

Figure 1: Meqtrees SKA simulation and Meqtrees-generated dirty image of two 1 Jy point sources with 75' separation located at R.A.: $0^h0^m0.1^s$, Dec.: $28^d0^m1^s$ and R.A.: $0^h0^m0.1^s$, Dec.: $26^d45^m10^s$, with Cortes beam and pointing errors ($l_{offset} = 0.005 \text{ rad} = 17.757'$, $m_{offset} = 0.00123 \text{ rad} = 4.250'$) applied. Simulation: log-spiral config. with $N_a = 150$; field center: R.A. = $0^h0^m0.1^s$, Dec. = $28^d0^m1^s$; observing freq.: 1400 MHz; number of freq. channels: 64; channel increment: 5.0 MHz; antenna diam.: 12.0 m.; integration time: 60 seconds; scan length: 90 min.; FWHM of primary beam: $\sim 75'$; Stokes parameter in image: I; imaging weights: uniform; number of convolution functions for w-projection: 128; image size in pixels: 2048; image size in arcmin: 273; image displayed, zoomed in, and brightness-contrast colormap adjustments with casaviewer; colormap used: 'isophotes'.

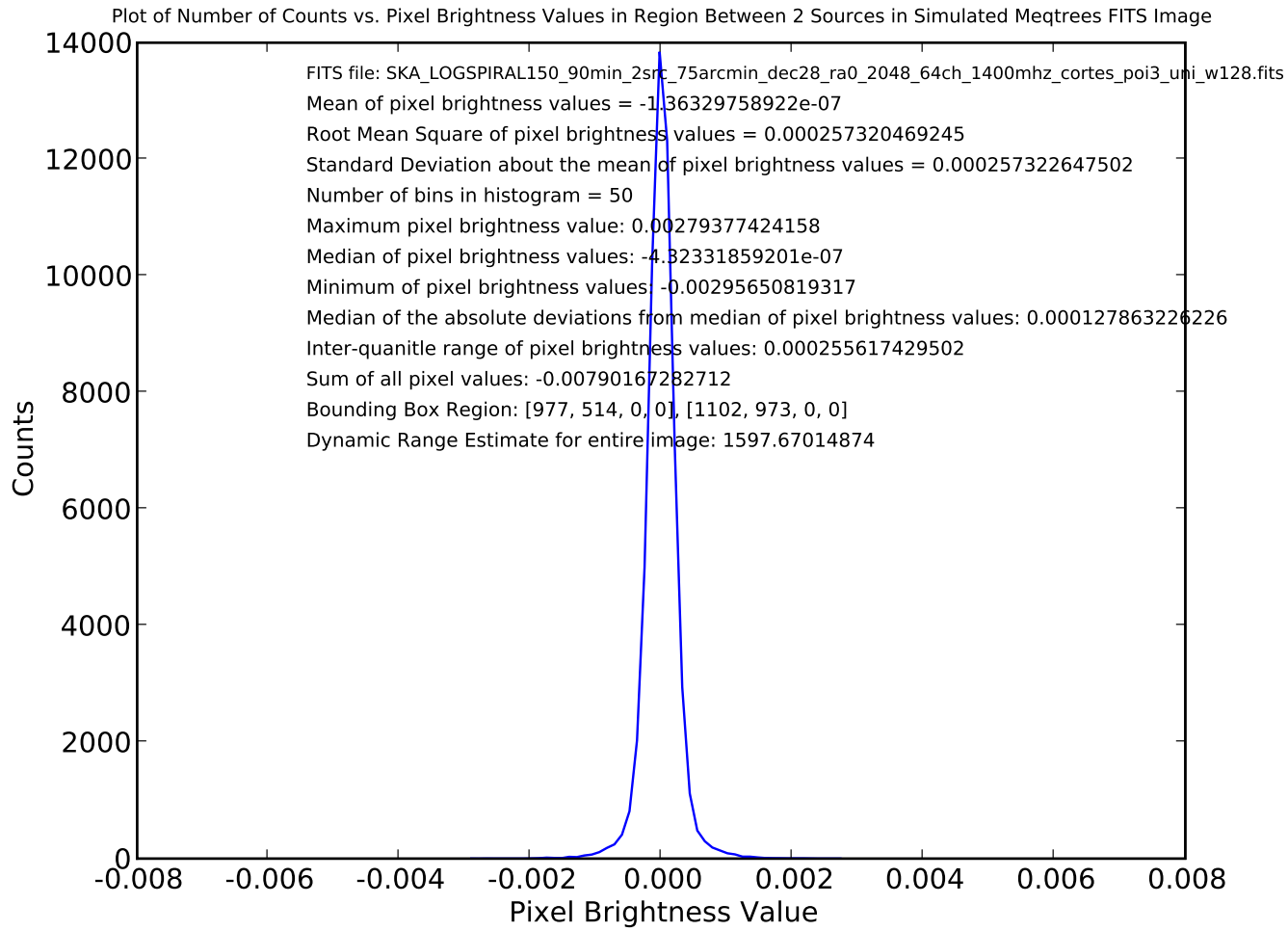


Figure 2: Line plot of counts vs. pixel brightness value for a specified bounding box region (bottom left corner = [977,514,0,0], top right corner = [1102,973,0,0]) between but not including the two point sources in Fig. 1. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) pixel brightness value in the image to the rms of pixel brightness values in the bounding box region.

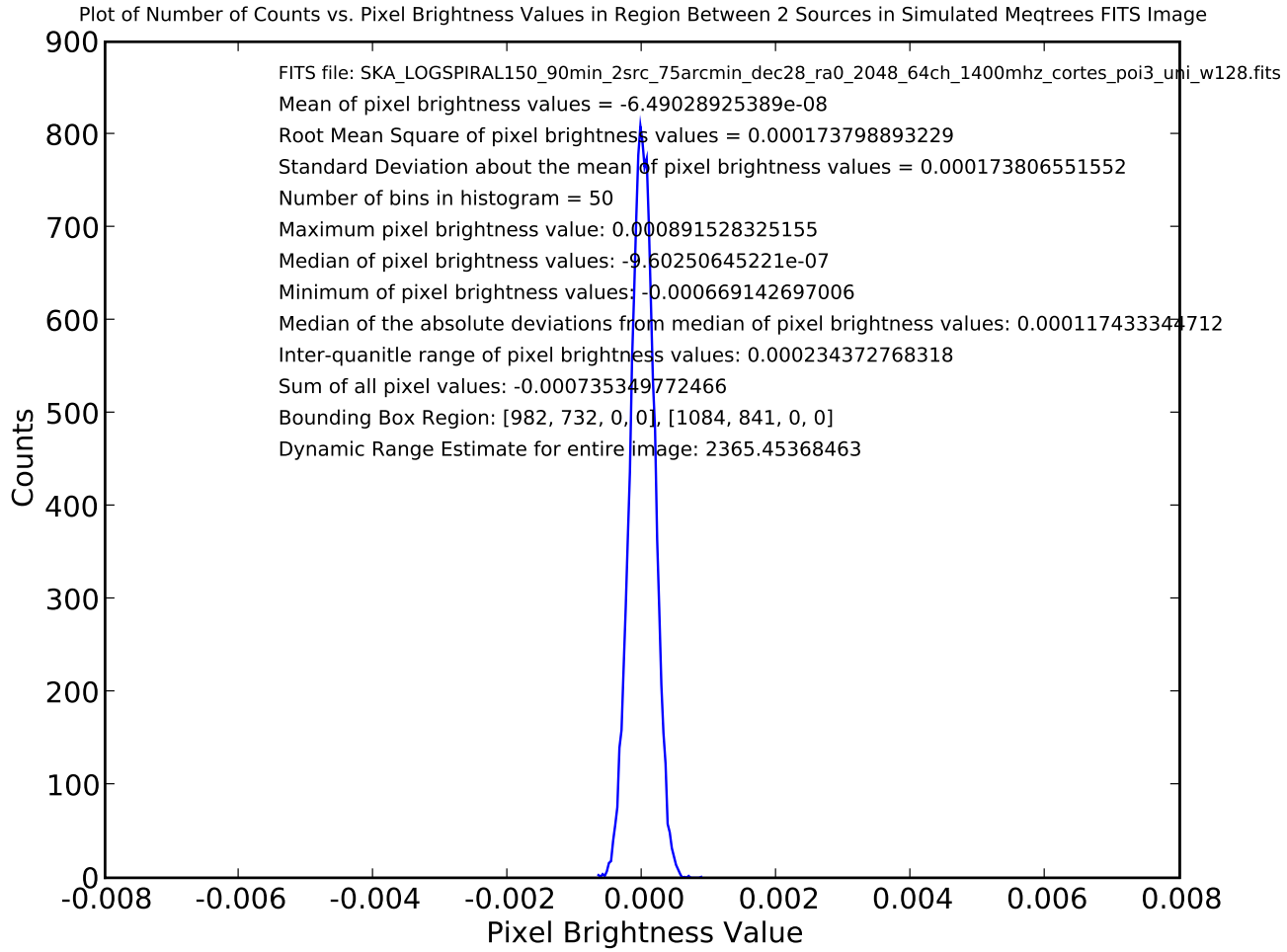


Figure 3: Line plot of counts vs. pixel brightness value for a specified smaller bounding box region (bottom left corner = [982,732,0,0], top right corner = [1084,841,0,0]) between the two point sources in Fig. 1. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) pixel value in the image to the rms of pixel brightness values in the bounding box region.

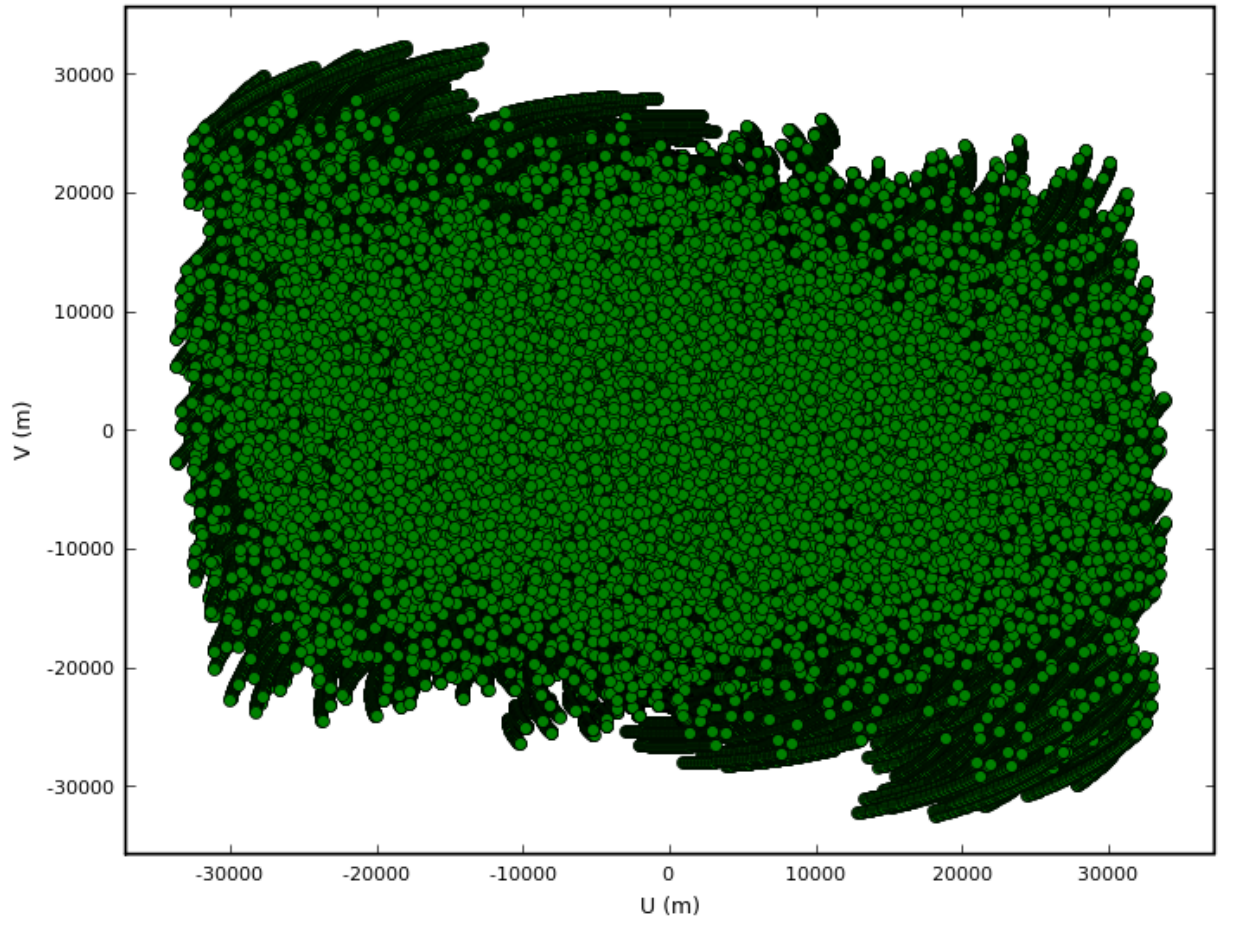


Figure 4: Plot of u-v coverage (in meters) for Meqtrees SKA simulation that is the same as that in Fig. 1. The plot was generated with CASA using the 'plotxy' command.

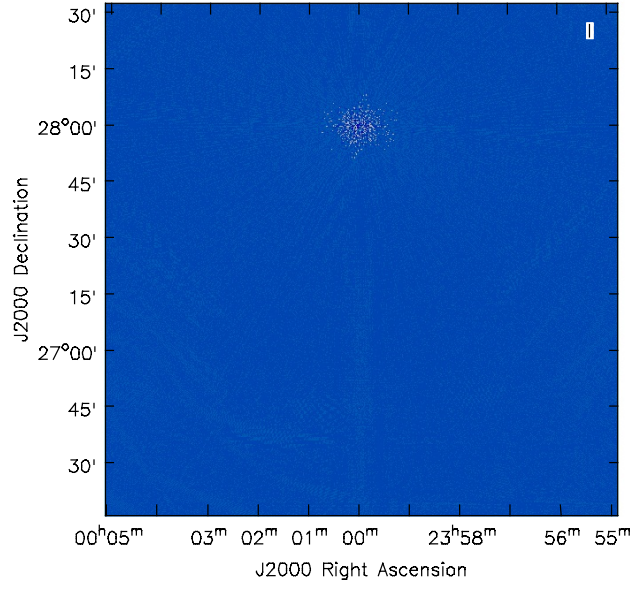


Figure 5: Meqtrees SKA simulation and Meqtrees-generated dirty image exactly the same as that in Fig. 1 except that $N_a = 175$.

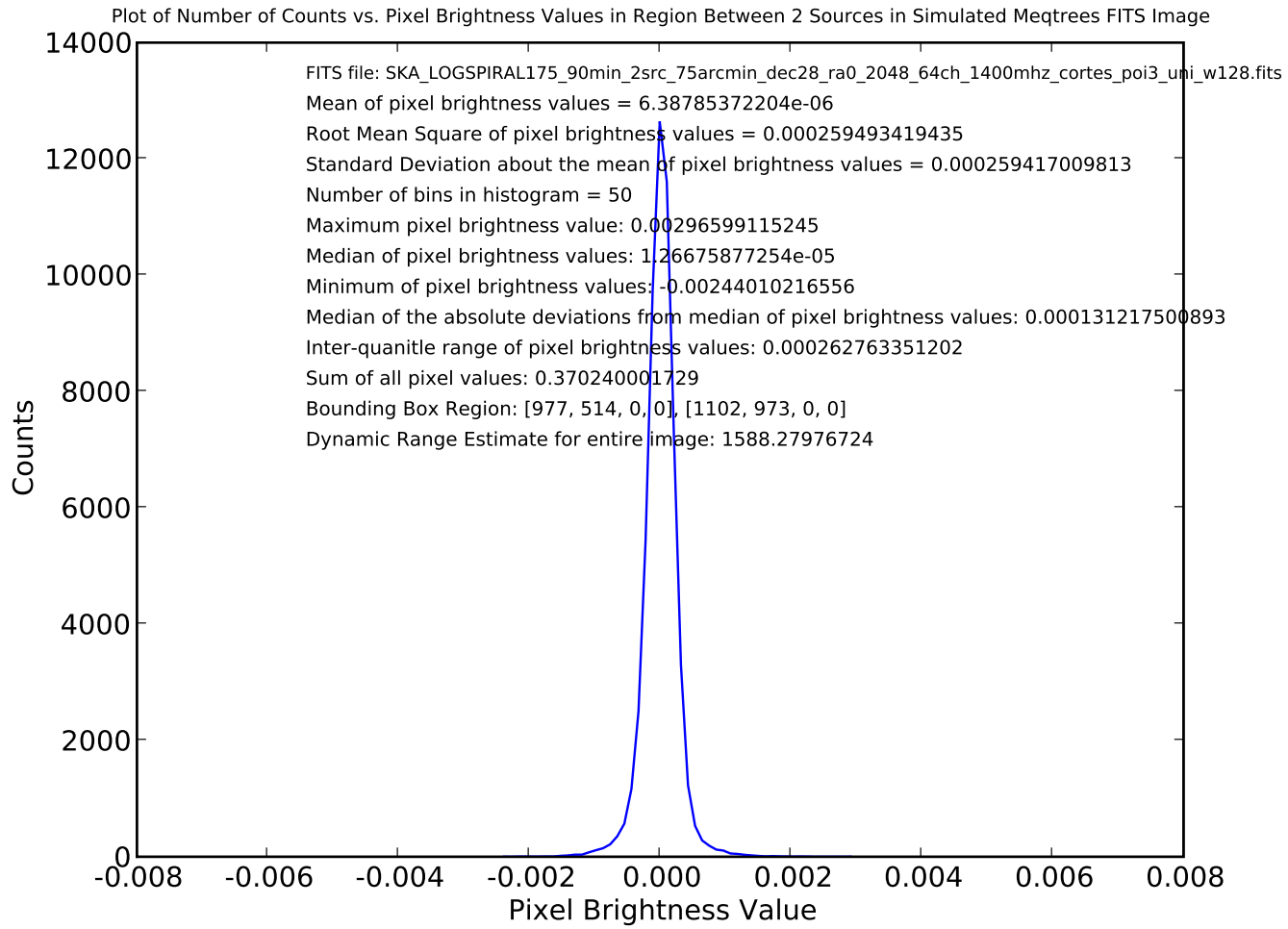


Figure 6: Line plot of counts vs. pixel brightness value for a specified bounding box region (bottom left corner = [977,514,0,0], top right corner = [1102,973,0,0]) between but not including the two point sources in Fig. 5. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) pixel brightness value in the image to the rms of pixel brightness values in the bounding box region.

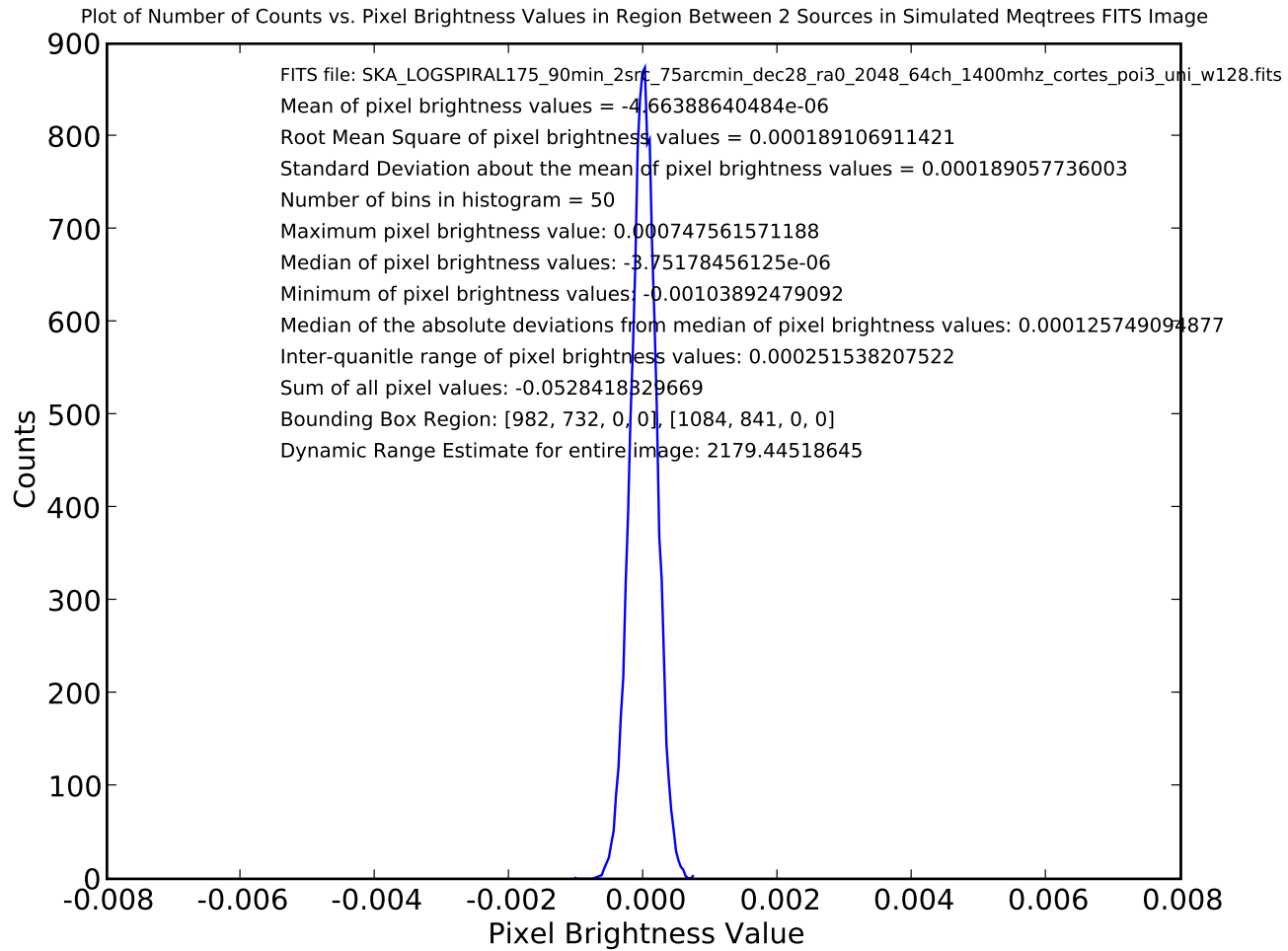


Figure 7: Line plot of counts vs. pixel brightness value for a specified smaller bounding box region (bottom left corner = [982,732,0,0], top right corner = [1084,841,0,0]) between the two point sources in Fig. 5. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) pixel value in the image to the rms of pixel brightness values in the bounding box region.

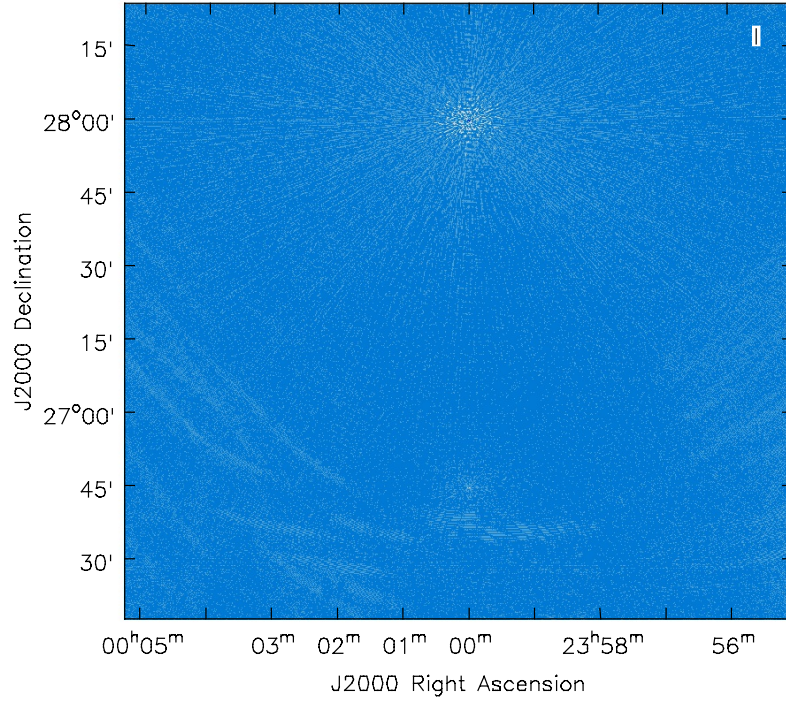


Figure 8: Meqtrees SKA simulation and Meqtrees-generated dirty image exactly the same as that in Fig. 1 except that $N_a = 200$.

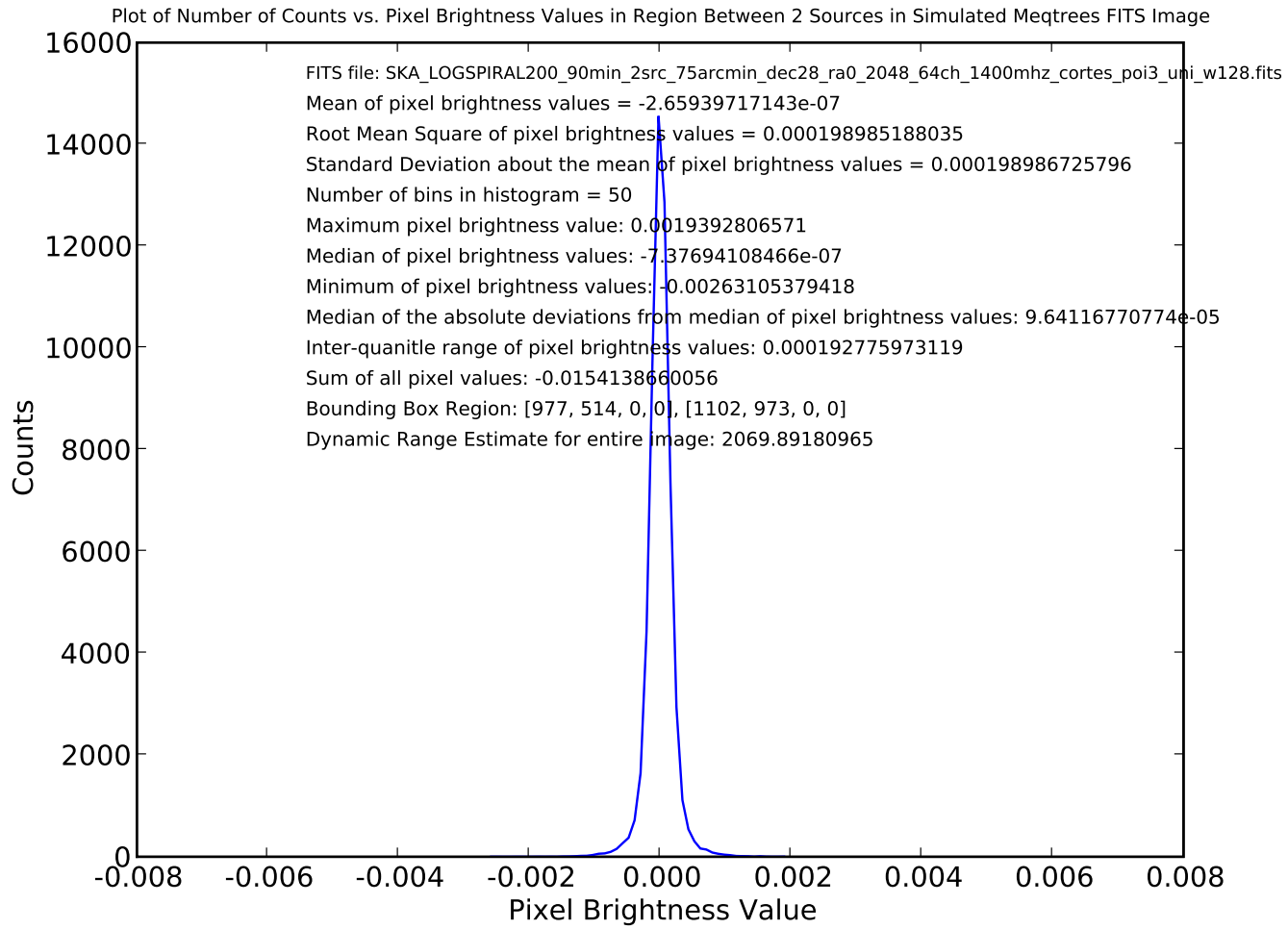


Figure 9: Line plot of counts vs. pixel brightness value for a specified bounding box region (bottom left corner = [977,514,0,0], top right corner = [1102,973,0,0]) between but not including the two point sources in Fig. 8. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) pixel brightness value in the image to the rms of pixel brightness values in the bounding box region.

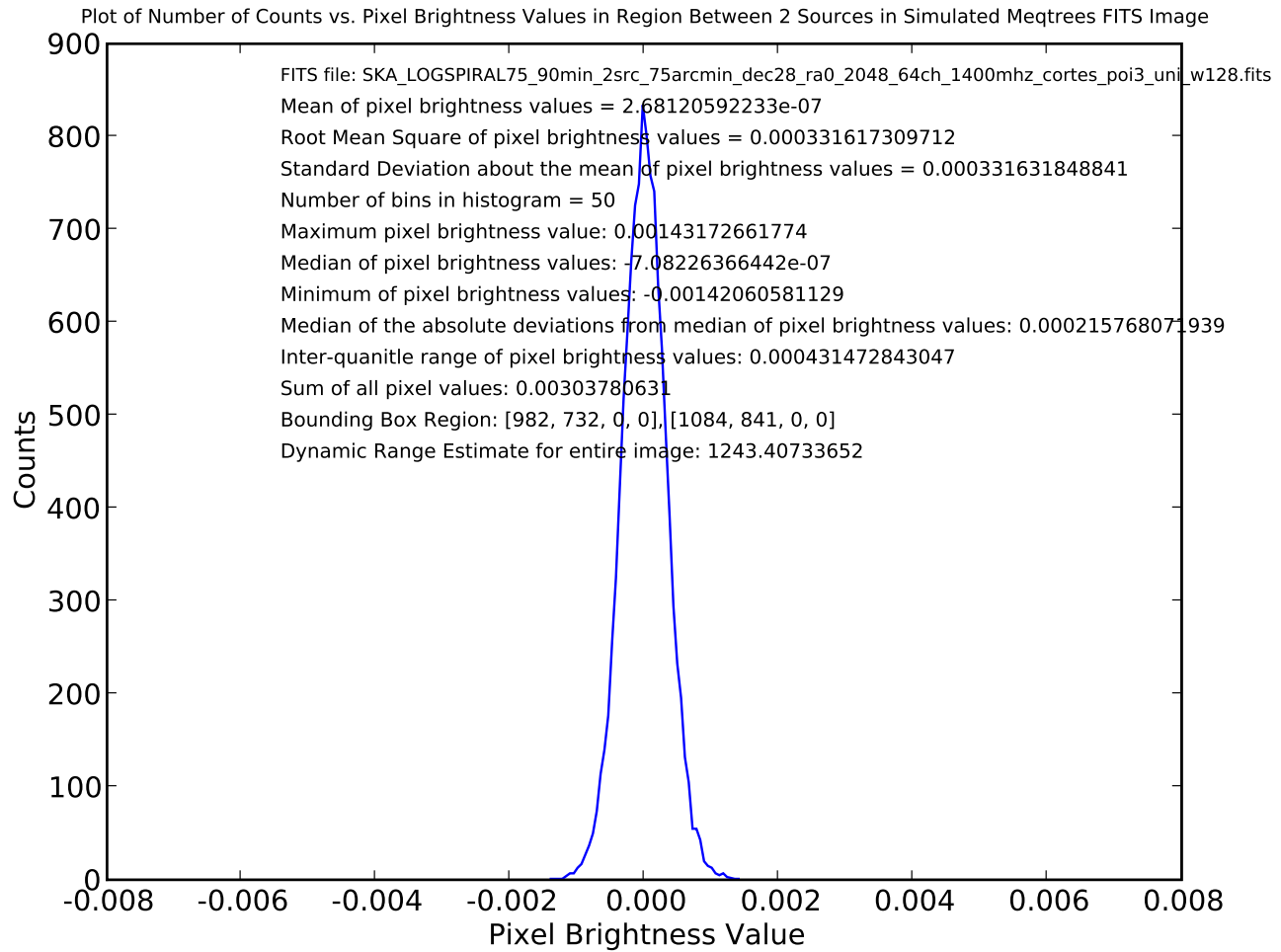


Figure 10: Line plot of counts vs. pixel brightness value for a specified smaller bounding box region (bottom left corner = [982,732,0,0], top right corner = [1084,841,0,0]) between the two point sources in Fig. 8. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) pixel value in the image to the rms of pixel brightness values in the bounding box region.