Northern Berkshire Astronomical Society

Whatever your experience, you belong under our skies

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THE MOON

- Jul 7: Last Qtr
- Jul 14: New Moon
- Jul 21: First Qtr
- Jul 29: Buck Moon

PLANETS

Mercury: behind the Sun

Venus: in Leo, sets ~10:30 PM

Mars: in Tau, rises ~2:30 AM

Jupiter: in Cnc, close to the Sun

Saturn: in Psc, rises ~12:00 AM

Uranus: in Tau, rises ~2:00 AM

Neptune: in Psc, rises ~11:30 PM

DEEP-SKY OBJECTS

Challenges:
C 12, NGC 6559, M 55

Easy (Binoc.):
M 11, M 29, M 5

Moderate (Small Tel.):
M 8, M 10, M 16

UPCOMING MEETINGS

July 1

August 5

September 2

1st Wed · 6 PM · North Adams Public Library

INTERACTING

Facebook: https://www.facebook.com/groups/nberkastro

Join us: 1st Wednesday, 6 PM

North Adams Public Library

Mars Meets Uranus

On the morning of the 4th of July, Mars passes Uranus by only 7.1' (0.12°) far closer than the Venus/Jupiter appulse we saw in June.

At 4 AM EDT, Mars is above the horizon and nicely placed between the Hyades and Pleiades star clusters in Taurus.

Telescopically, it's one of the worst times to view the planet: it's on the other side of the solar system from us (2.1 AU = 195 million miles), but in a telescope, you'll see it there at magnitude 1.4 with a 6th magnitude "star" to the NE: that's Uranus.

Though Mars is brighter by about a factor of 100, in terms of angular size, they're not that different: Uranus has an angular diameter of only 3.5", but Mars at its distance isn't much better: just 4.5". It will take high magnification and good seeing to perceive them as a little red ball and a little green ball!

Magnification: 200x

🪐 Special Event: Ed Faits talks about “The Wanderers”

We’re really excited to have our first speaker at our monthly meeting in a while: Ed Faits of the Arunah Hill group, is coming to present “The Wanderers”:

> *Throughout the ages humans have been fascinated with the night sky. All the stars move in lock step through the year, except for five “wanderers” that didn’t follow the rules: the planets. This talk takes a look at how perception of the planets changed over time as knowledge and technology evolved. We’ll also look at the ups and downs of the public view of Pluto and take a look beyond the solar system.*

🌐 What’s Happening on Our Website

Articles

A few of the topics that came up in June:

- We took a “Closer Look” at Arcturus, galaxy M 101, nebula M 57, and globular cluster M 92
- We published a Beginners Guide to Telescopes, including tips on what to prioritize (and what to avoid)
- We created a few quizzes on astronomical discoveries, and stellar evolution

New Features

We also expanded our list of Series, and services:

- We’ve improved our Star Maps: they’re now done weekly (and are available into 2027)
- Members’ Skies: where NBAS members share their images
- The NBAS Store: t-shirts, caps, stickers, and some surprises

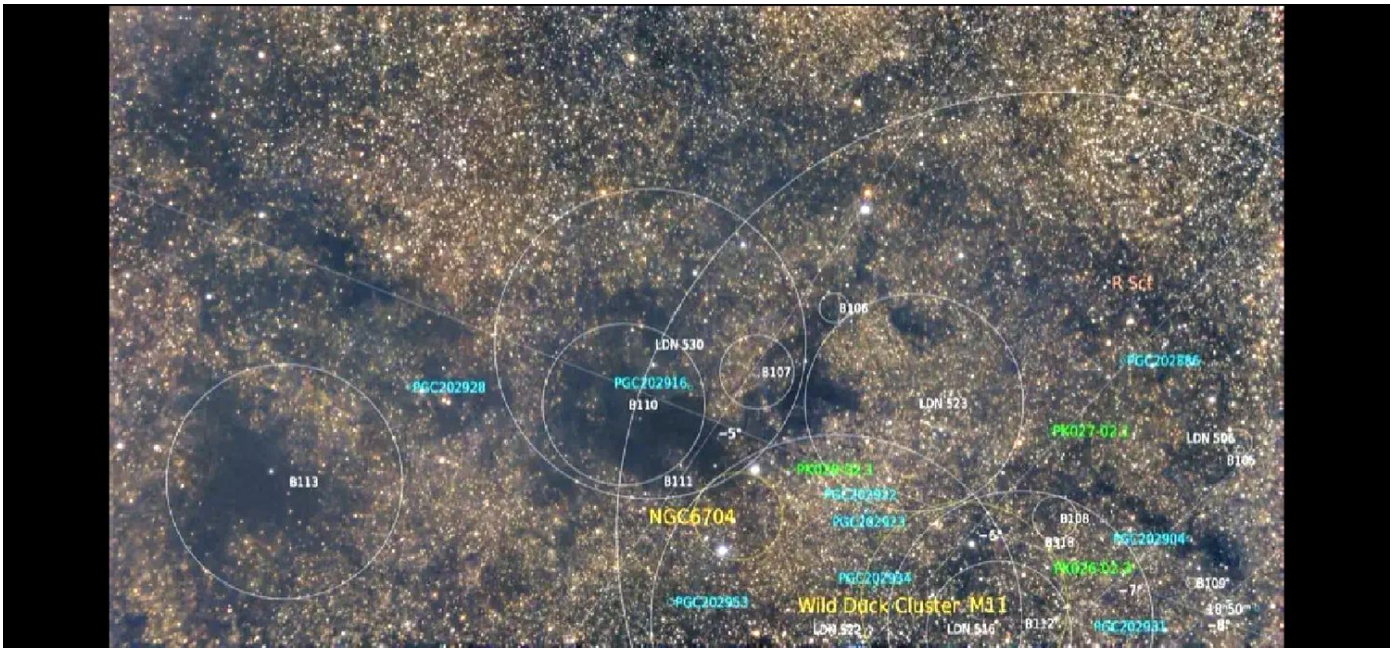
Coming in July!

- The Summer Triangle Stars: Vega, Deneb, and Altair
- Old Star Clusters: what makes them somewhat rare and so interesting?
- Stellar Dividing Lines: when is a star a brown dwarf? A red giant?
- Barnard’s Star: one of the interesting neighbors to the Sun
- A Guide to observing this year’s Perseid meteor shower (in August) with tips on how to make it a comfortable experience

This Month's Image

Bob Donahue, NBAS

Something that's overlooked in the Summer Milky Way are dark nebulae. They're in the plane of the Galactic disk, but in the foreground against the background Milky Way. You can also see them intertwined with bright nebulae (like the Trifid Nebula, M 20), and of course the most famous one is Barnard 33 - the "Horsehead Nebula" in Orion.



Here we have a strip of sky cutting through Scutum just NW of the rich open cluster M 11. There are several Barnard dark nebulae here: the two largest patches are B 113 and B 110, but these are all probably part of the same larger structure.

What's fascinating is that they can be so opaque that they completely blot out the Milky Way behind them. Some are prominent enough (in their inkiness) to be detectable with binoculars.

✨🔭 Monthly Starmap

✨ For July's star chart, visit nbasastro.org/starmap/ (this week, with planets) or nbasastro.org/starmap/reference/ (any night, any year, no planets).