A light curve is a way of graphing a star’s brightness over time. Astronomers use light curves to infer that planets are orbiting distant stars. Sensitive instruments aboard spacecraft like NASA’s Spitzer Space Telescope and Kepler allow scientists to make detailed measurements of a star’s brightness and reveal periodic decreases. These dips in brightness occur when a planet orbits the star and blocks starlight. The size of the dip corresponds directly to the size of the planet. Spitzer verified the first three TRAPPIST-1 planets and discovered the other four using this method. All of the planets in the TRAPPIST-1 system are about the size of Earth!