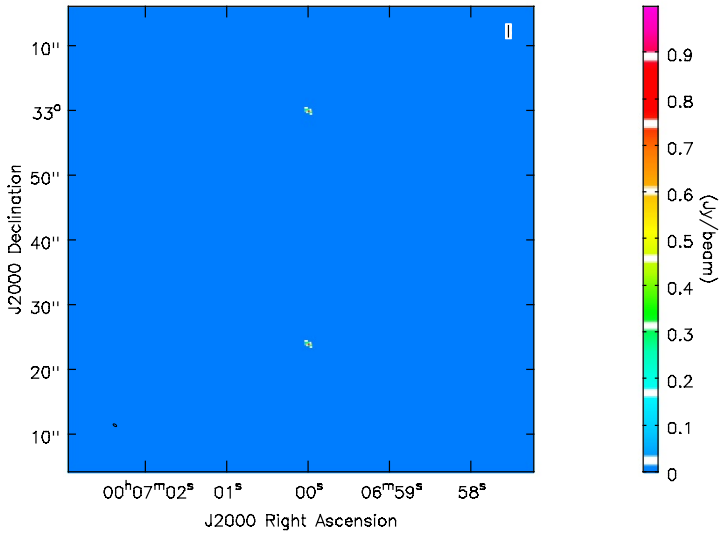

Figure 1: CASA (active developer release 3.3.0) VLA simulation and CASA-generated CLEANed (N_{iter} = 3000 with Clark CLEAN algorithm) image of two 1 Jy point sources with 0.6' separation located at R.A.: $0^h7^m0.0^s$, Dec.:$33^d00^m00^s$ (image center) and R.A.: $0^h7^m0.0^s$, Dec.:32^d59^m00s , with VLA primary beam model turned off. Simulation: N_a = 30, and observing frequency of 43.0 GHz; # of freq. channels: 16; channel increment: 5.0 MHz; antenna diam.: 25.0 m.; t_{int} = 60 sec.; Stokes parameter in image: I; imaging weights: natural; image size: 576 pixels; pixel size: 0.25 arcsec. Oversampling factor for GCF: 30 (in all simulations). Image displayed, and brightness-contrast colormap adjustments with casaviewer; colormap used: 'isophotes'.

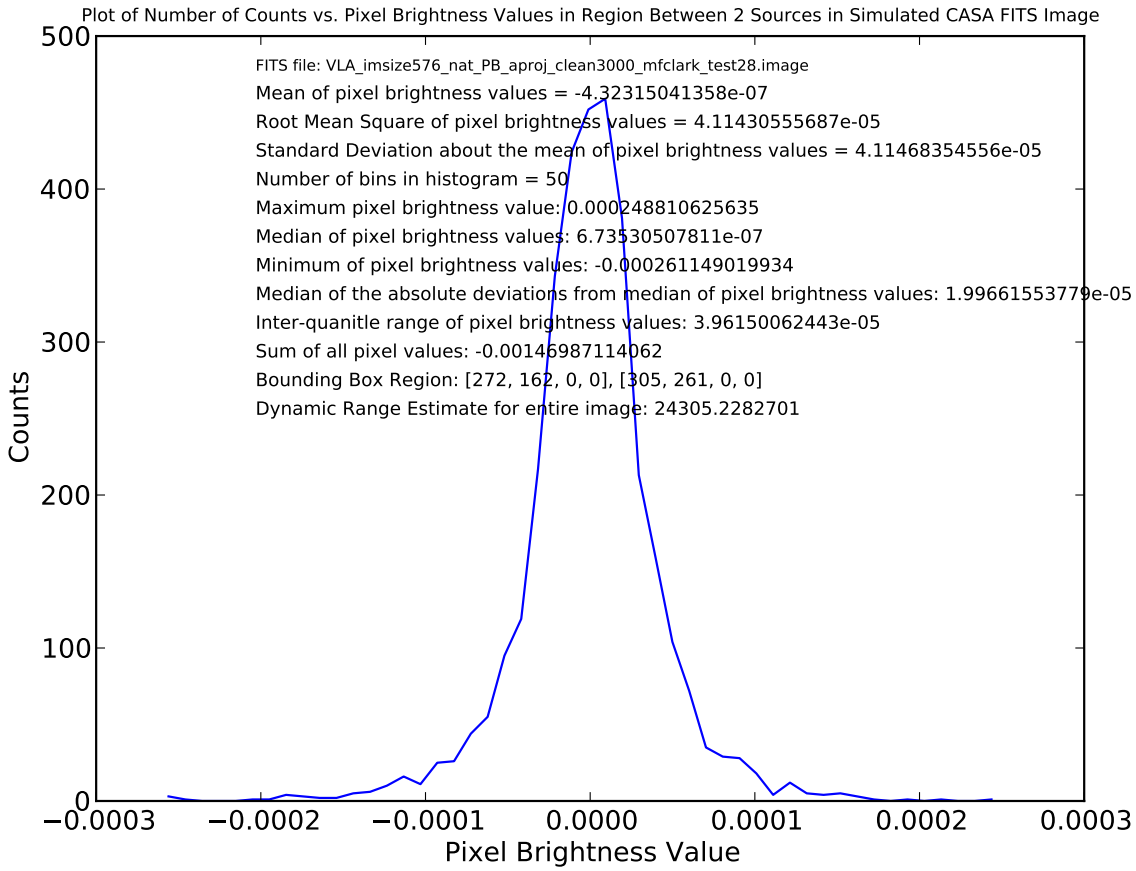

Figure 2: Line plot of counts vs. pixel brightness value for a specified bounding box region (bottom left corner = [272,162,0,0], top right corner = [305,261,0,0]) between but not including the two point sources in Fig. 1. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) positive pixel brightness value in the image to the rms of pixel brightness values in the bounding box region.

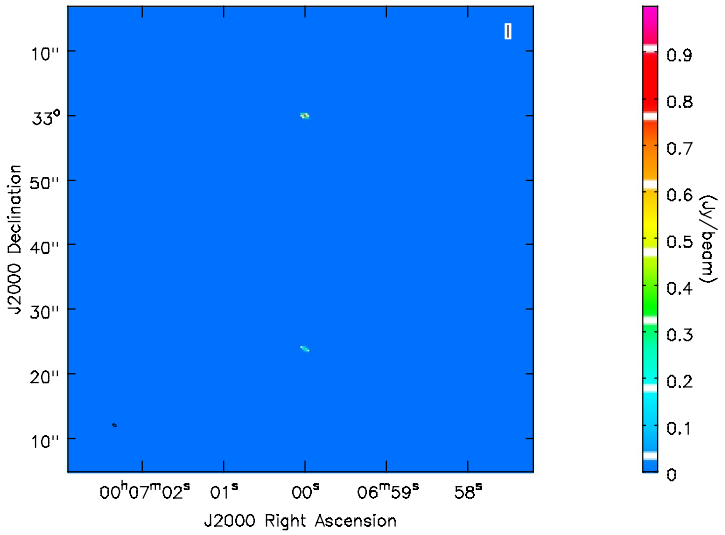

Figure 3: CASA (active developer release 3.3.0) VLA simulation and CASA-generated CLEANed ($N_{iter} = 3000$ with Clark CLEAN algorithm) image of two 1 Jy point sources with 0.6' separation located at R.A.: $0^h7^m0.0^s$, Dec.:$33^d00^m00^s$ (image center) and R.A.: $0^h7^m0.0^s$, Dec.:32^d59^m00s , with VLA primary beam model turned on (FWHM $\sim 1'$) but NOT corrected for. Simulation: $N_a = 30$, and observing frequency of 43.0 GHz; # of freq. channels: 16; channel increment: 5.0 MHz; antenna diam.: 25.0 m.; $t_{int} = 60$ sec.; Stokes parameter in image: I; imaging weights: natural; image size: 576 pixels; pixel size: 0.25 arcsec. Image displayed, and brightness-contrast colormap adjustments with casaviewer; colormap used: 'isophotes'.

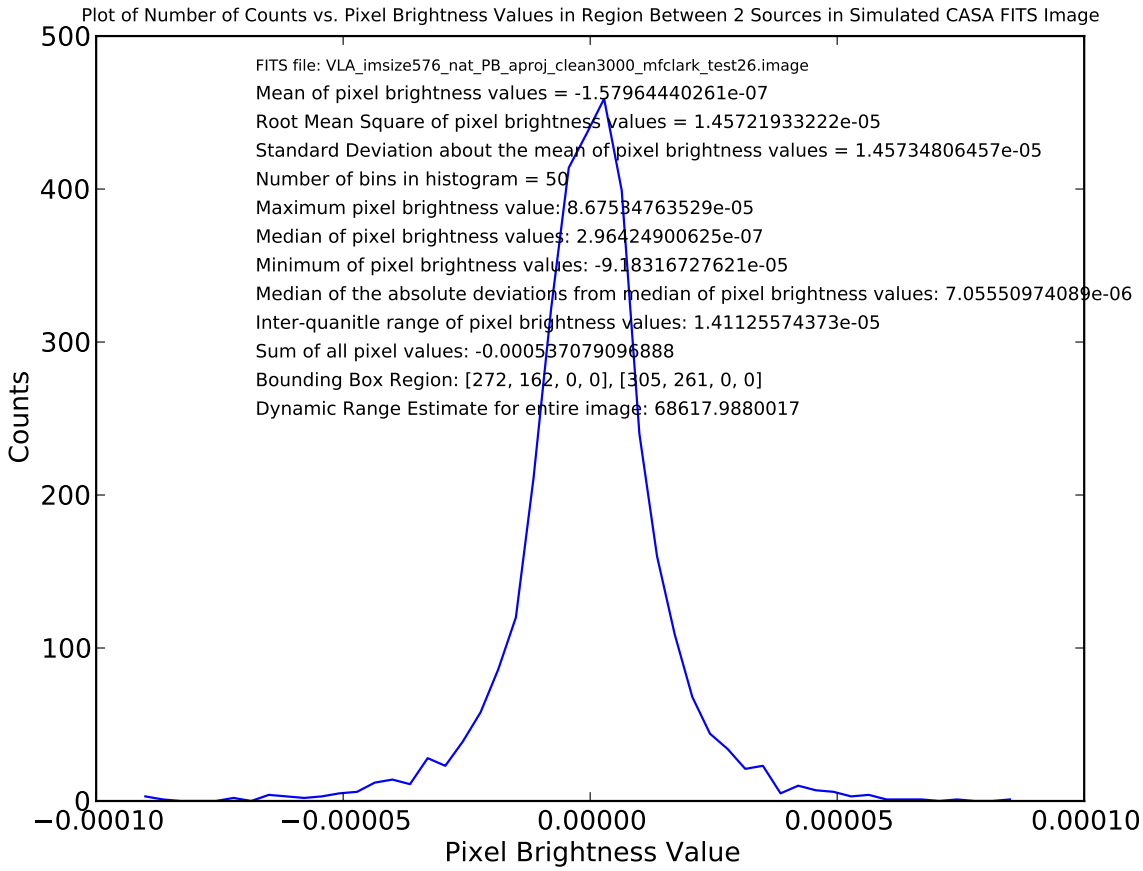

Figure 4: Line plot of counts vs. pixel brightness value for a specified bounding box region (bottom left corner = [272,162,0,0], top right corner = [305,261,0,0]) between but not including the two point sources in Fig. 3. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) positive pixel brightness value in the image to the rms of pixel brightness values in the bounding box region.

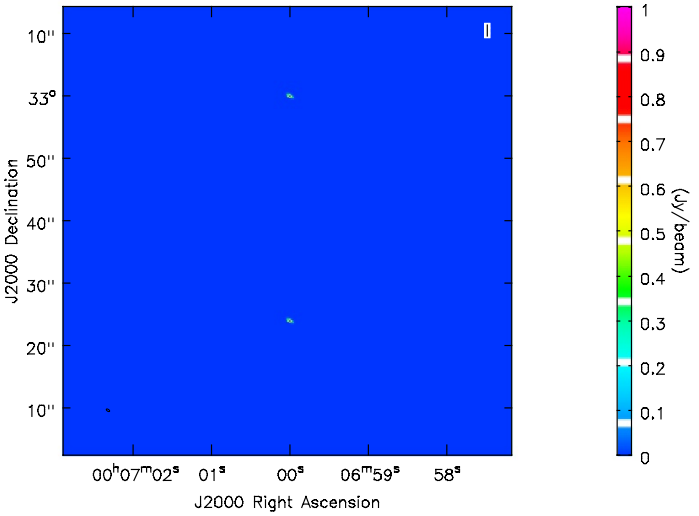

Figure 5: CASA (active developer release 3.3.0) VLA simulation and CASA-generated CLEANed (N_{iter} = 3000 with Clark CLEAN algorithm) image of two 1 Jy point sources with 0.6' separation located at R.A.: $0^h7^m0.0^s$, Dec.:$33^d00^m00^s$ (image center) and R.A.: $0^h7^m0.0^s$, Dec.:32^d59^m00s , with VLA primary beam model turned on (FWHM $\sim 1'$) and corrected for, i.e., it is "flux-corrected" (divided by the "flux image"), but not with use of A-Projection algorithm. Simulation: N_a = 30, and observing frequency of 43.0 GHz; # of freq. channels: 16; channel increment: 5.0 MHz; antenna diam.: 25.0 m.; t_{int} = 60 sec.; Stokes parameter in image: I; imaging weights: natural; image size: 576 pixels; pixel size: 0.25 arcsec. Image displayed, and brightness-contrast colormap adjustments with casaviewer; colormap used: 'isophotes'.

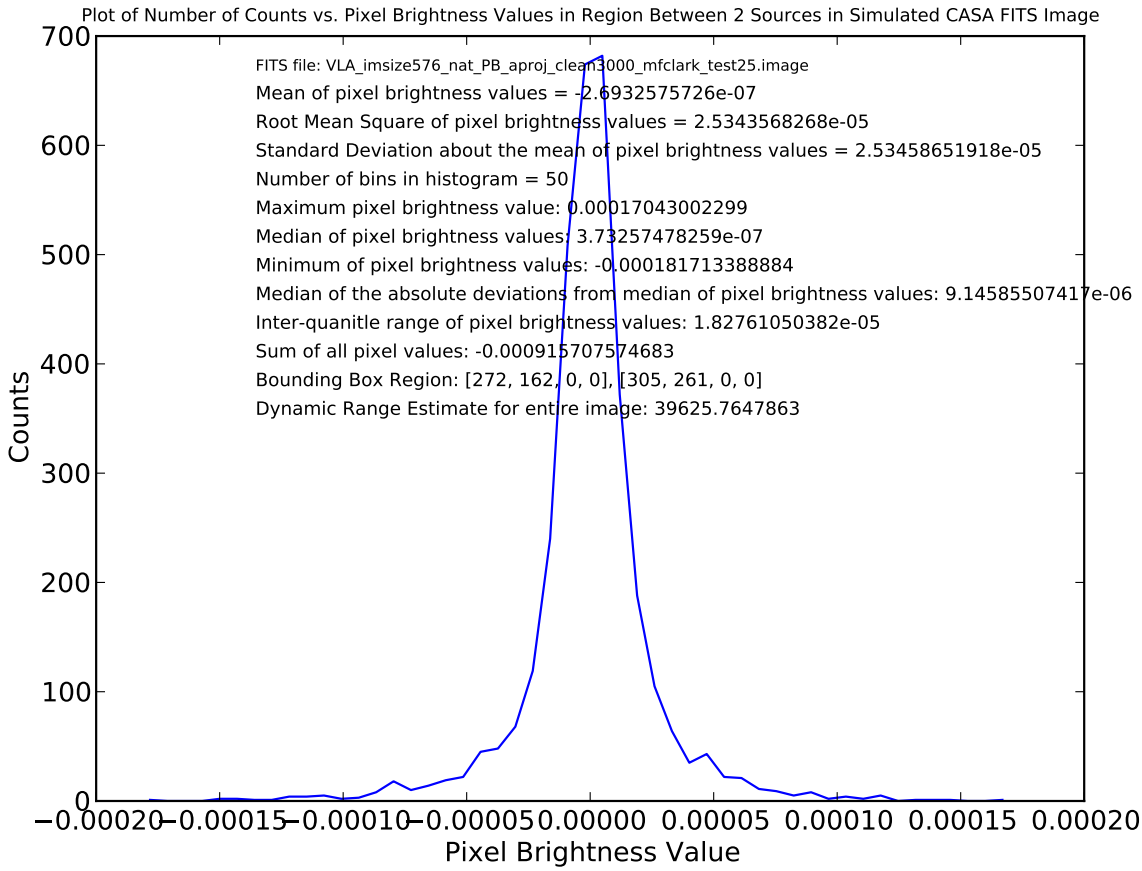

Figure 6: Line plot of counts vs. pixel brightness value for a specified bounding box region (bottom left corner = [272,162,0,0], top right corner = [305,261,0,0]) between but not including the two point sources in Fig. 5. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) positive pixel brightness value in the image to the rms of pixel brightness values in the bounding box region.

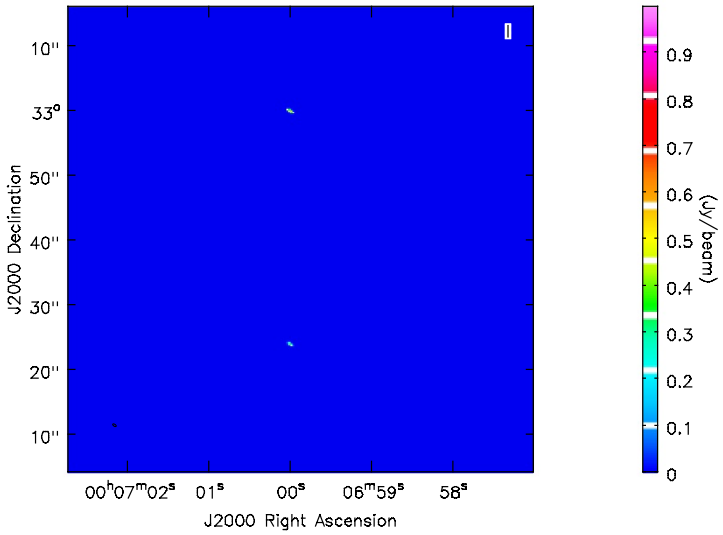

Figure 7: CASA (active developer release 3.3.0) VLA simulation and CASA-generated CLEANed (N_{iter} = 3000 with Clark CLEAN algorithm) image of two 1 Jy point sources with 0.6' separation located at R.A.: $0^h7^m0.0^s$, Dec.:$33^d00^m00^s$ (image center) and R.A.: $0^h7^m0.0^s$, Dec.:32^d59^m00s , with VLA primary beam model turned on (FWHM $\sim 1'$) and corrected for with use of A-Projection algorithm. Simulation: N_a = 30, and observing frequency of 43.0 GHz; # of freq. channels: 16; channel increment: 5.0 MHz; antenna diam.: 25.0 m.; t_{int} = 60 sec.; Stokes parameter in image: I; imaging weights: natural; image size: 576 pixels; pixel size: 0.25 arcsec. Image displayed, and brightness-contrast colormap adjustments with casaviewer; colormap used: 'isophotes'.

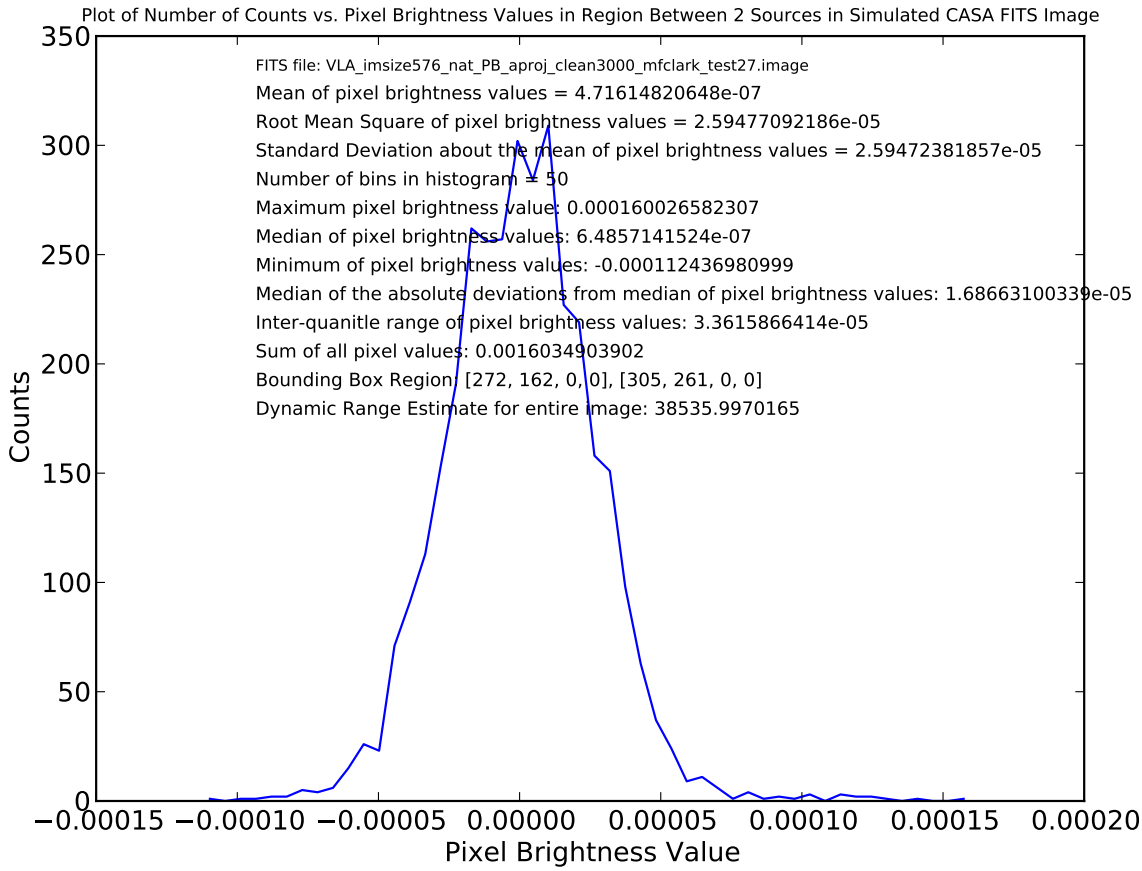

Figure 8: Line plot of counts vs. pixel brightness value for a specified bounding box region (bottom left corner = [272,162,0,0], top right corner = [305,261,0,0]) between but not including the two point sources in Fig. 7. Statistical measures calculated within the bounding box region are included in the plot. The dynamic range estimate is for the entire image and is taken as the ratio of the brightest (largest) positive pixel brightness value in the image to the rms of pixel brightness values in the bounding box region.