

Watch Saturn and Neptune retrograde near The Turtle in 2025.

***Now within a binocular field of Saturn and Neptune
... Bring back the Turtle!***

Following this article is a chart provided by our friend and colleague Robert D. Miller, for using binoculars or a finder scope to locate **Neptune** by *star hopping*, beginning with **Saturn** and stars of **The Turtle** asterism in 2025-26.

The now obsolete asterism **Testudo, the Turtle**, located between the Circlet of Pisces and the star Iota in Cetus, consists of the following **six stars** in Pisces:

The body, or shell, roughly rectangular, 1° in width, and 3° in height,

27 Piscium (mag. 4.9)

29 Piscium (mag. 5.1)

33 Piscium (mag. 4.6)

30 Piscium (mag. 4.4)

The neck and head of the Turtle, extending 2.8° WNW from 27 Piscium:

24 Piscium (mag. 5.9)

20 Piscium (mag. 5.5)

The entire asterism of six stars, from 20 Piscium to 33 Piscium, spans just 5¼°, easily fitting into the field of view of most 7- or 8-power binoculars.

Following is an excerpt from

[https://en.wikipedia.org/wiki/Pisces_\(constellation\)](https://en.wikipedia.org/wiki/Pisces_(constellation))

In 1754, the botanist and author [John Hill](#) proposed to sever a southern zone of Pisces as **Testudo** (the Turtle).^[36] 24 – 27 – YY(30) – 33 – 29 Psc.,^[37] It would host a natural but quite faint [asterism](#) in which the star 20 Psc is the head of the turtle. While [Admiral Smyth](#) mentioned the proposal,^[38] it was largely neglected by other astronomers, and it is now [obsolete](#).^[37]

Footnotes:

36• [Allen, R. H.](#) (1963). [Star Names: Their Lore and Meaning \(Reprint ed.\)](#). [New York, NY: Dover Publications Inc.](#) p. [163](#) [342](#). [ISBN 978-0-486-21079-7](#).

37 • Ciofi, Claudio; Torre, Pietro, [Costellazioni Estinte \(nate dal 1700 al 1800\)](#): Sezione di Ricerca per la Cultura Astronomica

38 • Smyth, W. H., (1884) [The Bedford Catalogue](#), p. 23

See also

https://en.wikipedia.org/wiki/Pisces_in_Chinese_astronomy

You can also refer to an especially useful chart showing the motions of Saturn and Neptune near the Turtle asterism in 2025-26, published in *Sky & Telescope*, June 2025, page 51.

However, that chart is available only to online or print subscribers. The chart shows both planets' retrograde loops surrounding their oppositions of September 2025. **All six stars of the Turtle asterism mentioned above are plotted, but not labeled. Five additional stars plotted, but not labeled, are listed here.**

HIP 417 (= HR 2 = HD 6), mag. 6.3, 2.65° NNE of 29 Psc;

4 Cet, mag. 6.4v; and **5 Cet**, mag. 6.2v, both stars actually in Pisces, 9.2' (arcminutes) apart, 1.55° to 1.70° ENE of 29 Psc. [v = variable star.]

XZ Psc, mag. 5.8v, 2.65° WNW of HIP 417; and

21 Psc, mag. 5.8, 1.65° NW of XZ Psc.

There are two much fainter additional stars shown on the Sky and Telescope finder chart you may encounter as you explore the field of Neptune in November 2025 through early January 2026. I have not identified them, but it would be useful to know their magnitudes to make it less likely to confuse

them with Neptune. Here is a description of their locations:

One is a star of about mag. 8, NNW of 29 Psc, about 85 percent of the way from 29 Psc toward the mid-November 2025 portion of Neptune's path. **The other is a fainter star very closely south of Neptune's western stationary point**, where the planet will linger for several days around the end of its retrograde in early December.

The chart shows Neptune and Saturn moving retrograde in celestial longitude (toward WSW, mostly nearly parallel to the ecliptic) on the following dates:

Neptune retrograding 2.8° from July 4, 2025 until December 9, 2025;

Saturn retrograding 6.8° from July 13, 2025 until November 27, 2025.

On November 1, 2025, the pair of 5th-mag. stars 27 and 29 Psc, 0.9° apart, are easy to spot in the same binocular field as Saturn. They are between east and east-northeast of Saturn, by nearly 3.0° and 3.9° , respectively. On Nov. 1, Neptune is within 4.2° ENE of Saturn, and roughly north of the pair of stars, namely 2.1° from 27 Psc, and 1.6° from 29 Psc. Note the 6.3-mag. star HIP 417, 2.65° NNE of 29 Psc. On Nov. 1, Neptune is 1.6° SW of HIP 417. Thus, Neptune is then equidistant from 29 Psc and HIP 417, forming an isosceles triangle.

On Nov. 21, Saturn and Neptune reach their maximum distance apart during this apparition, $4^\circ 24'$. With both planets nearing end of retrograde, their separation varies very slowly, remaining 4.4° (to the nearest 0.1 degree) throughout Nov. 12-30. Thereafter, Saturn gains on Neptune, and will pass just $0^\circ 50'$ (0.83°) SSE of the 8th-magnitude planet on February 20, 2026. By then they'll be only 28° from the Sun, and less than 9° above the horizon at the end of evening twilight as seen from lat. 40° N.

Watch for the following events between November and these planets' departure near the end of February:

Nov. 27: Saturn ends retrograde 1.7° SW of 5.5-mag. 20 Psc (head of the Turtle) and 2.3° WSW of 5.9-mag. 24 Psc (in the Turtle's neck). Watch Saturn's changing configuration with these stars in January,

Dec. 9: Neptune ends retrograde 4.2° NE of Saturn, 1.6° NNW of 29 Psc, 1.9° N of 27 Psc, and 2.0° SW of HIP 417.

January 6, 2026: On this night when Saturn passes closest to SSE of 20 Psc, it is equidistant from 20 and 24 Psc, 0.9° from each. Also tonight, find Neptune 3.2° NE of Saturn and 1.6° NNW of 29 Psc.

On January 18, as twilight ends in mid-U.S., Saturn appears only $2.0'$ (arcminutes) from the 5.9-mag. star 24 Piscium, and closes the gap between them as the evening progresses. The star 24 Psc is located 1.3° from 20 Psc and 1.5° from 27 Psc, on a line joining them. From farther west in the U.S., the gap between Saturn and 24 Psc at the end of twilight is even narrower. Later that night, after they have set, Saturn will pass slightly south of the star 24 Psc.

On Jan. 29, Saturn is equidistant from 24 and 27 Psc ($0^\circ 58'$).

On Feb. 3, Saturn is equidistant from 27 and 29 Psc (1° 01').

We think you will find our simplified chart below to be user-friendly for locating Neptune with binoculars or finder scope by star hopping, using Saturn and the stars of the Turtle asterism as starting points. Finder charts for Uranus and Neptune during their retrograde are now available on the *Sky Calendar*

Extra Content Page at

<https://abramsplanetarium.org/msta/>

Also, check out, on the same web page, the **monthly evening and morning mid-twilight charts** showing changing visibility of the naked-eye planets and bright stars at dusk and dawn through the end of 2026.