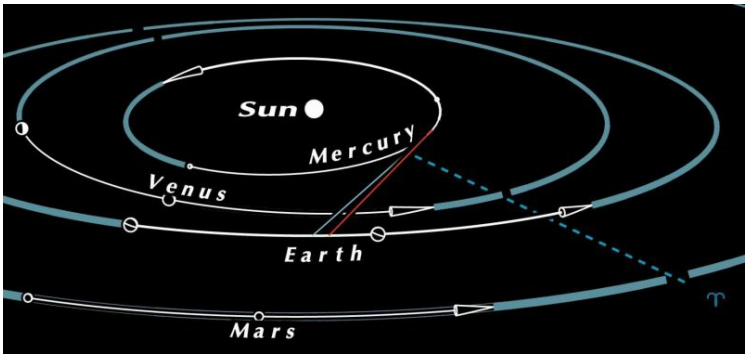
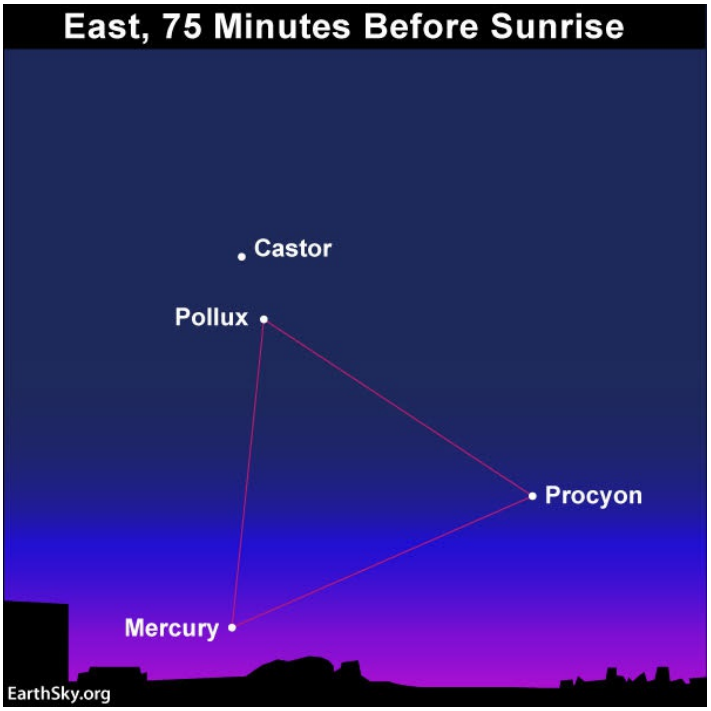
HOW TO CATCH MERCURY BEFORE SUNRISE



Space view (from 15 degrees north of the ecliptic plane) of the planets' paths in August and September, 2018. The dashed line is the vernal equinox direction. The Sun is exaggerated 5 times in size, the planets 300 times.

It's said that only a small fraction of Earth's population ever knowingly sees our solar system's innermost planet. If you live in the Northern Hemisphere, or southern tropics, these next two weeks – late August and early September 2018 – present a fine time to spot Mercury in the morning sky. Mercury will be harder to catch from temperate latitudes in the Southern Hemisphere (South Africa, southern Australia and New Zealand) because, from the far-southern part of Earth's globe now, it's more deeply buried in the glare of morning twilight.

Pollux and Procyon beam as 1st-magnitude stars whereas Castor is the sky's brightest 2nd-magnitude star. Pollux and Castor are noticeable for being bright and close together. With Mercury, Pollux and Procyon make a large equilateral triangle that rises before daybreak this week.



At mid-northern latitudes (United States, mainland Europe, Japan), Mercury rises about 1 1/2 hours before the Sun. Even from northerly latitudes, however, Mercury won't be an easy target.

Mercury is easily as bright as a 1st-magnitude star, but – as the innermost planet – it stays near the Sun in our sky. That means you'll often catch Mercury against a twilight background, making it appear dimmer than it would against a black night sky. Also, it's often seen low in the sky, amidst the atmospheric murkiness near the horizon.

Mercury should be visible to the eye alone, but binoculars always come in handy for any Mercury search.

Try to get up no later than 90 minutes before Sunup and find an unobstructed horizon in the direction of Sunrise. Better yet, stand on a balcony or a hilltop so that you can see farther over the horizon. Then, as darkness gives way to morning twilight, scan for Mercury over the Sunrise point on the horizon.

Don't get discouraged if you miss Mercury on August 25 or 26. Mercury is actually brightening day by day, and should be in good view in the morning sky for another week or two. Good luck!

Mercury, the innermost planet of the solar system, moved out of the evening sky and into the morning sky on August 9, 2018. Mercury probably won't first become visible in the morning sky until August 20th or so. The last week of August and the first several days of September will provide a good view of Mercury for the Northern Hemisphere and the southern tropics. A bit harder to spot from temperate latitudes in the Southern Hemisphere.

During the last week of August at mid-northern latitudes, Mercury will rise about 1 1/2 hours before Sunrise. At temperate latitudes in the Southern Hemisphere, on the other hand, Mercury only rises an hour or less before the Sun. Mercury will reach its greatest elongation from the Sun on August 26, 2018, and its reign as the morning "star" will extend until September 21, 2018 (same date that Venus reaches its greatest illuminated extent in the evening sky).

What do we mean by bright planet? By bright planet, we mean any solar system planet that is easily visible without an optical aid and that has been watched by our ancestors since time immemorial. In their outward order from the Sun, the five bright planets are Mercury, Venus, Mars, Jupiter and Saturn. These planets are typically as bright as the brightest stars. Plus, these relatively nearby worlds tend to shine with a steadier light than the distant, twinkling stars.

AK, with EarthSky and Wikipedia Notes.