



New Comet: Neowise

On May 27th, I posted an article [Comet, Covid, Catharsis](#), which explores the role of comets from a spiritual scientific perspective. We now can witness a new visible comet. As you can see in the cover image of the trajectory of Neowise, it currently is in the stars of Auriga (The Sun Charioteer) where it will pass at its perihelion behind the Sun and will continue above the zodiacal constellations of Gemini, Cancer, Leo, Virgo and Libra (during Michaelmas) before crossing below the ecliptic in early October, at least as projected. The images below show when and where to look before it passes behind the Sun, thus in the pre-dawn sky and then when it passes behind the Sun and is visible in the evening sky.

(From article in Earth Sky Magazine by Eddie Irizarry) We still have to wait for another very bright comet, what astronomers call a great comet. There's no strict definition for *great comet*, but most agree that Hale-Bopp – widely seen by people in 1997 – was one. Lesser comets are moderately frequent, though, such as NEOWISE now in the dawn sky. Some skilled observers have reported that – once you spot it with binoculars – you can remove them and see the comet with the unaided eye. Using binoculars or other optical aid is a must, though, if you want to see this comet's split tail. The comet is called C/2020 F3 (NEOWISE).

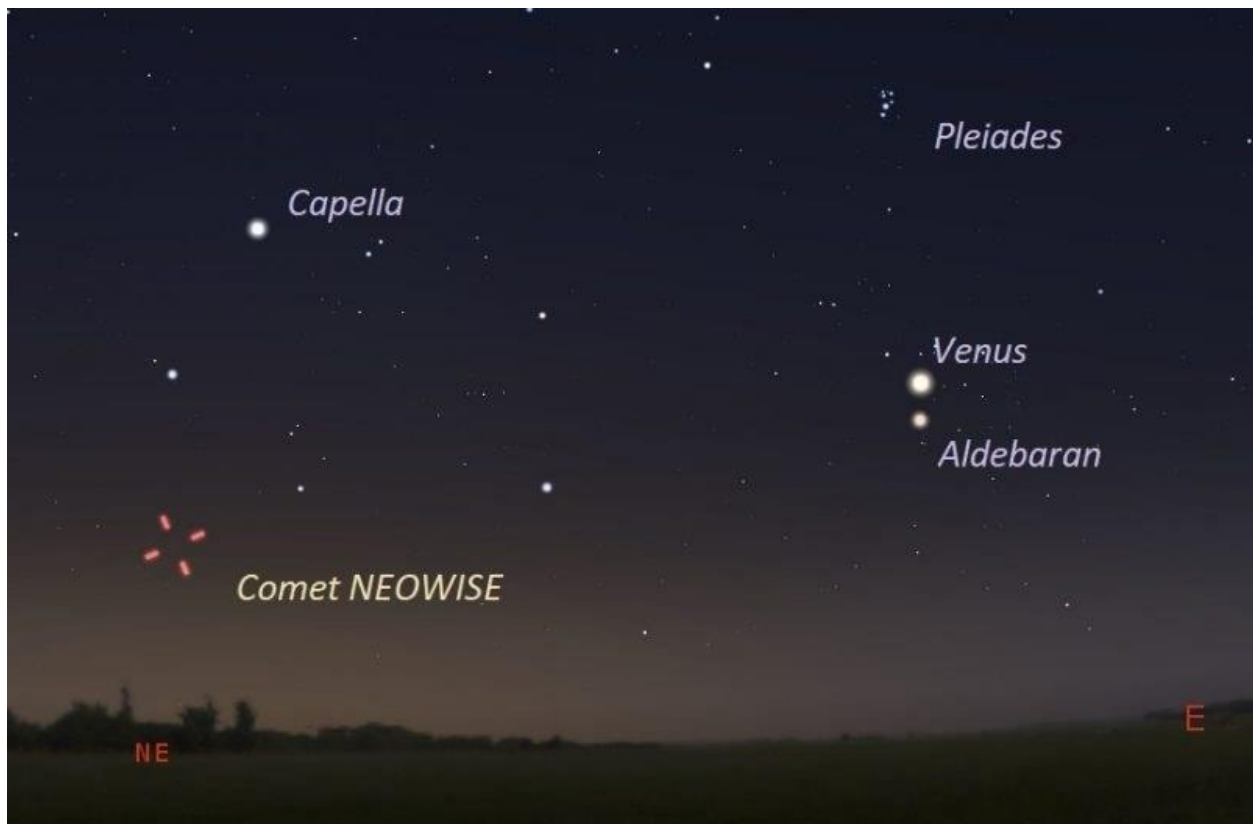
Comet C/2020 F3 (NEOWISE) was discovered on March 27, 2020, from some 326 miles (525 km) above Earth's surface by [NEOWISE](#), the Near Earth Object *Wide-field Infrared Survey Explorer*, which is a space telescope launched by NASA in 2009.

Comet NEOWISE was closest to the sun on July 3, 2020, passing at about 26.7 million miles (43 million km) from the sun, or a bit closer than the average distance from the sun to Mercury. Observers are still reporting seeing it, and so it appears to have survived the close encounter with our star.

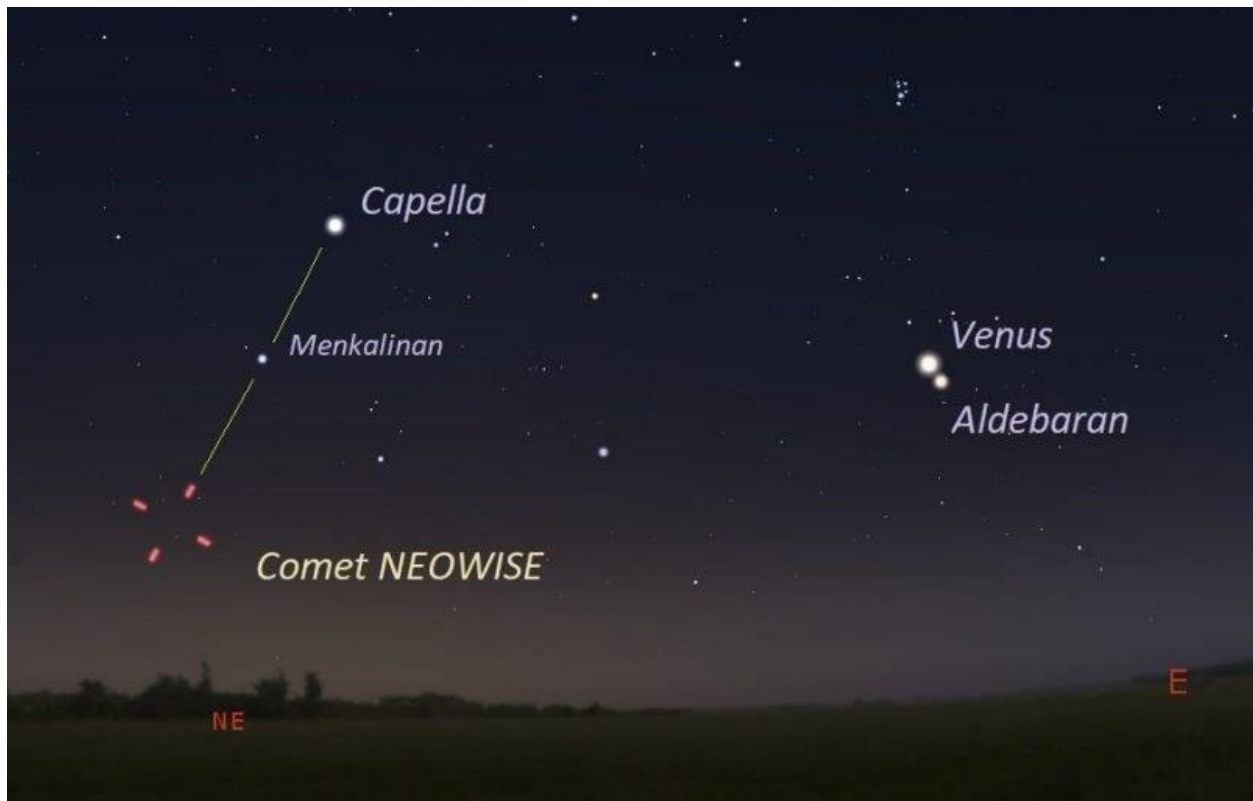
Comet C/2020 F3 (NEOWISE) is up at dawn now; it will be highest in the dawn sky around July 11. Then it will gradually approach the horizon each day. By mid July (around July 12-15), the comet will become visible at dusk (just after sunset), low in the northwest horizon.

If the comet remains relatively bright, it might be easier to see in the second half of July during evening dusk, because, at that time, it will appear somewhat higher in the sky. During the first days of July, comet NEOWISE is a little tricky to catch because it appears not against a dark sky, but very close to the northeastern horizon just as dawn is brightening the sky.

Here are a few charts for early this week that might help *you* see the comet. Again, it will probably be best seen in binoculars.



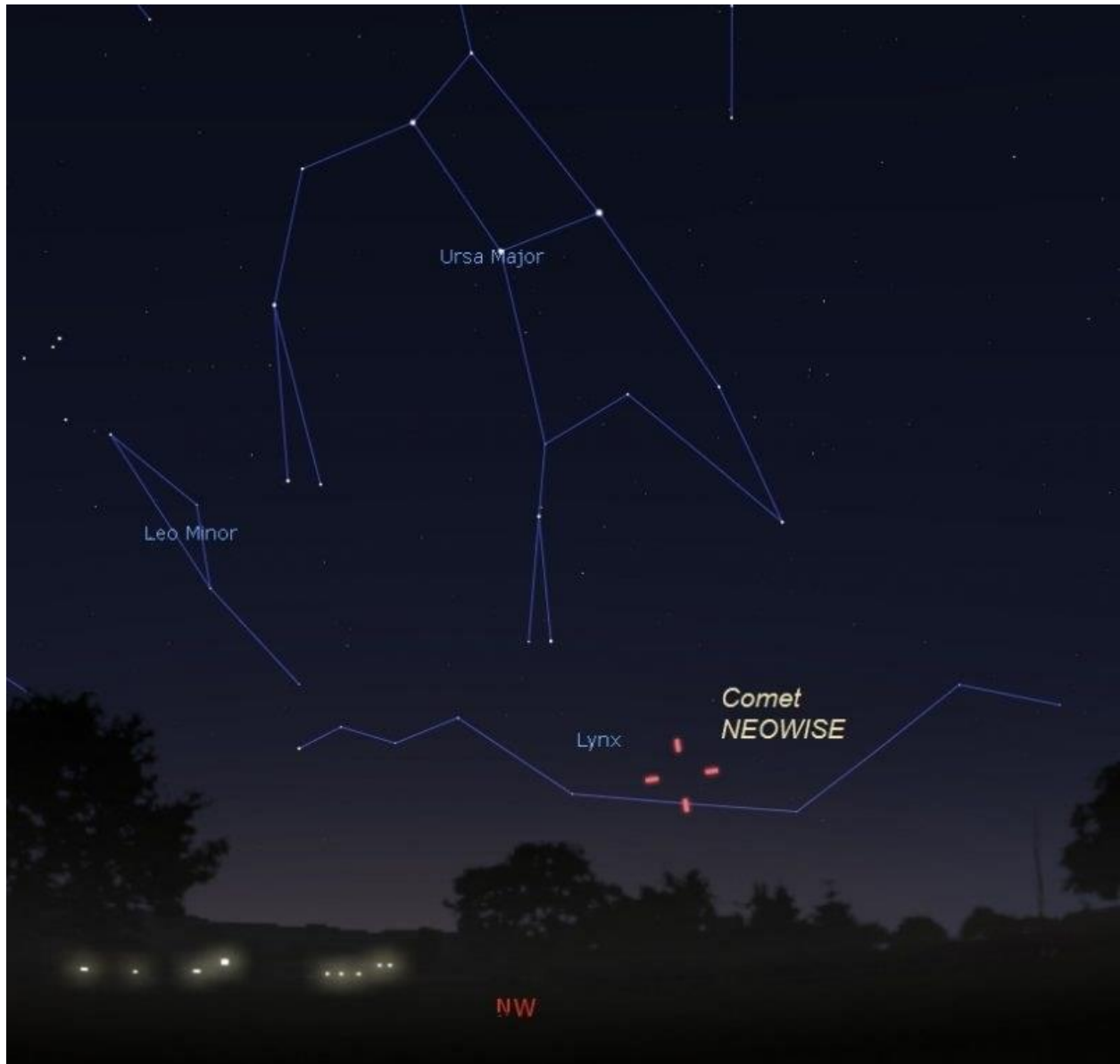
1 - July 9, 2020, just before dawn, as seen from central U.S. facing northeast about 45 to 60 minutes before sunrise. [Venus](#) is the very bright planet, while [Capella](#) is a bright star seen toward the northeast now, at dawn. Illustration by Eddie Irizarry using Stellarium.



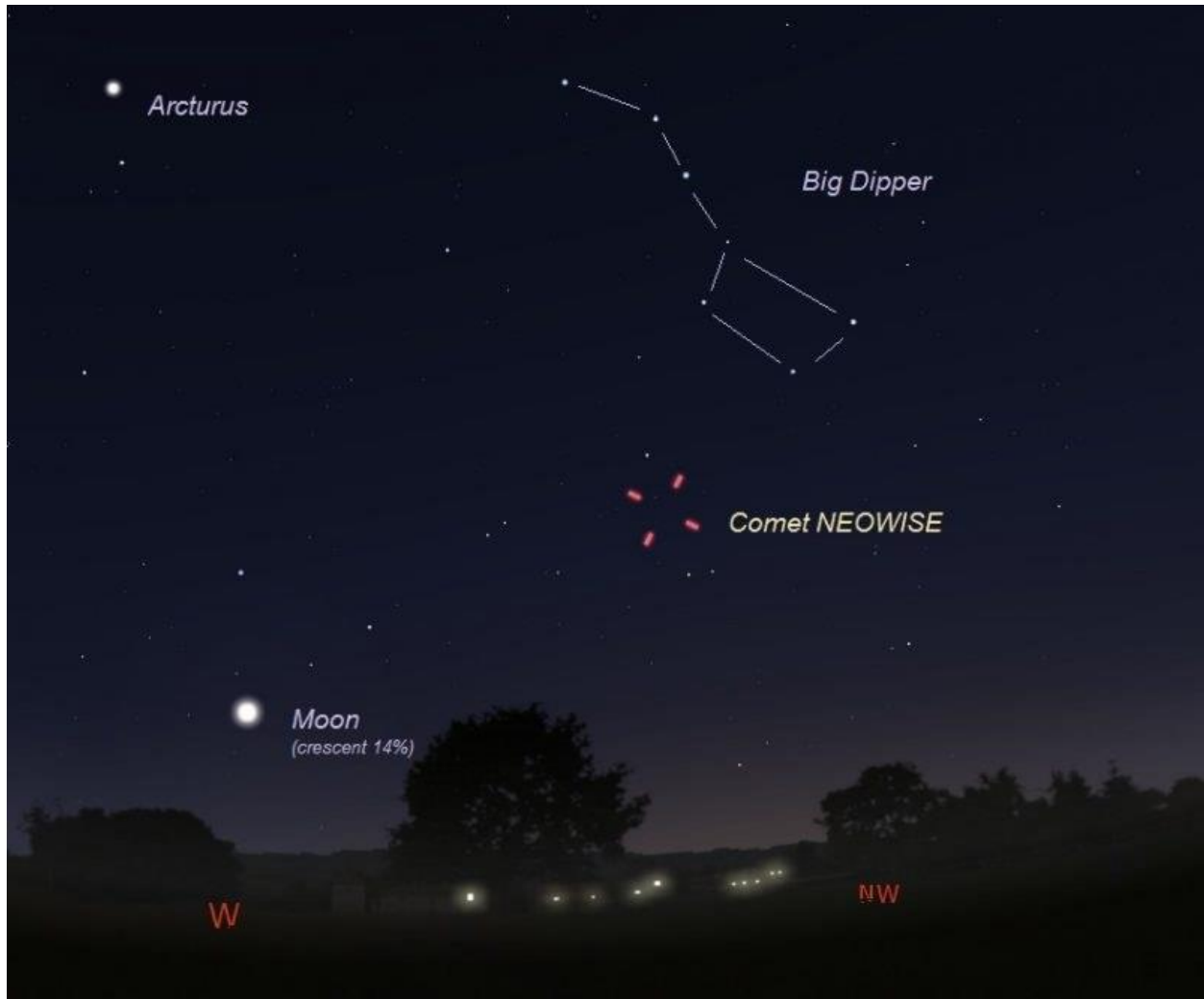
2 - July 11, 2020, facing northeast about 45 to 60 minutes before sunrise. Note that stars Capella and Menkalinan point to Comet NEOWISE on July 11 just before dawn. This is about the last date that comet NEOWISE will be visible in the morning. For evening charts, see below. Illustration by Eddie Irizarry using Stellarium.

As of early July, reports indicated that comet NEOWISE has a visual magnitude between 1 and 2. If you know the magnitude scale, where smaller numbers indicate brighter objects, that may sound very bright! However, stars are pinpoints of light, whereas the light of comets is diffuse (spread out). So, for comets, a magnitude of 1 or 2 is fainter than it would be for a star of equal magnitude. The reason is, the comet's light is distributed over a relatively wide area, instead being concentrated in a single point.

Now look below for a couple of evening charts for later this month. Comet NEOWISE will be closest to Earth on July 22-23, 2020. It will pass at some 64 million miles (103 million km) from our planet. The good news is that – if the comet continues looking great – the view during the night of closest approach should be nice. Although binoculars might be required for the celestial visitor, it will be visible at the same time we see a beautiful crescent (not too bright) moon.



3 - By mid July (around July 12-15), comet NEOWISE appears early in the evening sky. This illustration shows the location of the celestial visitor on July 15, 2020, as seen from the central U.S., facing northwest just after sunset. Illustration by Eddie Irizarry using Stellarium.



4 - Location of comet NEOWISE on the night of closest approach to Earth (July 23, 2020), as seen from the central U.S., facing west-northwest just after sunset. Illustration by Eddie Irizaray using Stellarium.

In the meantime, it's still a good idea to get up early in the morning this week and try for a glimpse of comet NEOWISE while it's still relatively bright, just in case it gets fainter later in the month.

And forget about making plans to view this comet's next apparition in Earth's skies. Comet NEOWISE might be visible again from Earth, but not until around the year 8,786!

Bottom line: Comet C/2020 F3 (NEOWISE) is basically a binocular object, although some experienced observers with pristine skies are reporting they can see it with the eye alone. Excerpt from article in Earth Sky Magazine, by *Eddie Irizaray* Posted here by Jonathan Hilton astrosophy.com