The Kepler Space Telescope is part digital camera and part light meter (photometer). It measured the dip in light that occurs when a planet transits its star.

As of September 2019, Kepler has discovered nearly 2,700 exoplanets, including about 30 Earth-size exoplanets.

You can see the 42 charge coupled devices, or CCDs, that make up Kepler’s large focal plane array. This focal plane contains 95 million pixels. (It’s impossible to see those—they’re tiny!)

Kepler stared at this field of 100,000 stars in our Milky Way galaxy for four years. The CCDs viewed the area marked by rectangles.

In 2013 Ball engineers devised an ingenious way to extend Kepler’s life. NASA approved the second mission, dubbed K2, which discovered even more exoplanets.