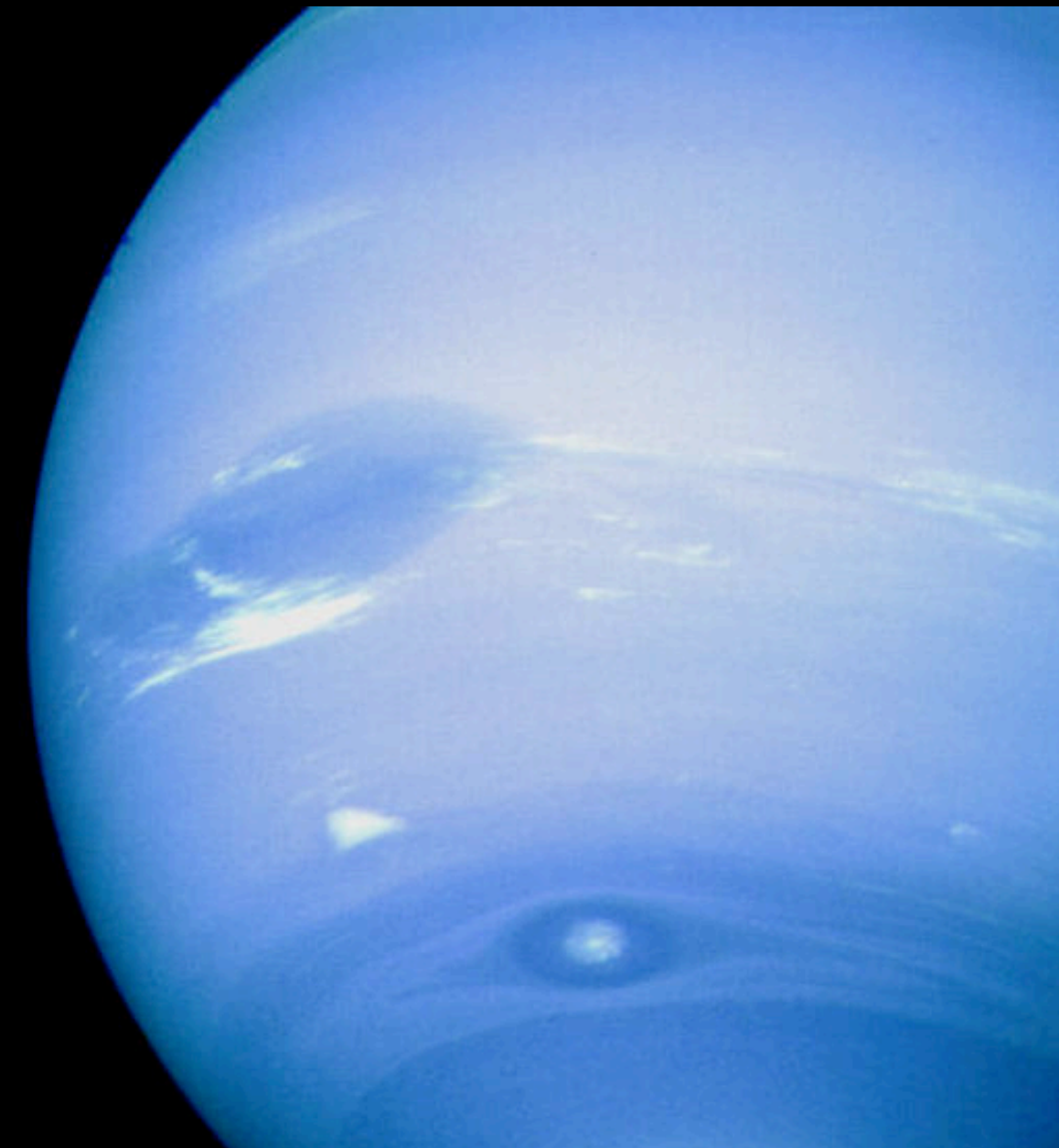


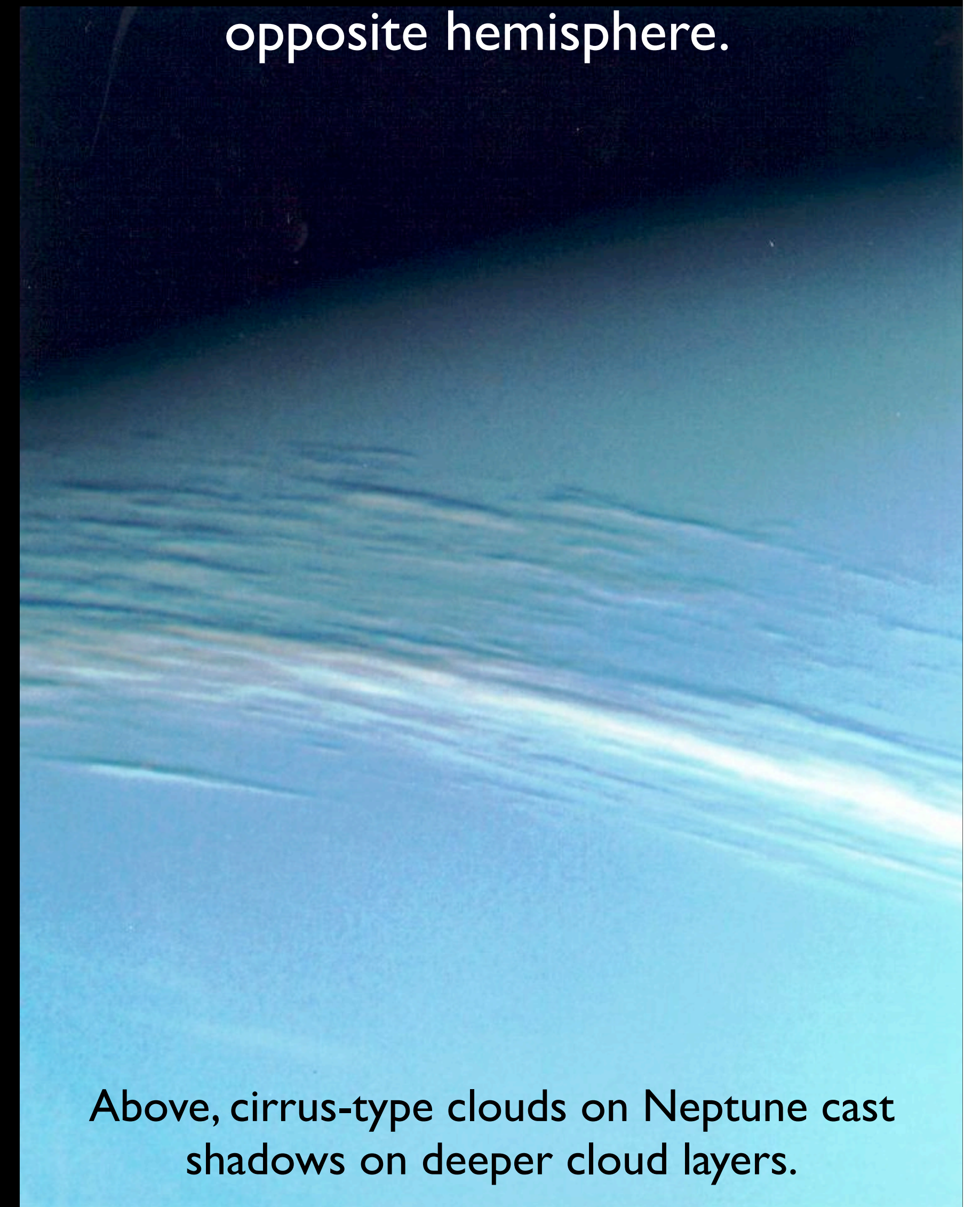
Neptune

1 Neptunian day = 16.1 Earth hours
1 Neptunian year = 165 Earth years

Neptune is the outermost **ice giant planet** in our solar system. Small amounts of methane in its atmosphere lend it a **deep blue colour**. Neptune was discovered because its gravity slightly alters the orbit of Uranus. Observing Uranus' orbit after its discovery enabled astronomers to **predict the existence** and location of a **previously unknown planet**. That planet, Neptune, was discovered on **September 23, 1846**.



When the Voyager 2 spacecraft flew past Neptune in 1989, two dark spots were visible in Neptune's atmosphere. The smaller one (left, below center) was a storm, but the **Great Dark Spot** (far left) was just a gap in Neptune's methane cloud deck. The Great Dark Spot had **vanished** by the time the Hubble Space Telescope viewed Neptune in 1994, but a **new dark spot** had appeared in the opposite hemisphere.

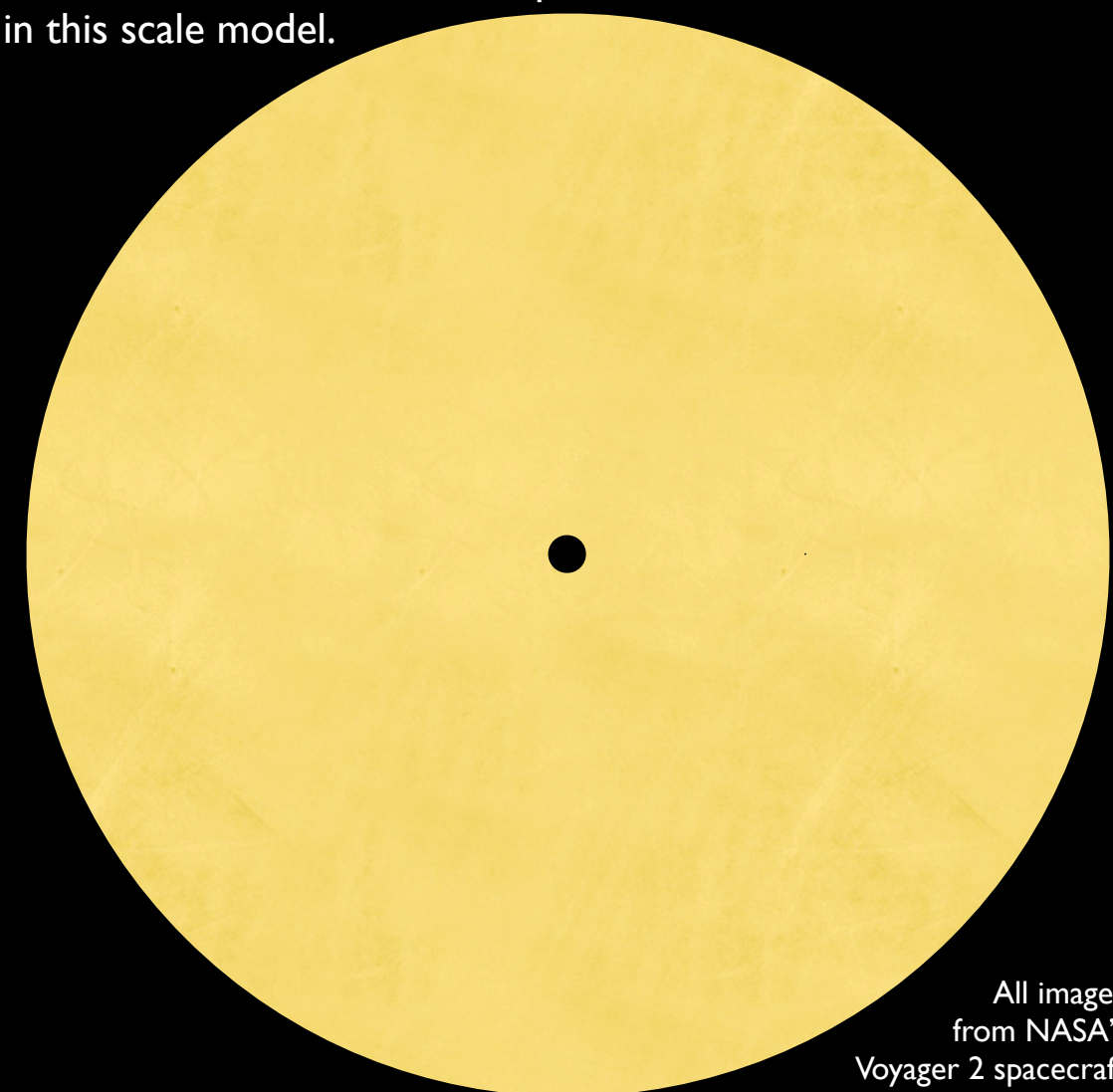


Above, cirrus-type clouds on Neptune cast shadows on deeper cloud layers.



Neptune's largest moon, **Triton**, is shown above. Triton orbits Neptune opposite to the direction Neptune spins. The tidal bulges Triton raises on Neptune pull backwards on Triton, pulling Triton a tiny distance closer to Neptune with every orbit. Eventually Triton will either **crash into Neptune** or **be torn apart** and form bright rings around Neptune like those around Saturn. (Neptune does have a few rings already. They are much narrower and darker than the rings of Saturn. That's why they weren't discovered until the 1980s.)

Neptune and Triton (seen as crescents above) are shown below with their correct sizes and separation relative to the Sun in this scale model.



All images from NASA's Voyager 2 spacecraft