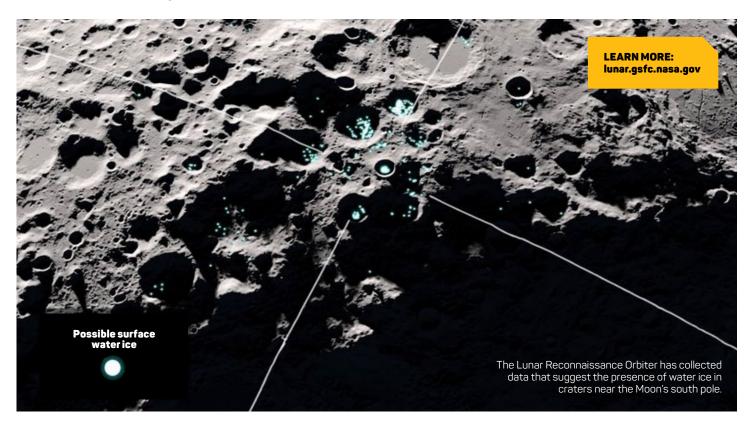
## Lunar Craters

A satellite orbiting the Moon is mapping its surface in unprecedented detail.





The Lunar Reconnaissance Orbiter is providing a close-up view of our nearest celestial neighbor.

**NASA's Lunar Reconnaissance Orbiter has been orbiting the Moon since 2009.** The spacecraft's on-board instruments, including a system of three cameras, capture high-resolution images of the Moon's surface from orbit. These observations have revealed new details about the Moon, including frost in some of its craters and mysterious patterns of light and dark material that have been dubbed "tattoos." Scientists believe that the Moon's magnetic field may be part of the cause for these light and dark patterns.

NASA scientists originally designed the Lunar Reconnaissance Orbiter to achieve a set of scientific objectives including identifying possible landing sites for future missions and exploring permanently shadowed regions for signs of frozen water. Having accomplished these goals, the spacecraft is now in an "extended mission phase." During extended missions, NASA scientists continue to use the spacecraft to ask new questions and expand the original scientific goals.