

### A lonely planet & dark world

# Neptune

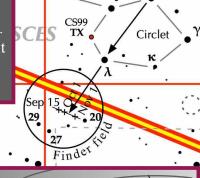


#### Neptune's maximum angular diameter

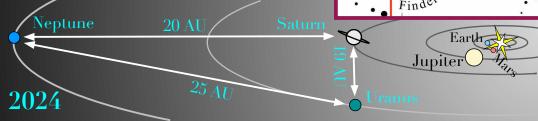
- equals  $2.4 \sec = 0.00067^{\circ}$
- equals that of a golf ball viewed at 2.3 miles.

### **How to locate Neptune in 2024:**

- Find Theta and Lambda Piscium in the Circlet of Pisces.
- Draw a line from Theta through Lambda and extend it for the same length.
- The line ends near where 7.8 magnitude Neptune lurks.



 $\omega_{\cdot \text{CS100}}$ 



# Neptune's nearest planetary neighbors:

In 2024 and for the next 6 years, Neptune's nearest planetary neighbor is the 6.6 magnitude Saturn, not the 6.9 magnitude Uranus. Both planets are farther from Neptune than Uranus is from Earth. Strangely, 3rd-6th magnitude Jupiter becomes Neptune's nearest neighbor in 2032.

# **Consequences of Diminished Sunlight at Neptune:**

Because it orbits at  $30\,\mathrm{AU}$ , it receives 1/900 the amount of sunlight as Earth.

- Illumination on Neptune is about the same as on Earth 40 minutes after sunset.
- Sun is magnitude -19.3, still far too bright to look at directly.
- The feeble amount of sunlight warms the planet to -346° F.
- Neptune's largest moon, Triton, appears the same size as our full moon, but nearly 150 times fainter, making it a dim orb floating in the darkness.
- Its 15 other moons are too dim and too small to easily see.
- Neptune's tenuous ring segments are largely too faint to see.

With no bright moons nor planets dotting the sky, Neptune is, indeed, a lonely planet.

