

File = Fake_databignosp.tif, delta theta = 1, delta rho = 1, SNR = 25.

LM solver param : Lambda = 0.1, epsilon = 1.0E-5

Fit params = Start and End point, spacing between consecutive Gaussians along the line, ds.

Number of gaussians for mask fit = $2 * \text{Math.max}(\text{psf}[0], \text{psf}[1]) / \text{ds}$.

Black: Fake data line parameters with Salt and Pepper and Poisson noise.

Red: Detection. (Gaussian masks determined by program was used)

StartX: 147.994 StartY: 32.8812 EndX: 167.9939 EndY :45.98487

Length 23.91038

StartX: 147.74648 StartY: 32.5641 EndX: 168.3408 EndY: 46.4866 ds: 1.1005

Length: 24.8589

Number of gaussians for mask fit:4

Error : StartX = 0.247, StartY = 0.317, EndX = 0.347, EndY = 0.502 , Length = 0.948

StartX : 92.8676 StartY : 5.4997 EndX : 112.8676 EndY : 21.13153

Length 25.38412

StartX: 92.48559 StartY: 4.9390 EndX: 113.4854 EndY: 21.8533 ds: 1.12582

Length: 26.96456

Number of gaussians for mask fit:4

Error : StartX = 0.382, StartY = 0.56, EndX = 0.62, EndY = 0.722 , Length = 1.58

StartX: 46.9581 StartY: 73.9193 EndX: 66.95812 EndY :78.34778

Length 20.4844

StartX: 46.73627 StartY: 73.5513 EndX: 67.6587 EndY: 78.6478 ds: 1.2383

Length: 21.53423

Number of gaussians for mask fit:4

Error : StartX = 0.222, StartY = 0.368, EndX = 0.7, EndY = 0.3 , Length = 1.05

StartX: 106.0607 StartY: 183.0128 EndX: 126.0607 EndY :184.7074

Length 20.07166

StartX: 105.934719 StartY: 182.9753 EndX: 127.33052 EndY: 184.6894 ds: 1.23797

Length: 21.46435

Number of gaussians for mask fit:4

Error : StartX = 0.125, StartY = 0.037, EndX = 1.27, EndY = 0.018 , Length = 1.4

StartX: 41.379541 StartY: 80.073 EndX: 61.37954 EndY : 94.4024

Length 24.6033

StartX: 41.08778 StartY: 79.7542 EndX: 62.04129 EndY: 95 ds: 1.07599

Length: 25.91302

Number of gaussians for mask fit:4

Error : StartX = 0.292, StartY = 0.318, EndX = 0.662, EndY = 0.597 , Length = 1.31

StartX: 100.599 StartY: 47.243269 EndX: 120.5994 EndY :50.00073

Length 20.18919

StartX: 100.5592 StartY: 47.0750 EndX: 121.50212 EndY: 50.3621 ds: 1.1098

Length: 21.1993

Number of gaussians for mask fit:4

Error : StartX = 0.04, StartY = 0.168, EndX = 0.9, EndY = 0.36 , Length = 1

StartX: 7.79435 StartY: 33.1048 EndX: 27.7944 EndY :52.91969

Length 28.1536

StartX: 7.515 StartY: 32.9149 EndX: 28.646 EndY: 53.809 ds: 1.0343

Length: 29.7171

Number of gaussians for mask fit:4

Error : StartX = 0.279, StartY = 0.189, EndX = 0.852, EndY = 0.889 , Length = 1.56

StartX: 45.3096 StartY: 158.025 EndX: 65.3096 EndY :176.277

Length 27.076451

StartX: 45.0552 StartY: 157.6648 EndX: 66.1076 EndY: 177.003 ds: 1.05717

Length: 28.58621

Number of gaussians for mask fit:4

Error : StartX = 0.254, StartY = 0.36, EndX = 0.79, EndY = 0.73 , Length = 1.51

StartX: 55.34645 StartY: 40.82695 EndX: 75.3464 EndY :56.43092

Length 25.36698

StartX: 55.1336 StartY: 40.4779 EndX: 76.1712 EndY: 57.1547 ds: 1.1009

Length: 26.845795

Number of gaussians for mask fit: 4

Error : StartX = 0.212, StartY = 0.349, EndX = 0.825, EndY = 0.724 , Length = 1.48