

NASA: VIRTUAL TOUR OF THE MOON

I had so much fun on my trip to the Moon. I first went to the Orientale Basin, which is near the western border. The surface gravity measurements on this lunar crust can give scientists an insight into the Moon's structure and interior. Next, I visited the South Pole. This region of the Moon receives little to no sunlight and is one of the coldest places in the Solar System ever recorded. The South Pole also may have potential water ice based on temperature readings from LRO's diviner instrument and reflectance from its laser altimeter Lola. Lola also allows scientists to peer into the darkness of Shackleton crater by bringing this digital elevation model. The crater itself is 21 kilometers wide and 4 kilometers deep, but it pales in comparison to the largest known impact in the earth-moon system -- The South Pole Aitken basin. Sitting on the farther side of the Moon, it's 2,500 kilometers across and 13 kilometers deep. Scientists don't yet know exactly how old the basin is, but it was first seen in the 1960s by spacecraft flying around the far side. The Tycho crater is around 100 million years old. There, the Lunar Reconnaissance Orbiter camera captures the central peak with a 100 meter wide Boulder At the summit. The Aristarchus Plateau region tells a lot about the rich volcanic history of the Moon. The Apollo 17 lunar landing still sits on the surface as well as the rover vehicle. My final destination was the North Pole. Detailed terrain measurements by Lola allow scientists to model sunlight and shadow at the poles over decades and centuries. Summit peaks in crater rims in this region may be ideal locations for generating solar power for future expeditions to the Moon. Overall, I really enjoyed this trip, and I definitely can't wait for future visits to other mysteries of space.