 days	ZZ ddys	23 day3	24 duys	25 days	20 days	27 days
19	20	21	22	23	24	25
Waning crescent	Waning crescent	New Moon	Waxing crescent	Waxing crescent	Waxing crescent	Waxing crescent
3.1%	0.7%	8:25 A.M.	1.2%	4.2%	8.8%	14.8%
28 days	29 days	0 days	1 day	2 days	3 days	4 days
26	27	28	29	30	31	
Waxing crescent	Waxing crescent	Waxing crescent	First Quarter	Waxing gibbous	Waxing gibbous	
22.2%	30.6%	40.0%	12:22 P.M.	60.1%	70.3%	
5 days	6 days	7 days	8 days	9 days	10 days	

Moon Visualization:

<u>Almanac.com/Astronomy</u>

Educator Guide: Moon Phases | NASA/JPL Edu,

Daily Moon Guide | Observe - Moon: NASA Science

There will be no major lunar occultations this month of any planets or bright stars.

Moon, Saturn and Neptune (close approach) -

On the evening of **Sunday**, **October 5**, the **Moon**, **Saturn** and **Neptune** will make a close approach, passing within about **3°30'** of each other. From **NE Ohio**, the trio will be visible in the night sky, becoming accessible at 19:35 EDT about 11°above the eastern horizon.

The **Moon** will be at **mag -12.7** (in the constellation **Pisces**); **Saturn** will be at **mag 0.6** (in the constellation **Aquarius**); and **Neptune** will be at **mag 7.8**.

They will be too widely separated to fit within the field of view of a telescope, but will be visible to the naked eye or through a pair of binoculars.

Moon and M45 (Pleiades Open Star Cluster) (close approach) –

On the morning of Friday, October 10, 2025, the Moon and M45 (Pleiades Open Star Cluster) will make a close approach, passing within a mere 54.7 arcminutes of each other. From NE Ohio, the pair will be visible in the morning sky, becoming accessible around 21:39 EDT, when they reach an altitude of 12° above the eastern horizon. They will then reach their highest point in the sky at 03:57 EDT, 72° above your southern horizon. They will be lost to dawn twilight around 06:48 EDT, above the western horizon.

The **Moon** will be at **mag -12.6**; and **M45** will be at **mag 1.3**. Both objects will lie in the constellation **Taurus**. (**Uranus** will be near the **Pleiades** as well on the same evening at **mag +5.68**)

The **Moon and M45** will be a little too widely separated to fit comfortably within the field of view of a telescope, but will be visible to the naked eye or through a pair of binoculars.

Moon and Jupiter (close approach) -

The **Moon** and **Jupiter** will make a close approach on the morning of **Monday**, **October 13**, passing about **4°** of each other.

In **NE Ohio**, the pair will be visible in the dawn sky, rising at **00:14 (EDT)** reaching an altitude of **69° above** the **southern horizon** before fading from view as dawn breaks at around **07:16 EDT**. Both objects will lie in the constellation Gemini.

For further reference, consult the link: https://in-the-sky.org//newsindex.php?feed=appulses

Planets

Here is a chart summarizing the visible planets on **October 15, 2025 in NE Ohio**. https://stellarium-web.org/



Mercury will be difficult to observe in October of 2025. To observe Mercury, look in the western evening twilight shortly after sunset, as it will be near its **greatest eastern elongation** on **October 29, 2025**. This date marks the best evening viewing opportunity for **Mercury** in 2025 for the **Southern Hemisphere**. You'll need to look low in the sky in the direction of the setting **Sun**.

Venus can be observed as a bright "morning star" in the eastern sky before sunrise, appearing slightly north of east at the start of the month and rising closer to due east by mid-month. The brightest object in the eastern sky, **Venus** will be prominent in the pre-dawn hours, with the waning crescent **Moon** passing near it around **October 19th**.

Mars will be challenging to observe in October 2025, as it is low in the southwestern evening sky after sunset and increasingly difficult to spot due to its proximity to the **Sun**. Around mid-month, brighter **Mercury** joins **Mars** in the twilight, and they are closest on **October 20th and 21st**, making this a key time to try to find the pair. You will need binoculars or a telescope and a clear view of the west-southwest horizon to locate them.

Jupiter will be observed in the eastern sky before sunrise, high in the southeast with the bright star Pollux in Gemini. It will of course be visible to the naked eye, but binoculars will offer a better view of its Galilean moons. For an even closer look, a small telescope will show the moons and potentially their shadows. For details on the locations of all of the **Galilean moons**, refer to the online tool available at the <u>"Sky and Telescope" website</u>.

Saturn can be observed in October 2025, especially in the first week when the bright Harvest Moon will be near it. Saturn reached its **opposition on September 21, 2025**, and will remain brightly visible in the

night sky for months, providing excellent opportunities to view its rings (seen on edge) even with small telescopes or binoculars. Look for **Saturn** in the southeast after sunset, near the bright star **Fomalhaut** in the constellation **Pisces**.

Uranus can be observed using binoculars or a telescope by locating it near the **Pleiades star cluster** in the constellation **Taurus**. The planet is visible in the southeastern sky as morning twilight begins and shines at its brightest magnitude for the year from mid-October to mid-December, making it easier to spot with the unaided eye under dark skies, though a telescope will show its greenish disk.

Neptune can be observed in October using binoculars or a telescope. Starting around **midnight** after the moonset, and look for it near the planet **Saturn**. After its opposition on September 23, **Neptune** remains visible in the evening sky through February 2026, appearing as a dim, blueish point of light. You'll need to find **Saturn** first and then use a sky chart or app to locate **Neptune** to its upper left.

Ceres, the dwarf planet, will reach opposition on **October 2**, when it lies opposite to the **Sun** in our sky. Lying in the constellation **Cetus**, it will be visible for much of the night, reaching its highest point in the sky around midnight local time.

From **NE Ohio**, it will be visible between **22:30** and **04:52 EDT**, reaching its highest point in the sky at 1:39 EDT, 38° above your southern horizon.

For a detailed ephemeris for these planets, consider using NASA Jet Propulsion Laboratory's "Horizons System" tool at https://ssd.jpl.nasa.gov/horizons/app.html#/

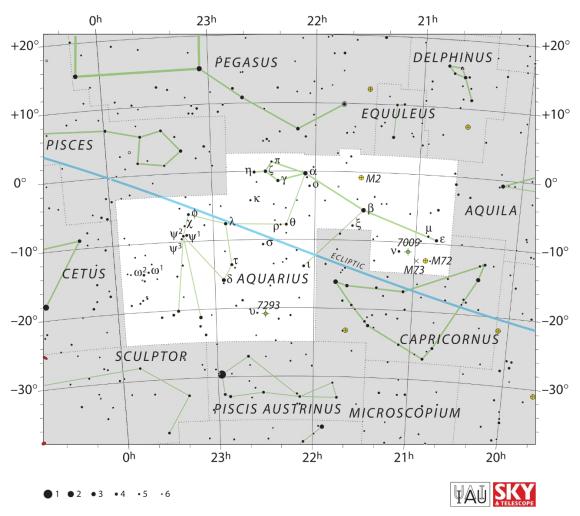
Constellations

Aquarius (Aqr)

Aquarius is located on the celestial equator and lies predominantly in the southern celestial hemisphere. It is one of the 12 **zodiac constellations**. The constellation's name means "the water-bearer" (or "cupbearer") in Latin.

Aquarius lies in a region of the sky which is sometimes referred to as "the Sea," because it contains a number of other constellations that are associated with water; Pisces (the Fish), Eridanus (the River), and Cetus (the Whale), among others. Like other zodiac constellations, Aquarius was catalogued by the Greek astronomer Ptolemy in the 2nd century CE.

The constellation contains the yellow supergiant stars **Sadalsuud** (**Beta Aquarii**) and **Sadalmelik** (**Alpha Aquarii**), and is home to many stars with planetary systems, including **TRAPPIST-1**, **Gliese 876**, **WASP-47**, and **HD 215152**.



Among the interesting deep sky objects in Aquarius are two Messier objects. These are two different globular clusters **Messier 2 (M2)** and **Messier 72 (M72)**, both cataloged by Charles Messier.

M2 is a large, dense, bright, and relatively close globular cluster. Located roughly 37,000 light-years from Earth, M2 has a diameter of over 150 light-years and is one of the largest clusters of its kind. It was discovered in 1746 by the French astronomer Jean-Dominique Maraldi while he was observing a comet. The cluster has an apparent magnitude +6.3.



Hubble Image of Messier 2 – by NASA

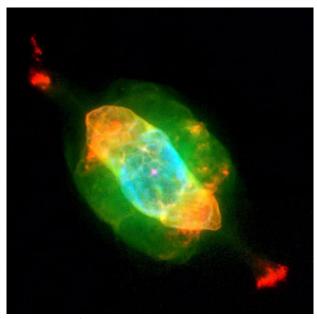
In contrast, M72 is a fainter, smaller, and more diffuse globular cluster. Pierre Méchain, a French astronomer and colleague of Charles Messier, discovered the globular cluster M72 in 1780. It was the first of five star-clusters that Méchain would discover while assisting Messier and, at a distance of 50,000 light-years from Earth, it is one of the most remote clusters in Messier's catalog. M72 has an apparent magnitude +9.4. The cluster appears as a faint patch of light in small telescopes.



Hubble Image of M72 – by NASA

Caldwell 55, also known as the **Saturn Nebula** or **NGC 7009**, is also found in **Aquarius**. It is a planetary nebula and what we see is the outer gaseous layers of a dying star.

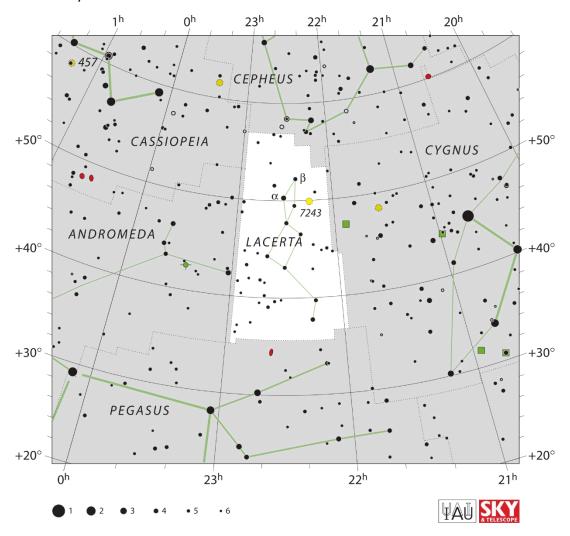
Stars are powered by nuclear fusion, but each one comes with a limited supply of fuel. When a mediummass star (like our own **Sun**) exhausts its nuclear fuel, it swells and sheds its outer layers until only a small, hot core remains. The leftover core, called a white dwarf, is a lot like a hot coal that glows after a barbecue — eventually it will fade out. Until then, the cast-off gaseous debris fluoresces as it expands out into the cosmos, possibly destined to be recycled into later generations of stars and planets.



Hubble Image of **Caldwell 55**, the **Saturn Nebula** – by <u>NASA</u>

Lacerta (Lac)

The constellation Lacerta (the Lizard) is located on the northern celestial sphere. It is a relatively faint and small constellation created by Johannes Hevelius in 1687, and it is located between the constellations Cygnus, Cassiopeia, and Andromeda. Lacerta is known for its "W" shape, similar to Cassiopeia but dimmer. Its brightest star, a blue-white star designated Alpha Lacertae, has an apparent magnitude of only +3.76.



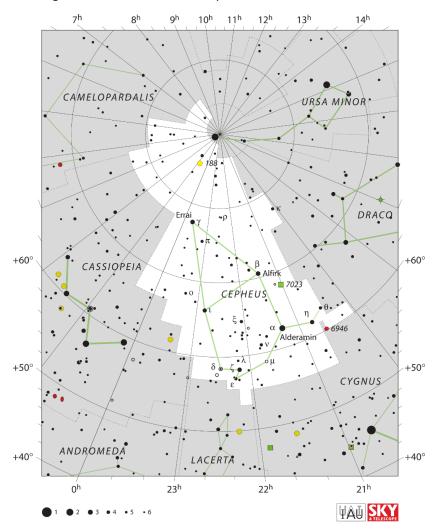
Lacerta contains NGC 7243 (also known as Caldwell 16), a bright open star cluster shining at apparent magnitude +6.4. Its celestial coordinates are RA 22h, 15.3m, Dec +49 53'. Located in our sky near Alpha Lacertae, it lies approximately 2,800 light-years away, and is thought to be just over 100 million years old, consisting mainly of white and blue stars.



Image of Star Cluster NGC 7243 – by Egres73 under CC3.0 License

Cepheus (Cep)

Cepheus is a northern constellation with a "house-shaped" pattern of stars found the upper right of Polaris (the North Star), between the **Little Dipper** and **Cassiopeia**. Look for the star **Alderamin** (**Alpha Cephei**) at the bottom-right corner of the house shape.



Cepheus is one of the original Greek constellations. It was named after the mythical **King Cepheus** of **Aethiopia**, husband of **Cassiopeia** and father of **Andromeda**, both represented by neighboring constellations. Like most other constellations in the **Perseus** family, **Cepheus** was catalogued by the Greek astronomer **Ptolemy** in the 2nd century.

The constellation **Cepheus** contains many notable deep-sky objects, including the **Fireworks Galaxy** (**NGC 6946**), a spiral galaxy known for hosting numerous supernovae; the colorful **Iris Nebula** (**NGC 7023**), a reflection nebula; the **Wizard Nebula** (**NGC 7380**), an open star cluster embedded in a nebula; and the dark and faint **Elephant's Trunk Nebula**, a star-forming region within the **IC 1396** complex. Other objects include the **Cave Nebula** (**Sh2-155**), the prominent red supergiant **Mu Cephei**, and the extremely powerful quasar **S5 0014+81**.

The galaxy **NGC 6946** is nothing short of spectacular. In the last century alone, **NGC 6946** has experienced **10 observed supernovae**, earning its nickname as the **Fireworks Galaxy**. In comparison, our **Milky Way** averages just one to two supernova events per century. The NASA/ESA **Hubble Space Telescope** image below shows the stars, spiral arms, and various stellar environments of **NGC 6946** in phenomenal detail.



Hubble Image of NGC 6946 nicknamed the Fireworks Galaxy - By NASA/ESA

The **Iris Nebula** (**NGC 7023**, and **Caldwell 4**) is a reflection nebula located about **1,400 light-years away**, known for its striking blue, petal-like structure and surrounding dark dust clouds. It gets its color from its central star, **HD 200775**, scattering blue light off interstellar dust, while extended red emission from UV radiation interacting with dust grains creates reddish wisps. The nebula was discovered by **Sir William Herschel** in **1794**. The dust mass in the **Iris Nebula** is estimated to be approximately 1.18 x 10²⁷ kg.



NGC 7023, aka Iris Nebula - by Laz Ilyes (taken at IHO)

NGC 7380 is a bright open star cluster, also known as the **Wizard Nebula**. It is located about 7,000 light-years from **Earth**. The star cluster is embedded in an emission nebula, which spans some 110 light-years! The stars of **NGC 7380** have emerged from this star-forming region in the last **5 million years** or so, making it a relatively young cluster.



Image of the Wizard Nebula (NGC 7380) – by Laz Ilyes

IC 1396 is a large circular region of glowing gas and dust in the constellation of **Cepheus** and is located about **2,400 light-years** from **Earth**. Measuring approximately **100 light-years across**, this region is energized by a bluish central multiple-star called **HD 206267**. The ionized gas glows bright while dark dust concentration in the area can also be seen.

The **Elephant's Trunk**, **IC 1396A**, is one feature that stands out prominently in images taken of the area. Pressure from bright stars in the core blows dust from that area leaving behind a darker region at the center of the nebula while compressing dust around the edges, which drives new star formation. As a result, up to 250 young stars, all less than **100,000 years old**, have been detected in infrared images taken of the Trunk region in 2003. The Trunk itself is about **20 light-years long**.



"SHO Palette" Image of the **Elephant's Trunk Nebula** – by Laz Ilyes

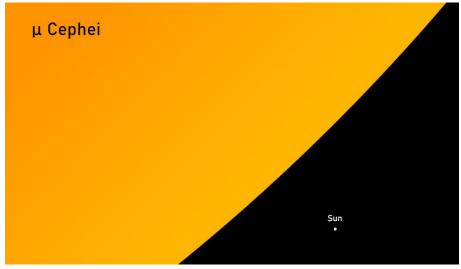
Sh 2-155 (also designated Caldwell 9, LBN529, and nicknamed the **Cave Nebula**) is a diffuse nebula in the constellation **Cepheus**, within a larger nebula complex containing emission, reflection, and dark nebulosity. It is widely known as the **Cave Nebula** is an ionized H II region with ongoing star formation activity, at an estimated distance of **2,400 light-years** from **Earth**.

The name "Cave Nebula" was coined for this object by Patrick Moore, presumably derived from photographic images showing a curved arc of emission nebulosity corresponding to a cave mouth.



Image of the Cave Nebula (Sh2-155) – by Jeff Ratino

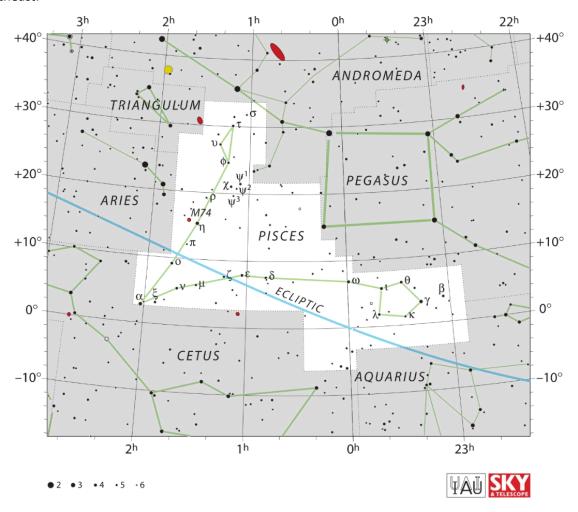
Mu Cephei is a massive, bright red hypergiant star in the **Cepheus** constellation that is one of the largest known stars in the universe, with a radius over **1,400 times that of the Sun!** Also known as **Herschel's Garnet Star**, it is visible to the naked eye and noted for its striking deep red color, a result of its low temperature and stage of stellar evolution.



Artistic Rendering of Mu Cephei Compared to our own Sun – by <u>Diamantinasaurus CC 1.0 License</u>

Pisces (Psc)

The constellation of **Pisces** represents two fish connected by a cord and is one of the **12 zodiac constellations**. It is a large but faint constellation in the Northern Hemisphere, located between **Aries** and **Aquarius**, and it contains the **vernal equinox**. Its brightest star is **Eta Piscium** (**magnitude +3.6**), and it also contains the **spiral galaxy M74**. The best time to view Pisces in the Northern Hemisphere is during the fall months, and it can be found by locating the **Great Square of Pegasus** asterism and looking southeast.



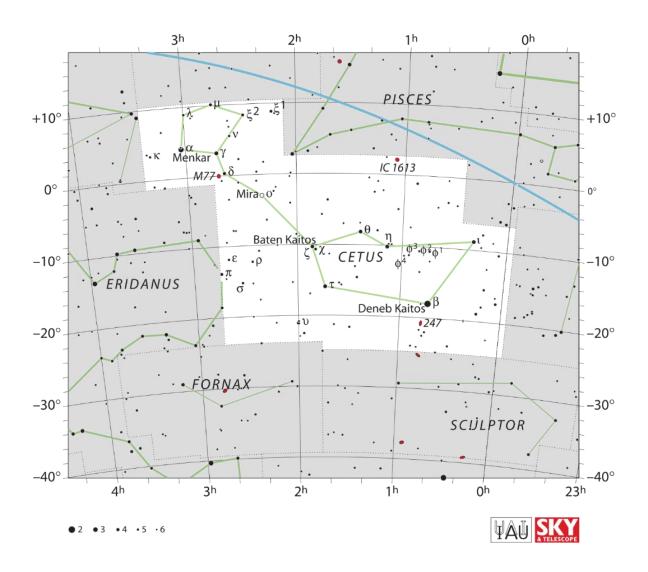
Messier 74 (also known as NGC 628, M74 and Phantom Galaxy) is a large spiral galaxy in the equatorial constellation Pisces. It is about 32 million light-years away from Earth. The galaxy contains two clearly defined spiral arms and is therefore used as an archetypal example of a grand design spiral galaxy. The galaxy's low surface brightness makes it the most difficult Messier object for amateur astronomers to observe. Its relatively large angular (that is, apparent) size and the galaxy's face-on orientation make it an ideal object for professional astronomers who want to study spiral arm structure and spiral density waves. It is estimated that M74 hosts about 100 billion stars.



Hubble/ESA Image of the galaxy **M74** – by <u>NASA/ESA</u>

Cetus (Cet)

Cetus is one of the largest constellations, located in the "**Celestial Sea**" region, known as a sea monster or whale in Greek mythology from the **Perseus** and **Andromeda** story, where it was sent by **Poseidon** to terrorize Aethiopia but was slain by **Perseus**. It contains the variable star **Mira** and the spiral galaxy **Messier 77**. Visible in the late autumn and winter months for Northern Hemisphere observers, it spans a large area of the sky but features mostly dim stars, making it a bit challenging to find.



Messier 77 (or M77, aka NGC 1068 or the Squid Galaxy), is a barred spiral galaxy in the constellation Cetus. It is about 47 million light-years away from Earth, and was discovered by Pierre Méchain in 1780, who originally described it as a nebula. Charles Messier subsequently listed the object in his catalog. It is one of the brightest Seyfert galaxies visible from Earth and has a diameter of about 90,000 light-years.



Hubble/ESA Image of the galaxy M77 – by NASA/ESA

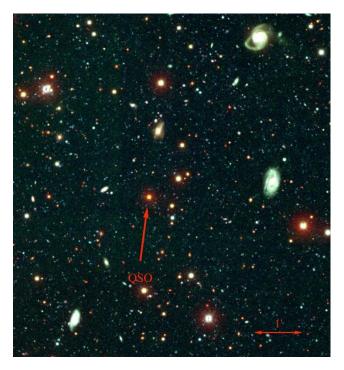
IC 1613 (also known as Caldwell 51) is an irregular dwarf galaxy located on the outskirts of the Local group around 730 kiloparsecs from Earth in the constellation of Cetus, near the star 26 Ceti. It has a low mass, only being around 108 solar masses. It has played an important role in the calibration of the Cepheid variable period-luminosity relation for estimating distances. Other than the Magellanic Clouds, it is one of the few Local Group dwarf irregular galaxy where RR Lyrae-type variables have been observed. This factor, along with an unusually low abundance of interstellar dust both within IC 1613 and along the line of sight enable especially accurate distance estimates. IC 1613 was discovered in 1906 by Max Wolf, and is approaching Earth at 234 km/s.



Image of dwarf galaxy IC 1613 (aka Caldwell 51) – by ESO's VLT Survey Telescope CC by 4.0

Fall Observing Challenge

Do you think you can photograph something that is **12.1 billion light-years away**? That's how far **Quasar APM 08279+5255** is from us, here on Earth. At that extreme distance, it represents an object that is a very early member in our Universe, which began expanding from the Big Bang a little over 14 billion years ago.



A **quasar** is powered by an enormous black hole that steadily consumes a surrounding disk of gas and dust. As it eats, the **quasar** spews out huge amounts of energy. This particular quasar (<u>APM 08279+5255</u>) is thought to harbor a black hole 20 billion times more massive than the sun and produces as much energy as a thousand trillion suns.

APM 08279+5255 is a broad absorption **line quasar** located in the constellation **Lynx**. It appears to be a giant elliptical galaxy with a supermassive black hole and associated accretion disk. It is magnified and split into multiple images by the gravitational lensing effect of a foreground galaxy through which its light passes.

Quasar APM 08279+5255 has an R-band apparent **magnitude of 15.2** and appears as a tiny red "star". While it is only the brightness of a 15th-magnitude object, its intrinsic luminosity is estimated to be around 100 billion times that of the Sun, making it the most intrinsically luminous object known. The gravitational lensing allows its immense intrinsic luminosity to be seen from Earth, despite its extreme distance. Seen at this distance (and due to its red-shift) the quasar looks like a faint red star to us.

The challenge is to see if you can locate and photograph this distant object during Fall – 2025.

Epilogue

Interested in Making More Observations?

Consider the opportunities offered by the <u>Astronomical League</u>. Perhaps you'd like to go on a "safari" to hunt down <u>galaxies</u>. Maybe star <u>clusters</u> are your main interest. There are always <u>bright nebulae</u> out there to find. Did you ever try to find <u>carbon stars</u>? And there are still five more opportunities to get a silver certificate by participating in the Hubble Night Sky Challenge (see below). Take a look at the list of programs and awards that are available through your membership in the league! Here is a <u>link to an alphabetical list</u> of available programs. Talk to other members about your interests. It's always fun to observe together! Ask an officer in our club if you need help getting started.

T CrB

At the time of writing this, **T CrB** has <u>still</u> not gone nova. Continue watching for news of the event if it should occur. We will try to notify you by email should there be any updates.

Hubble's Night Sky Challenge

As mentioned in previous sky reports, you can be recognized for your observing in 2025. Here are links:

https://science.nasa.gov/mission/hubble/science/explore-the-night-sky/hubbles-night-sky-challenge/

https://www.astroleague.org/nasa-observing-challenges-special-awards/

https://www.astroleague.org/wp-content/uploads/2024/12/Hubble-35-v2.pdf

If you completed requirements for the **September challenge** then the deadline for submitting your is **October 31, 2025**. For a list of NASA's **October** targets please refer to the <u>latest updates</u>. You will have until **October 31, 2025** to submit your **September** observation(s).

Special thanks to **Russ Swaney** for suggesting the Fall Challenge proposed in this month's sky report. And big thanks to **Connie Meier** and **Russ Swaney** for getting the report to all of you.

Clear Skies and Excellent Observing!

Laz