The Multiwavelength Sub/millimeter Inductance Camera (MUSIC) is a multi-band imaging camera that employs 2304 Microwave Kinetic Inductance Detectors (MKIDs) in 576 spatial pixels to cover a 14 arc-minute field of view, with each pixel simultaneously sensitive to 4 bands centered at 0.85, 1.0, 1.3, and 2.0 mm. In April 2012 the MUSIC instrument was commissioned at the Caltech Submillimeter Observatory with a subset of the full focal plane. We examine the noise present in the detector timestreams during observations taken in the first two years of operation.