

DQM Report for run number 10

pysimdamicm.dqm.dqm_manager

June 1, 2022

Data directory:

/data/calidaq_backup/PhotoNeutron/DataTaking/Bkg/Run_10

Output directory:

/data/chicago/PhotoNeutronData/WADERS/DataTaking/DQM/Bkg

Reference used:

None

Total images: 13

List of Figures

1	Active Area. Median dark current (only $q_{i,j} < q_i^{th}$) vs row	3
2	Slope DC fit (from MEMeanDCperRow) vs file	3
3	Intercept DC fit (from MEMeanDCperRow) vs file	4
4	Active area. Baseline vs row	4
5	Active area. MAD vs row	5
6	Full Image. Baseline vs column	5
7	Full Image. MAD vs column	6
8	Overscan. Baseline vs row	6
9	Overscan. MAD vs row	7
10	PedestalSubtractionProcess: mean pedestal vs file (gauss fit)	7
11	PedestalSubtractionProcess: mean sigma vs file (gauss fit)	8
12	PedestalSubtractionProcess: mean pedestal vs file (gauss fit)	8
13	PedestalSubtractionProcess: mean sigma vs file (gauss fit)	9
14	Masked pixels	10
15	Masked pixels	11
16	Number of pixels with $E > 300.0$ eV vs file	12
17	Number of pixels with $E > 300.0$ eV vs file	12
18	Pixel Charge Distribution	13
19	Pixel Charge Distribution	14
20	Pixel Charge Distribution	15
21	Pixel Charge Distribution	16
22	Zero electron peak (from MEFitDC) vs Image	17
23	Electron Single Resolution (from MEFitDC) vs Image	17
24	Dark current (from MEFitDC per Row) vs Image	18
25	Calibration constant (from MEFitDC) vs Image	18
26	<i>Overscan. PCD Gaussian fit: μ_0</i>	19
27	<i>Overscan. PCD Gaussian fit: σ_0</i>	19
28	Electronic column transient showing an exponential behaviour	20
29	Column transient decay constant (from MEColTransient) vs Image	20
30	Column transient amplitude (from MEColTransient) vs Image	21
31	CCD Image	22
32	CCD Image	23
33	CCD Image	24
34	CCD Image	25
35	CCD Image	26

36	CCD Image	27
37	CCD Image	28
38	CCD Image	29
39	CCD Image	30
40	CCD Image	31
41	CCD Image	32
42	CCD Image	33
43	CCD Image	34
44	Overscan. Baseline Shift Status vs Image	35
45	Overscan. Horizontal Clusters vs Image	35
46	Overscan. Miscellaneous Noise Found Status	36

Active Area. Median dark current (only $q_{i,j} < q_i^{th}$) vs row
 [class MEMeanDCperRow]

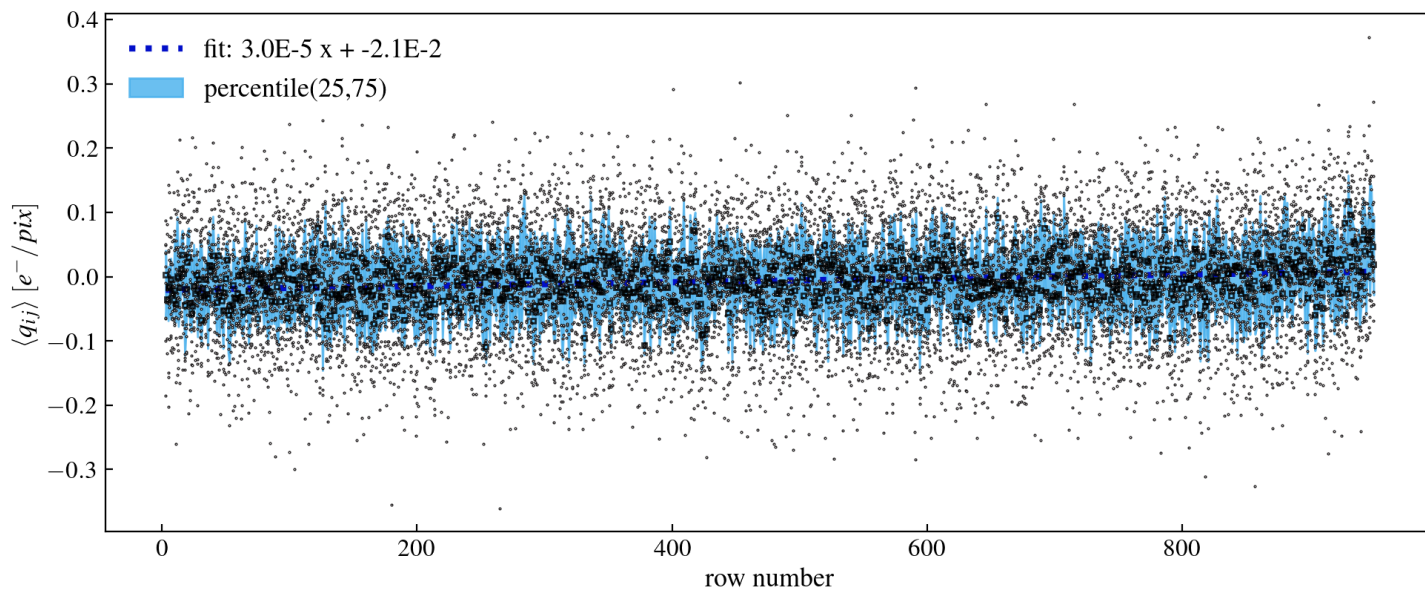


Figure 1: Active Area. Median dark current (only $q_{i,j} < q_i^{th}$) vs row

Slope DC fit (from MEMeanDCperRow) vs file
 [class MEDCslope]

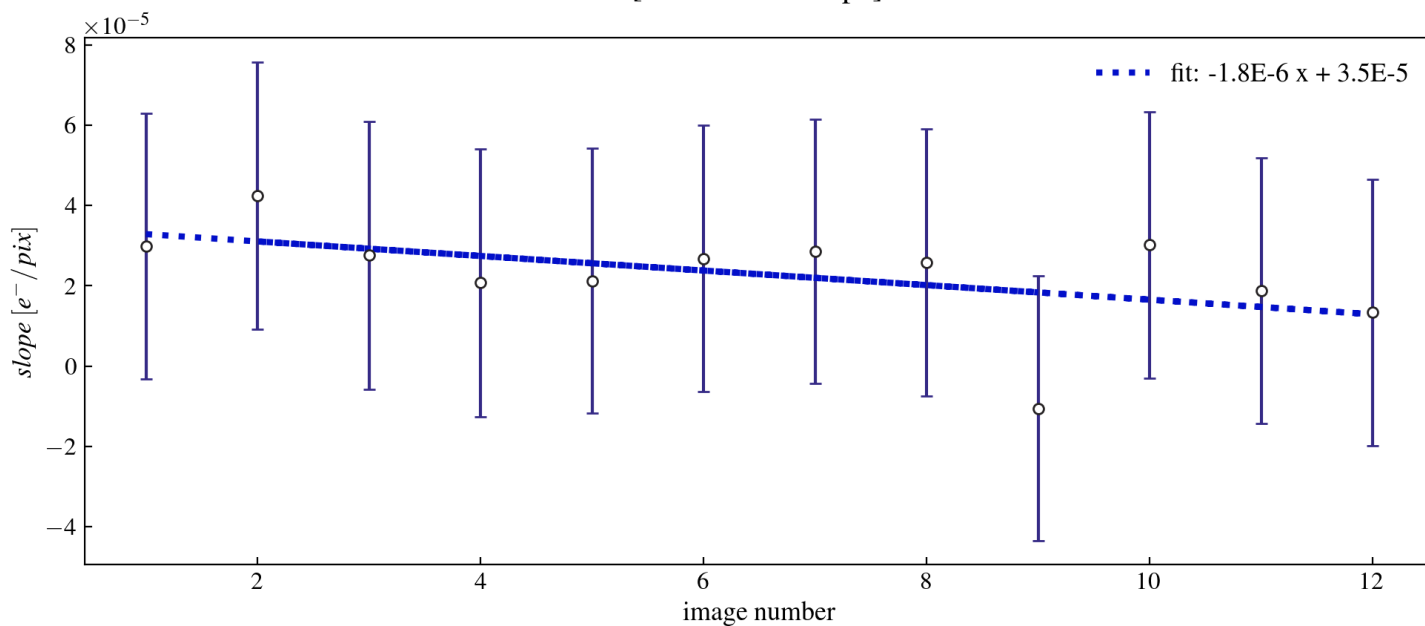


Figure 2: Slope DC fit (from MEMeanDCperRow) vs file

Intercept DC fit (from MEMeanDCperRow) vs file
[class MEDCintercept]

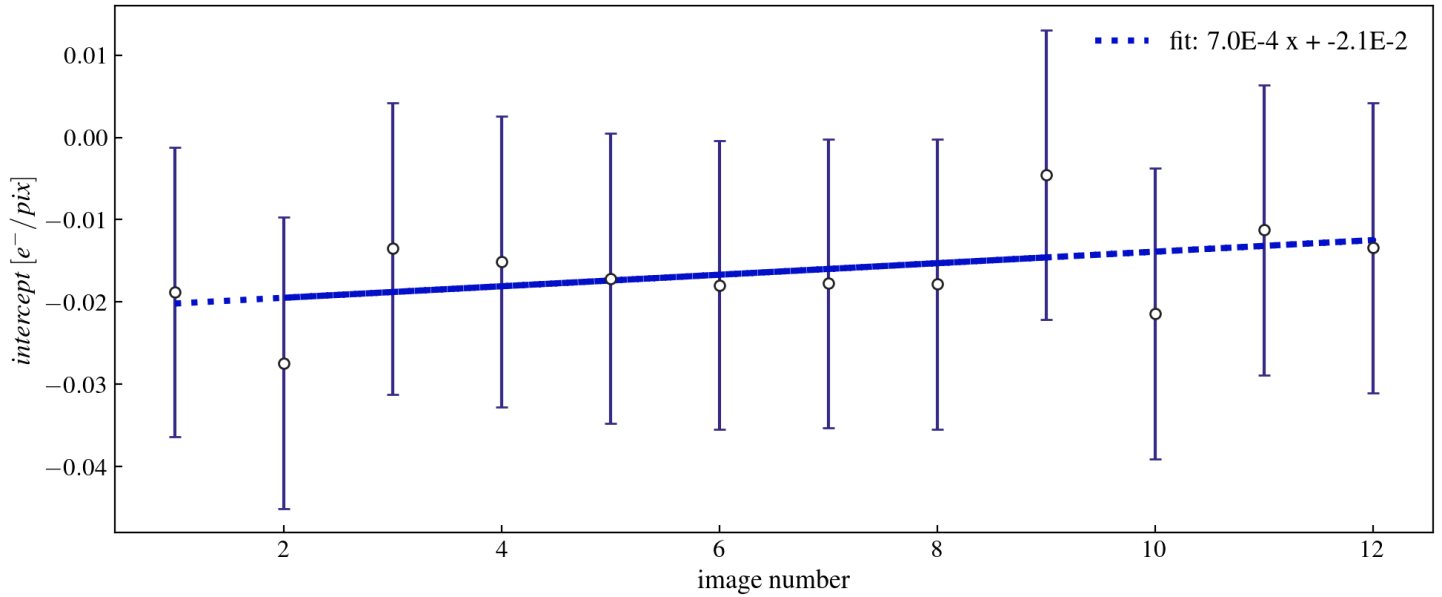


Figure 3: Intercept DC fit (from MEMeanDCperRow) vs file

Active area. Baseline vs row
[class MESensorMedianperRow]

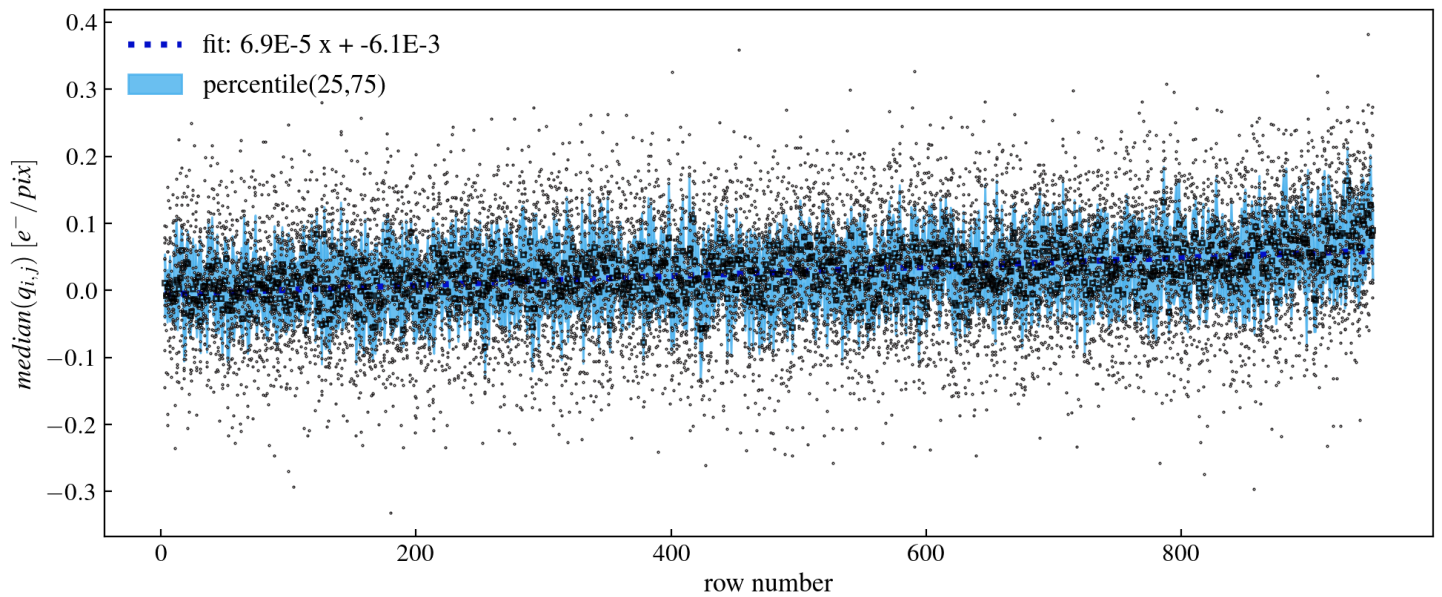


Figure 4: Active area. Baseline vs row

Active area. MAD vs row
[class MESensorMADperRow]

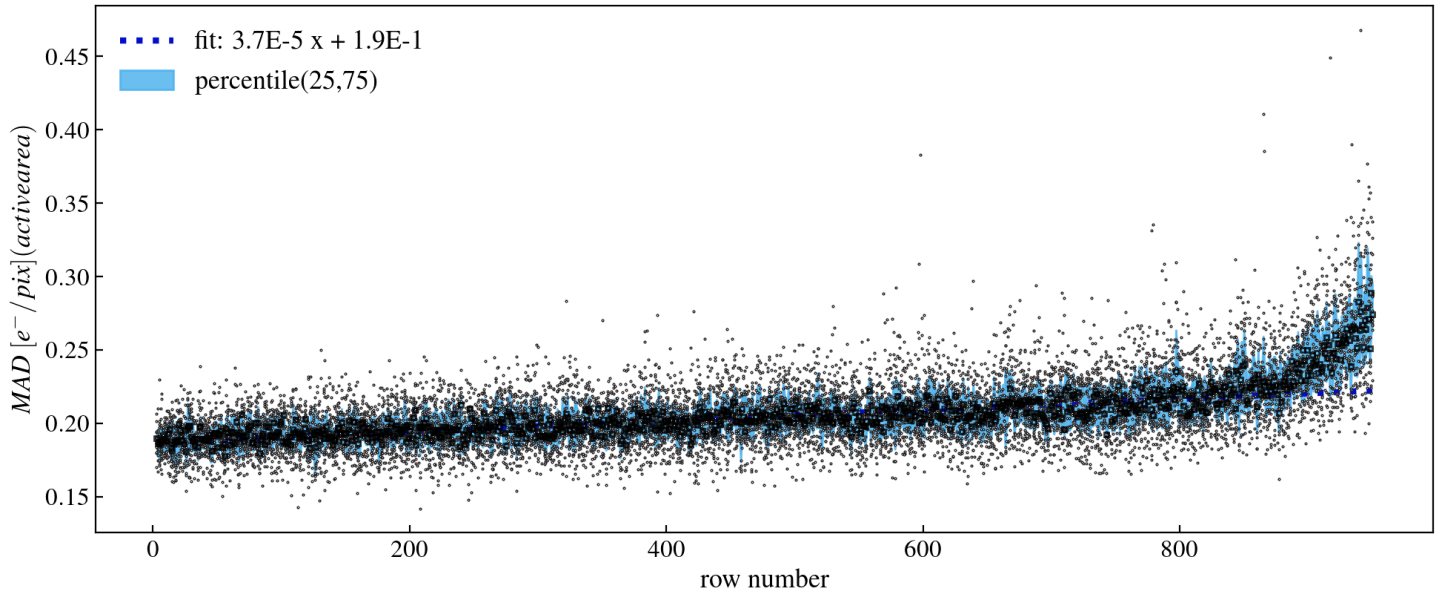


Figure 5: Active area. MAD vs row

Full Image. Baseline vs column
[class MEImageMedianperCol]

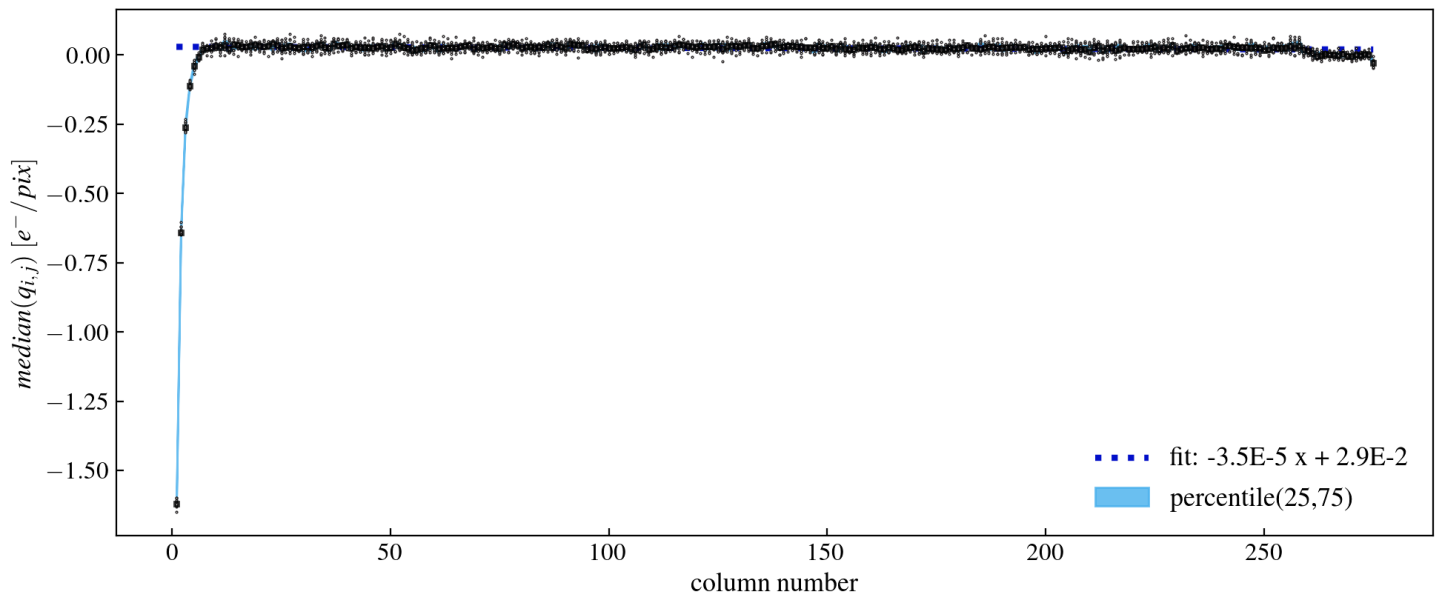


Figure 6: Full Image. Baseline vs column

Full Image. MAD vs column
[class MEImageMADperCol]

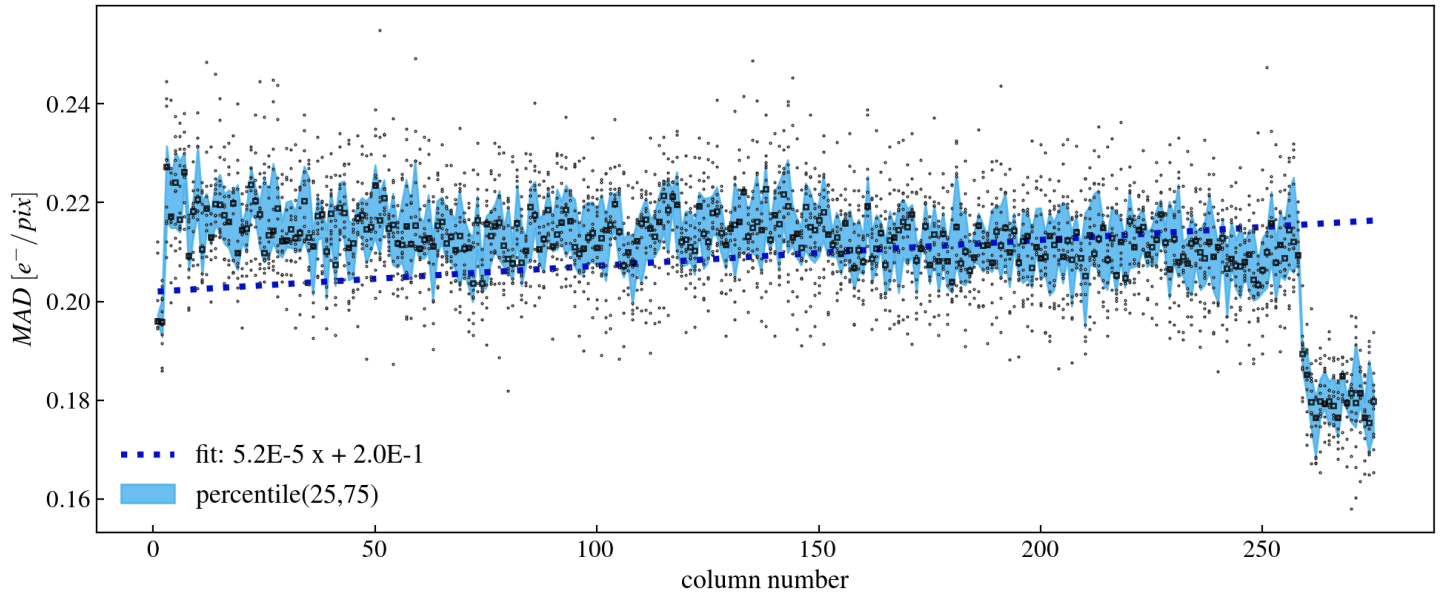


Figure 7: Full Image. MAD vs column

Overscan. Baseline vs row
[class MEOverscanMedianperRow]

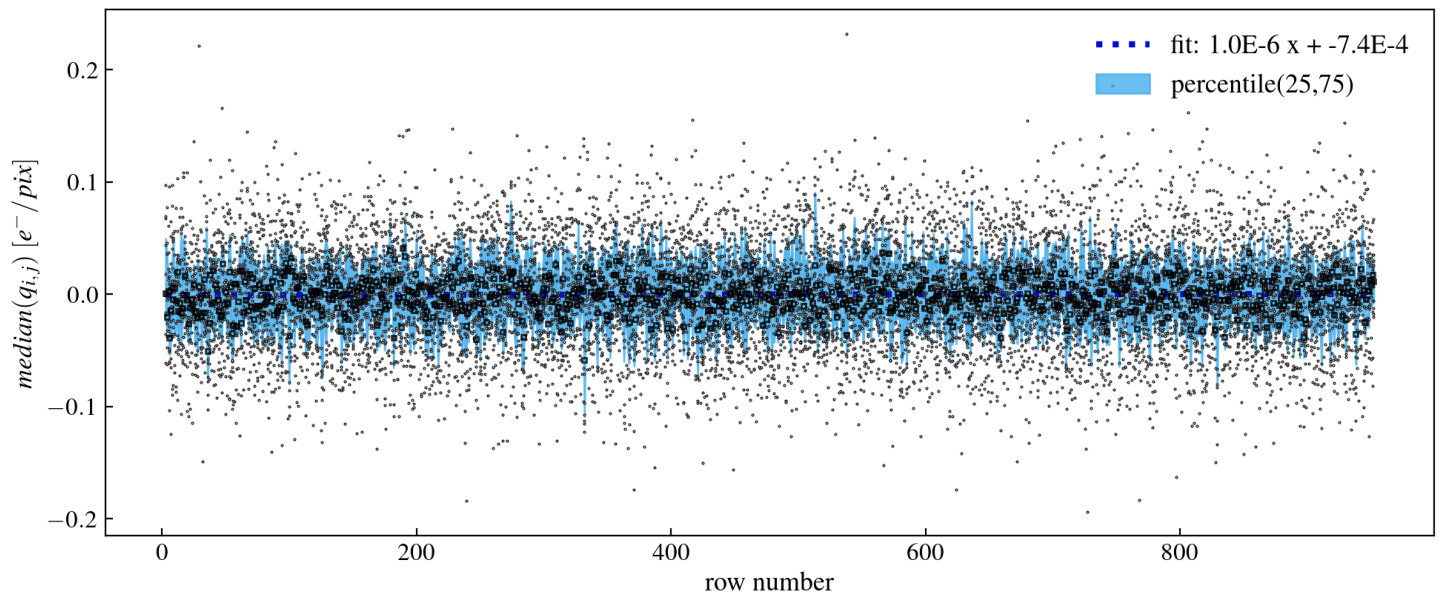


Figure 8: Overscan. Baseline vs row

Overscan. MAD vs row
[class MEOverScanMADperRow]

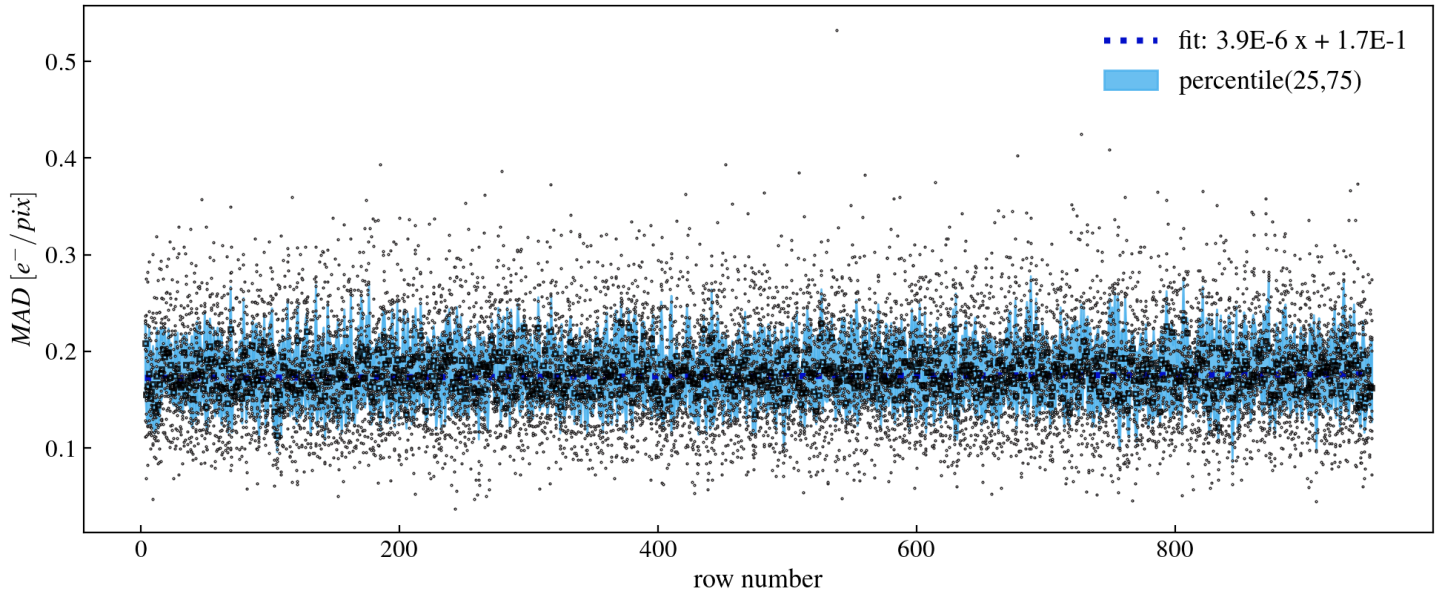


Figure 9: OverScan. MAD vs row

PedestalSubtractionProcess: mean pedestal vs file (gauss fit)
[class MEMeanPedestalMu]

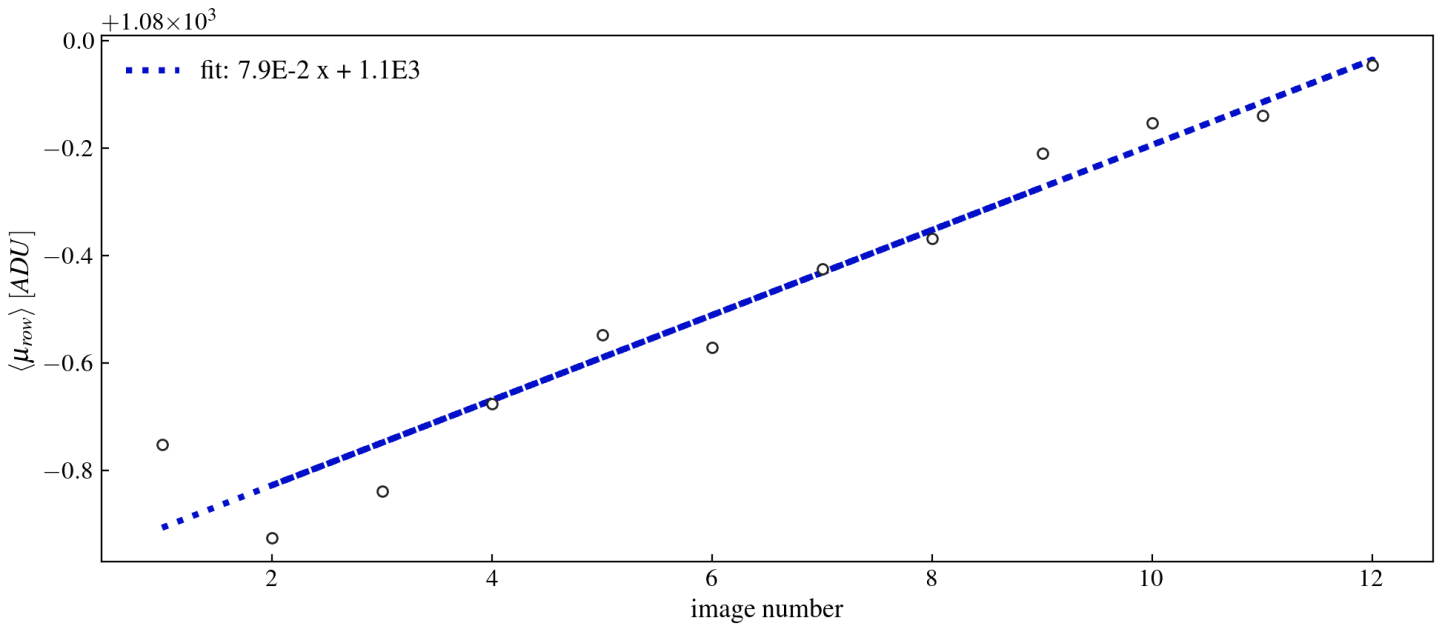


Figure 10: PedestalSubtractionProcess: mean pedestal vs file (gauss fit)

PedestalSubtractionProcess: mean sigma vs file (gauss fit)
[class MEMeanPedestalSigma]

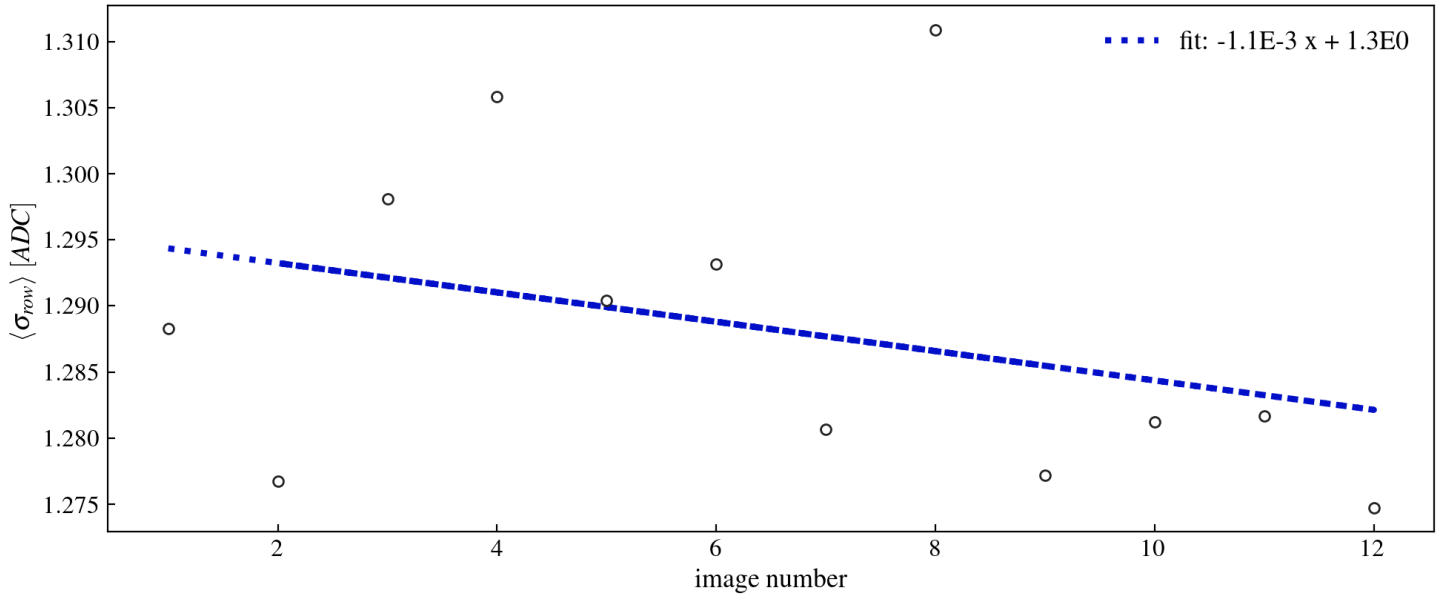


Figure 11: PedestalSubtractionProcess: mean sigma vs file (gauss fit)

PedestalSubtractionProcess: mean pedestal vs file (gauss fit)
[class MEPedestalMuPerRow]

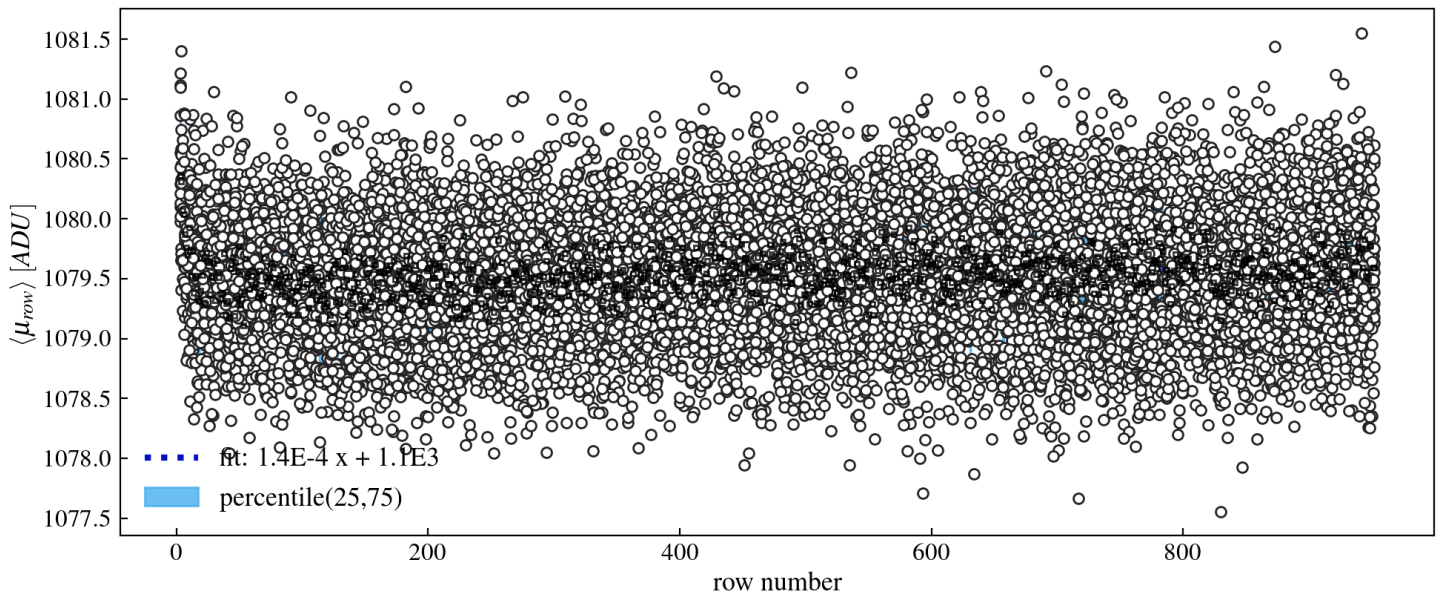


Figure 12: PedestalSubtractionProcess: mean pedestal vs file (gauss fit)

PedestalSubtractionProcess: mean sigma vs file (gauss fit)
[class MEPedestalSigmaPerRow]

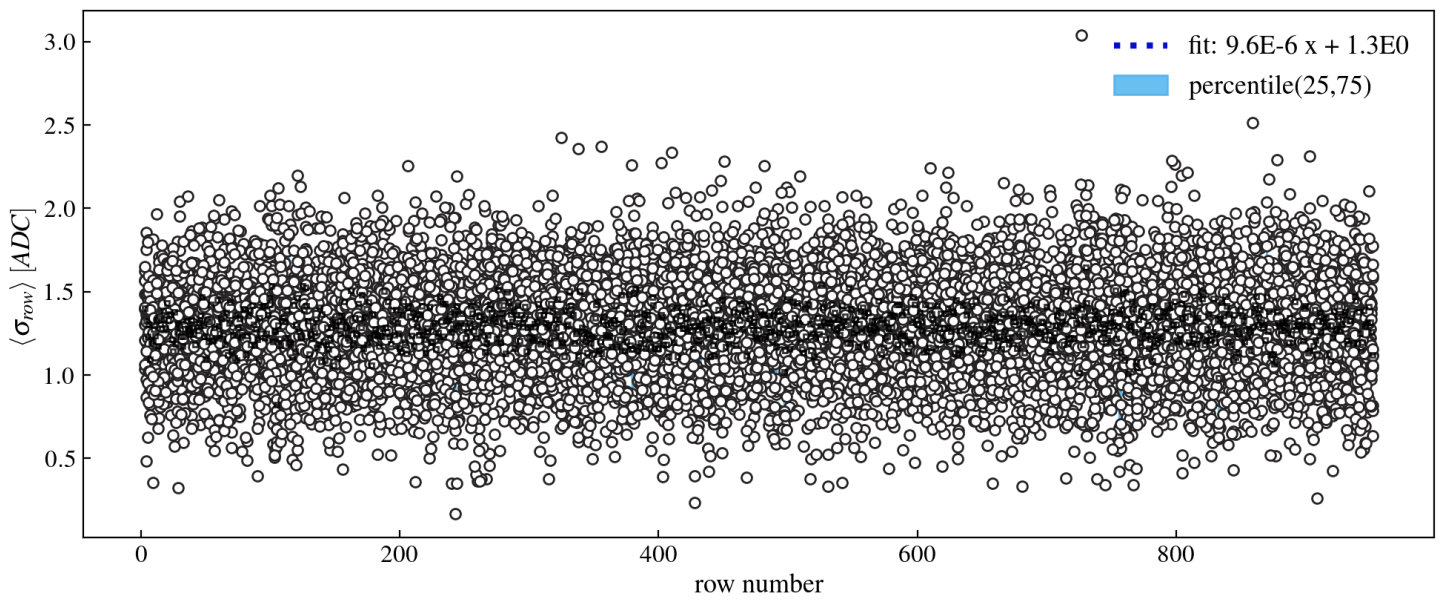


Figure 13: PedestalSubtractionProcess: mean sigma vs file (gauss fit)

Masked pixels [run 10]: frequency
[class MEMaskedPixels]

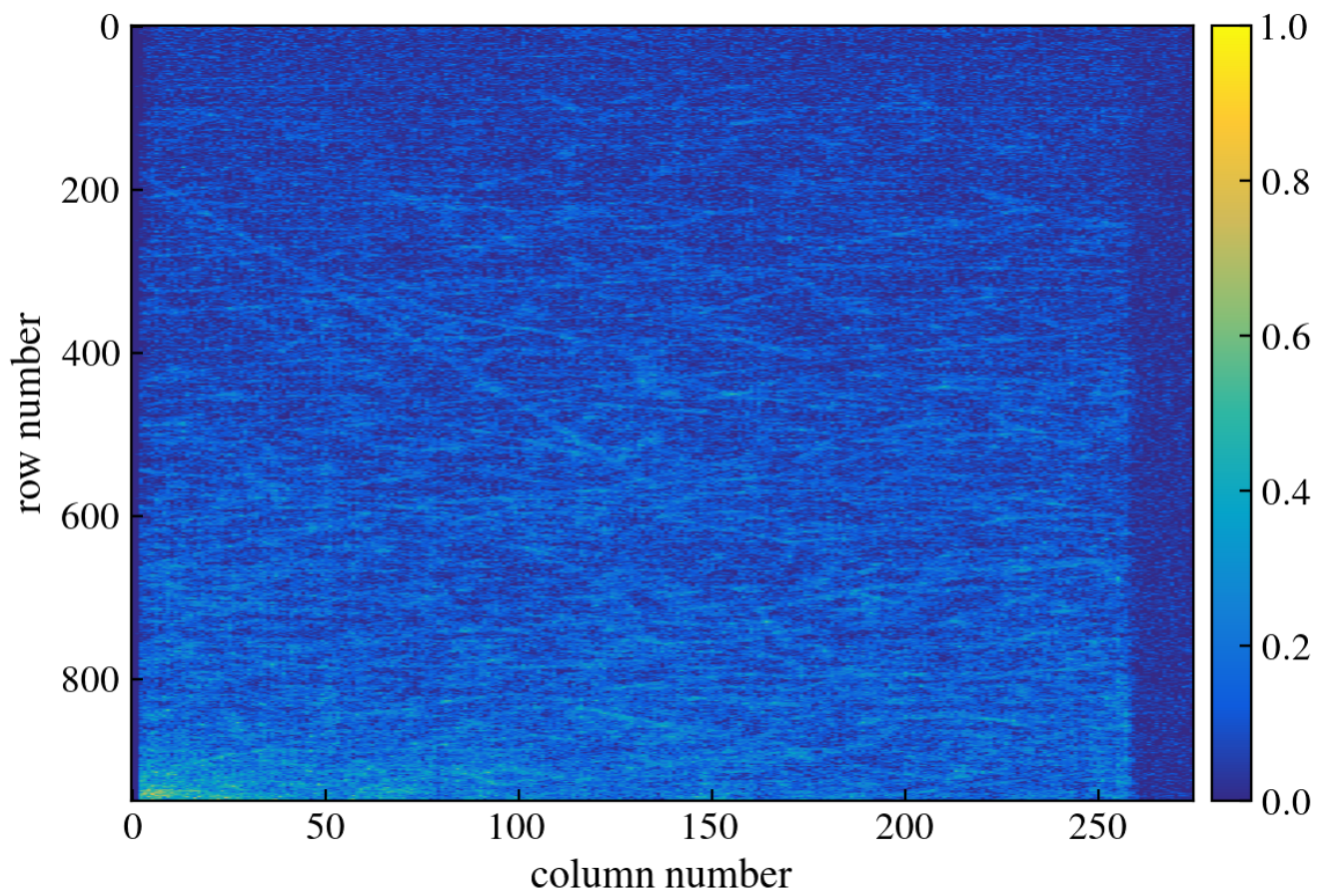


Figure 14: Masked pixels

Masked pixels [run 10]: mask
[271] masked pixels
[class MEMaskedPixels]

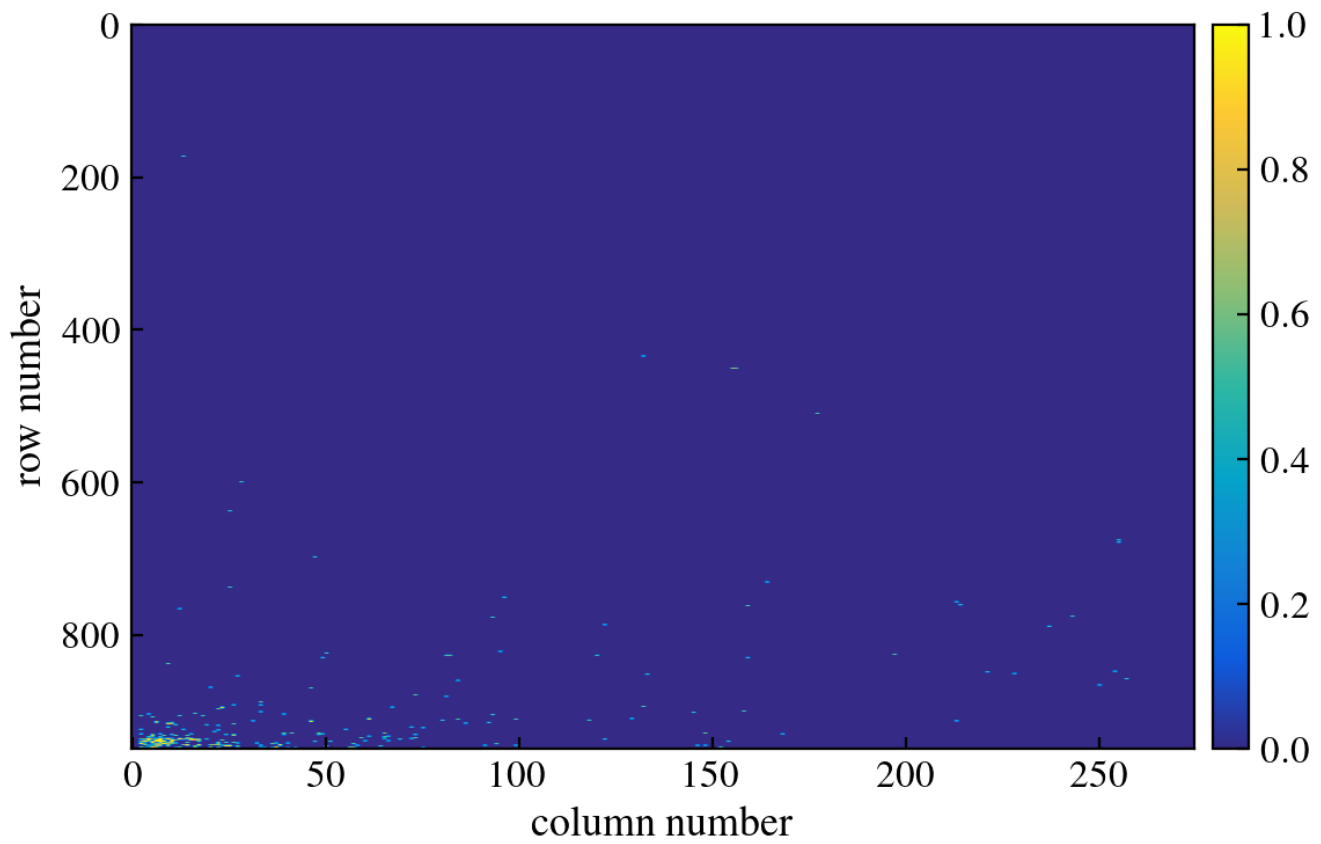


Figure 15: Masked pixels

Single Pixel Energy Distribution [w/ 5.09 ADC/e- and 3.74eV/e-]
[class MESinglePED]

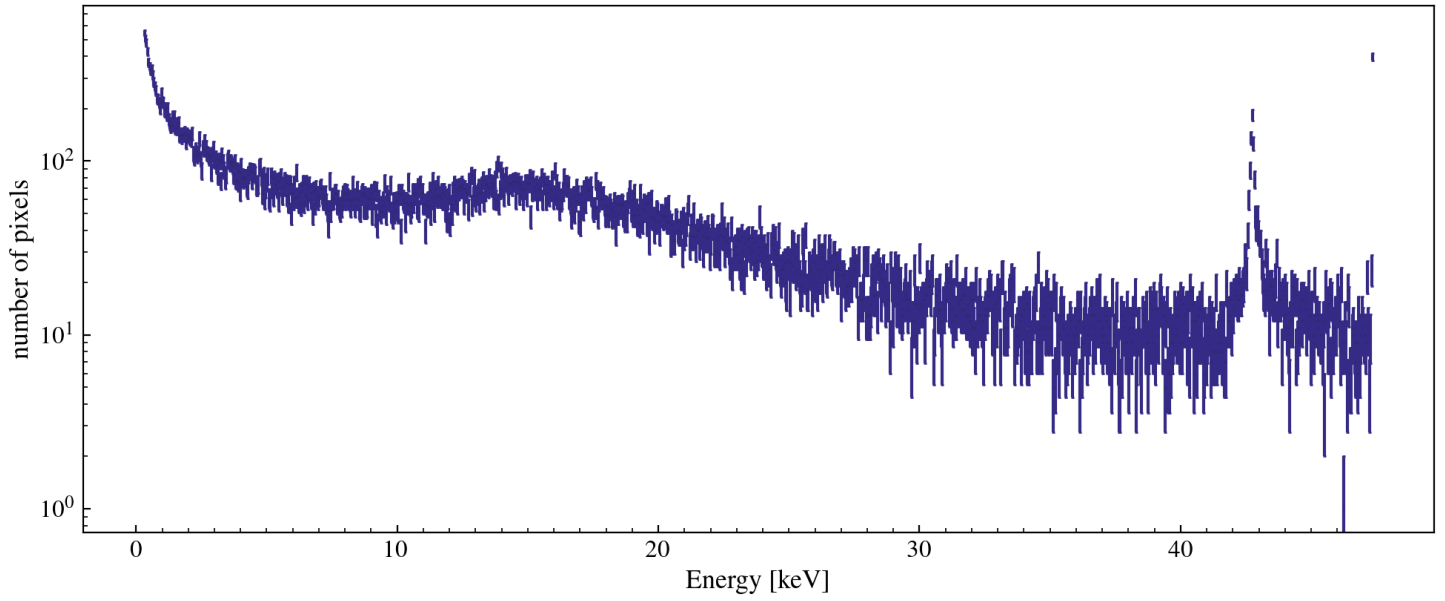


Figure 16: Number of pixels with $E > 300.0$ eV vs file

Number of pixels with $E > 300.0$ eV vs file
[class MESinglePED]

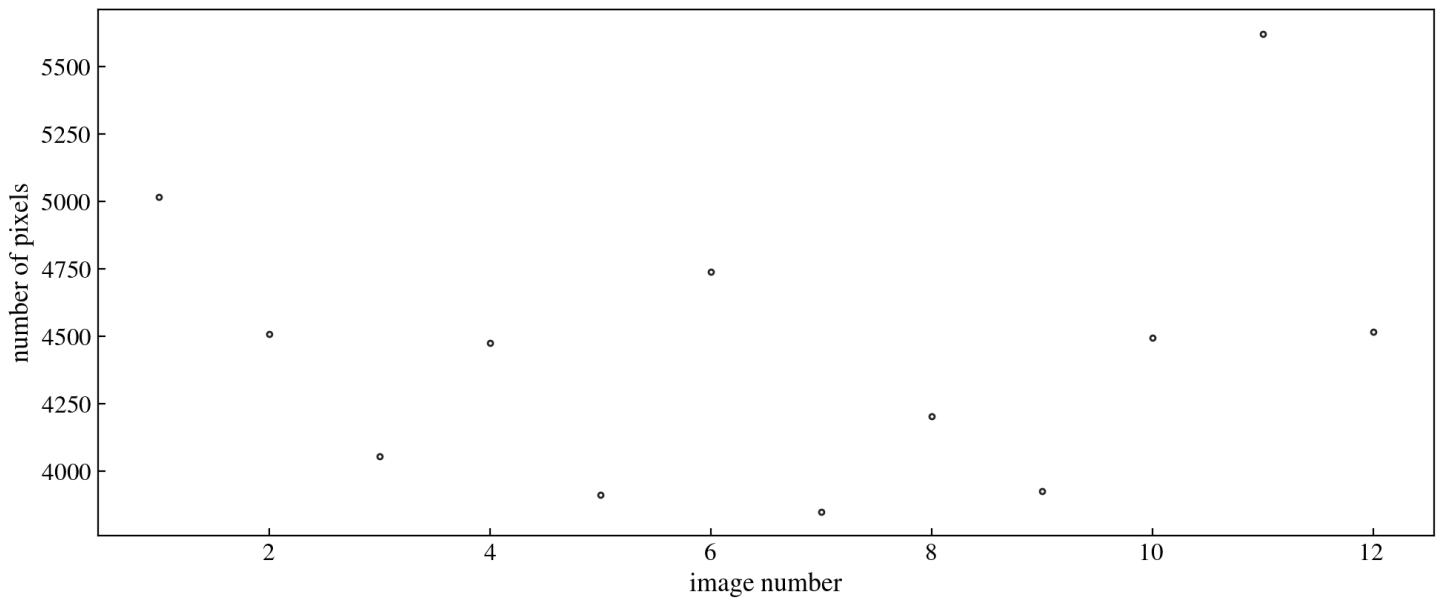


Figure 17: Number of pixels with $E > 300.0$ eV vs file

Pixel Charge Distribution

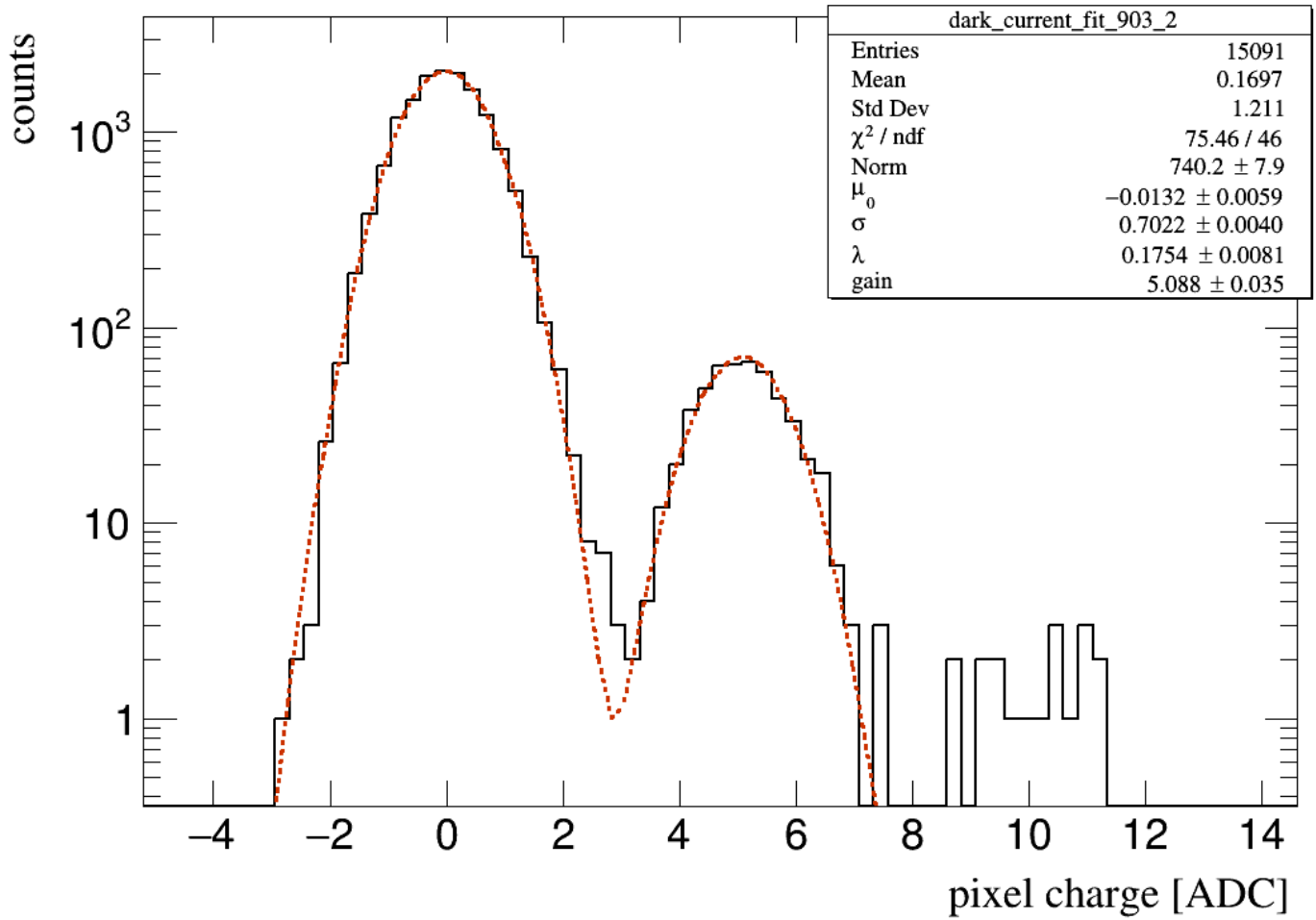


Figure 18: Pixel Charge Distribution

Image used to Fit DC (HR image)

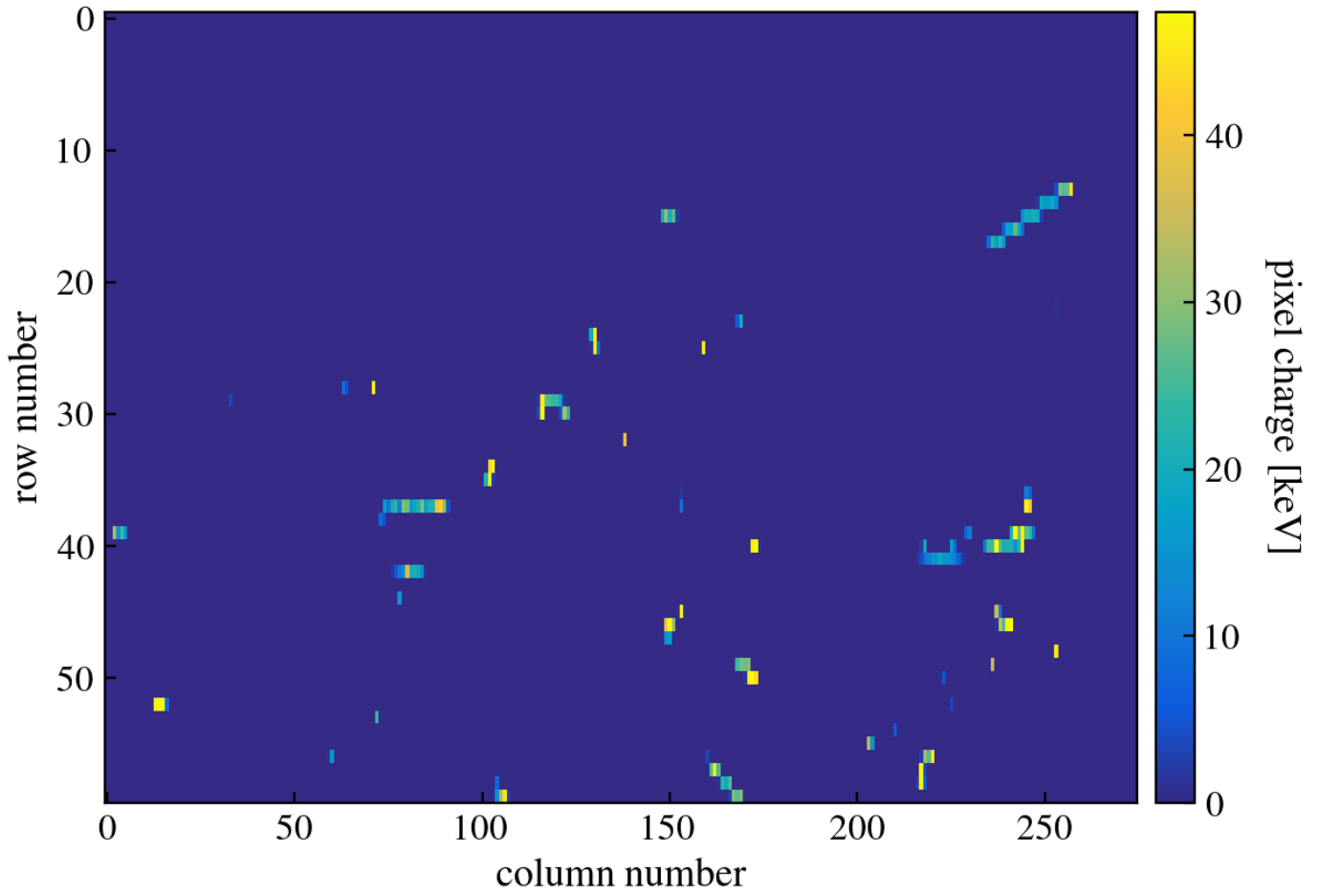


Figure 19: Pixel Charge Distribution

Pixel Charge Distribution

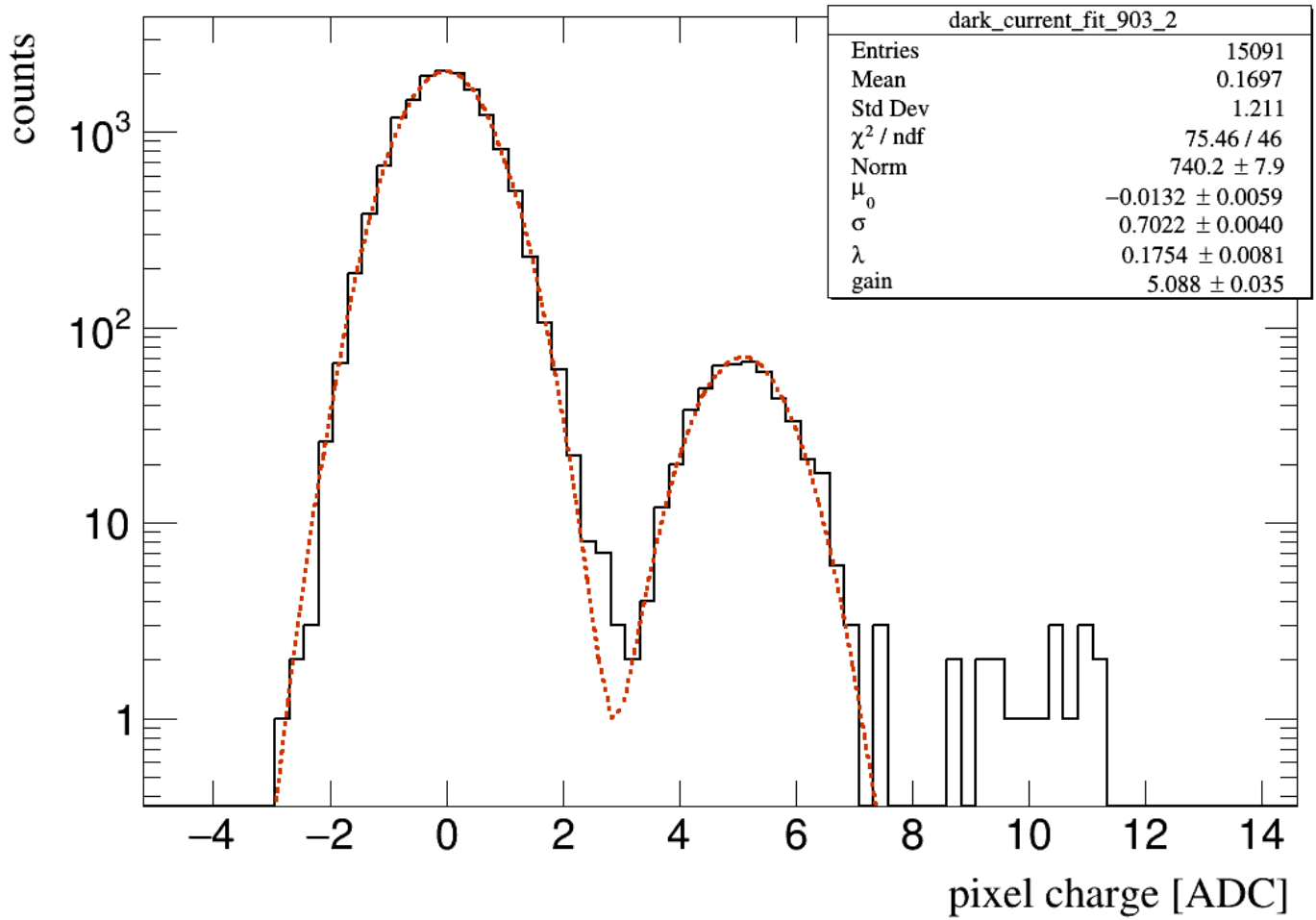


Figure 20: Pixel Charge Distribution

Image used to Fit DC (HR image)

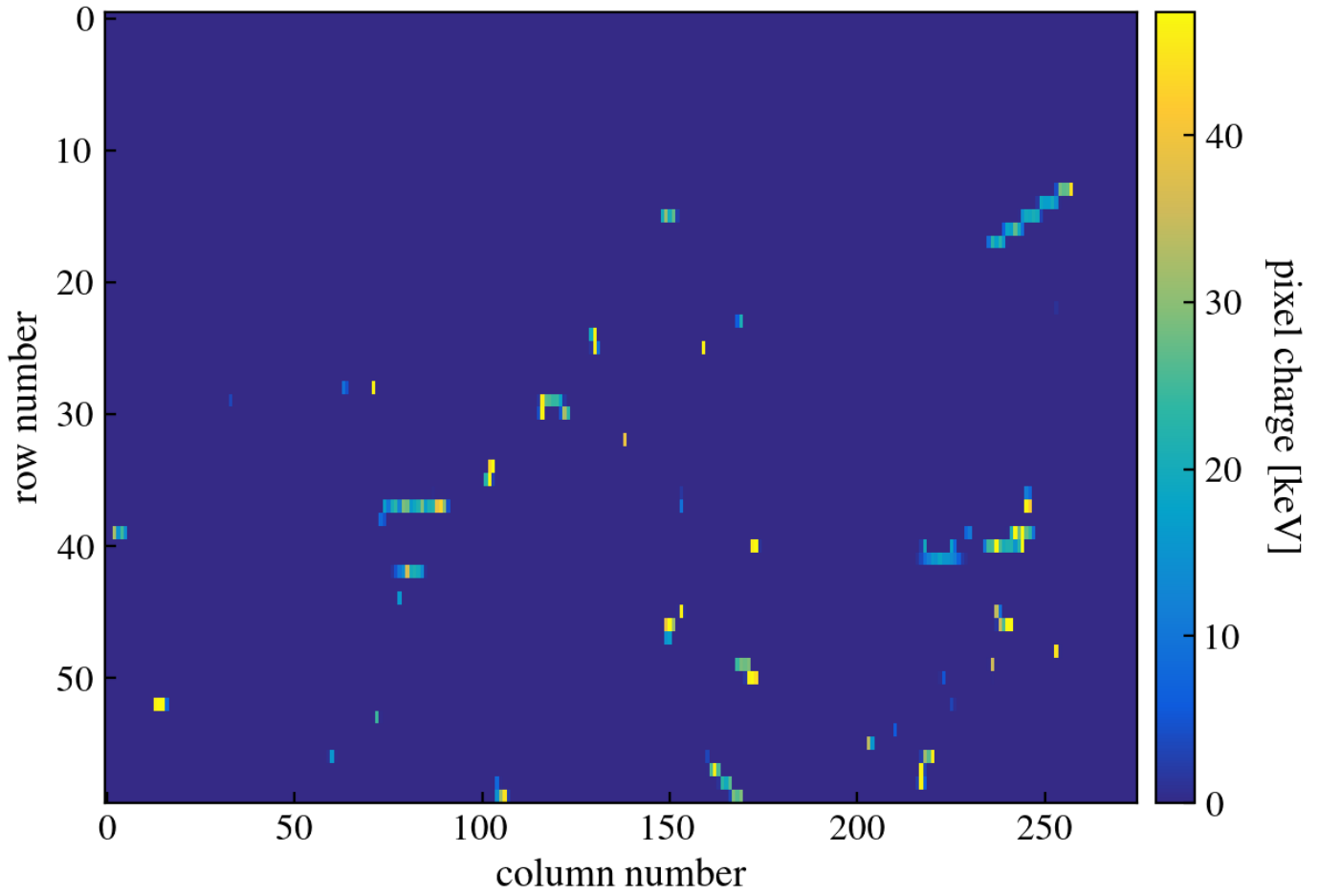


Figure 21: Pixel Charge Distribution

Zero electron peak (from MEFitDC) vs Image
[class MEFitDCMu0]

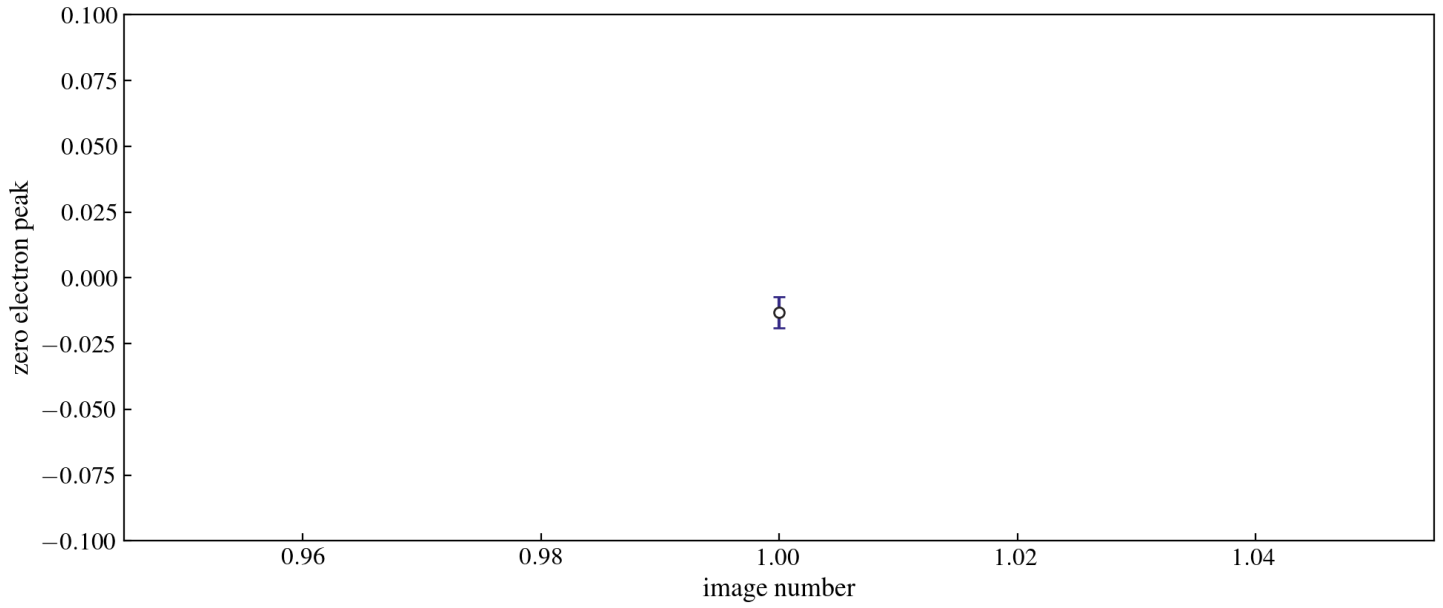


Figure 22: Zero electron peak (from MEFitDC) vs Image

Electron Single Resolution (from MEFitDC) vs Image
[class MEFitDCSigma]

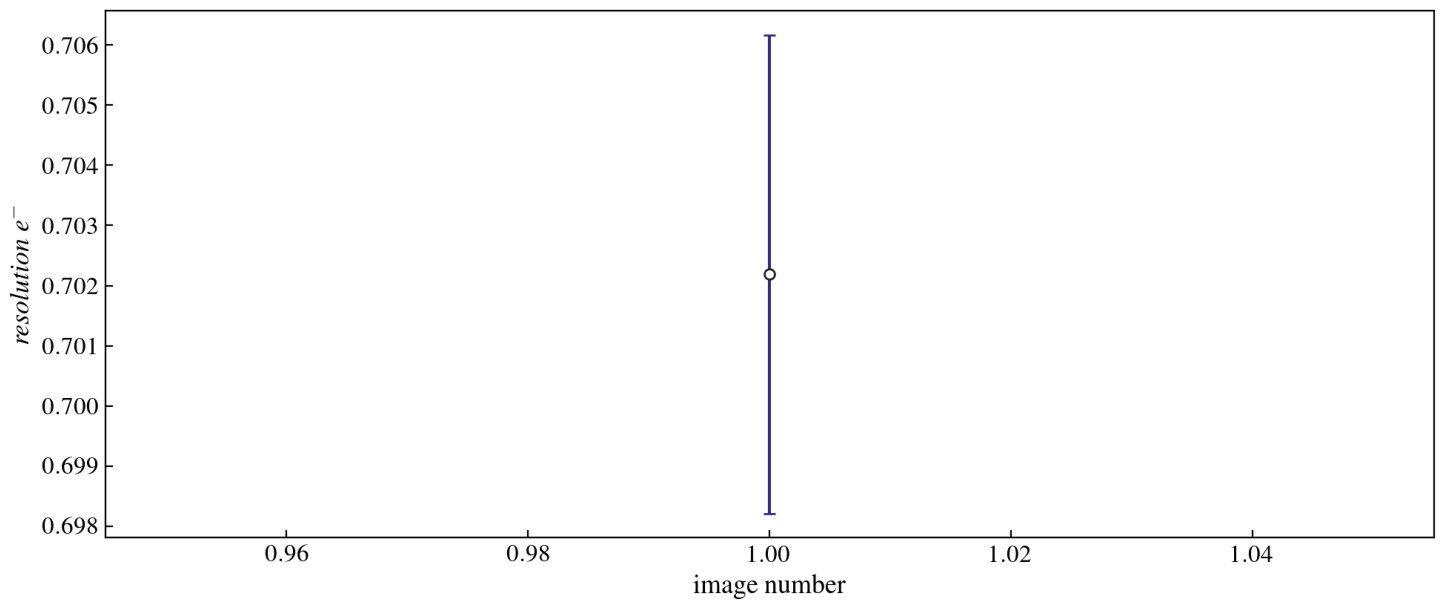


Figure 23: Electron Single Resolution (from MEFitDC) vs Image

Dark current (from MEFitDC per Row) vs Image
[class MEFitDCLambda]

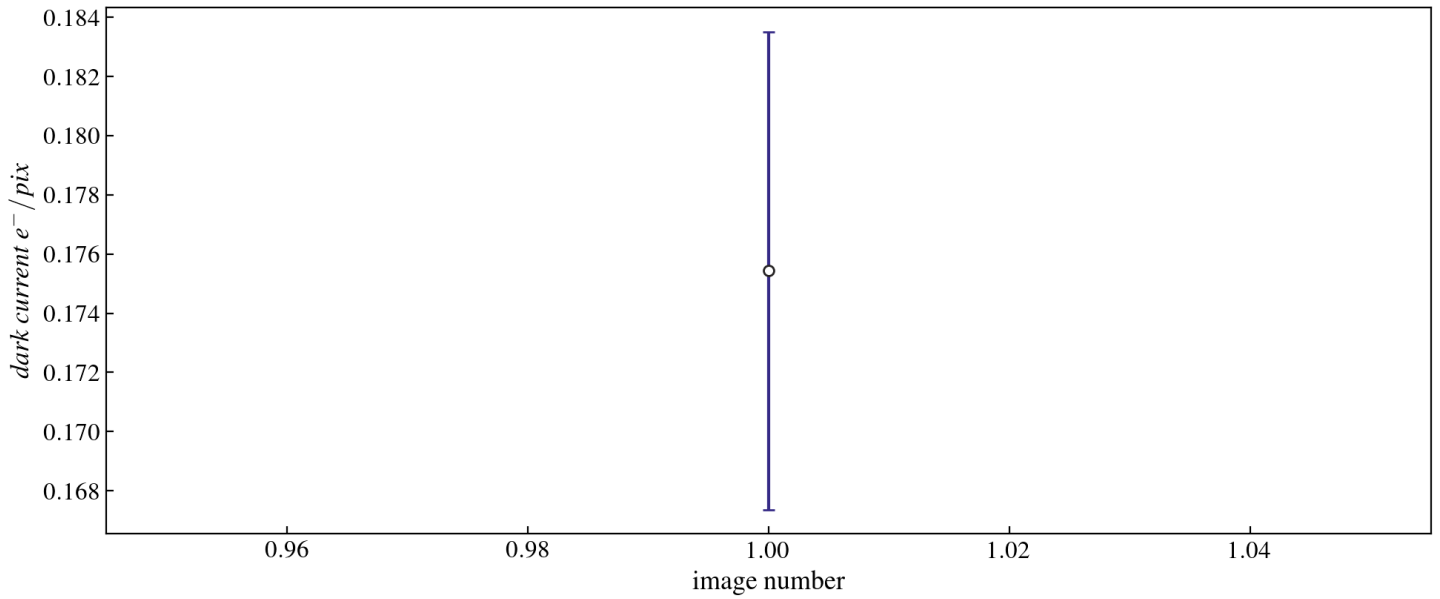


Figure 24: Dark current (from MEFitDC per Row) vs Image

Calibration constant (from MEFitDC) vs Image
[class MEFitDCCalibration]

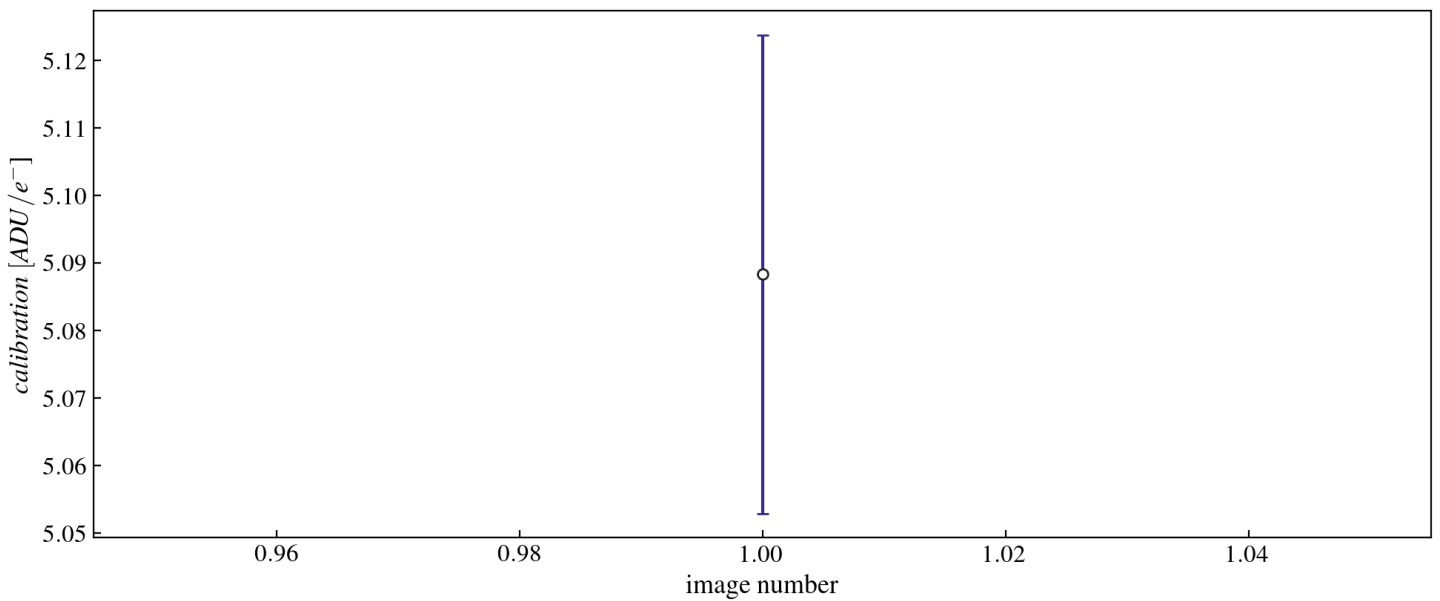


Figure 25: Calibration constant (from MEFitDC) vs Image

Overscan. PCD Gaussian fit: μ_0
[class MEOverscanPCDMu]

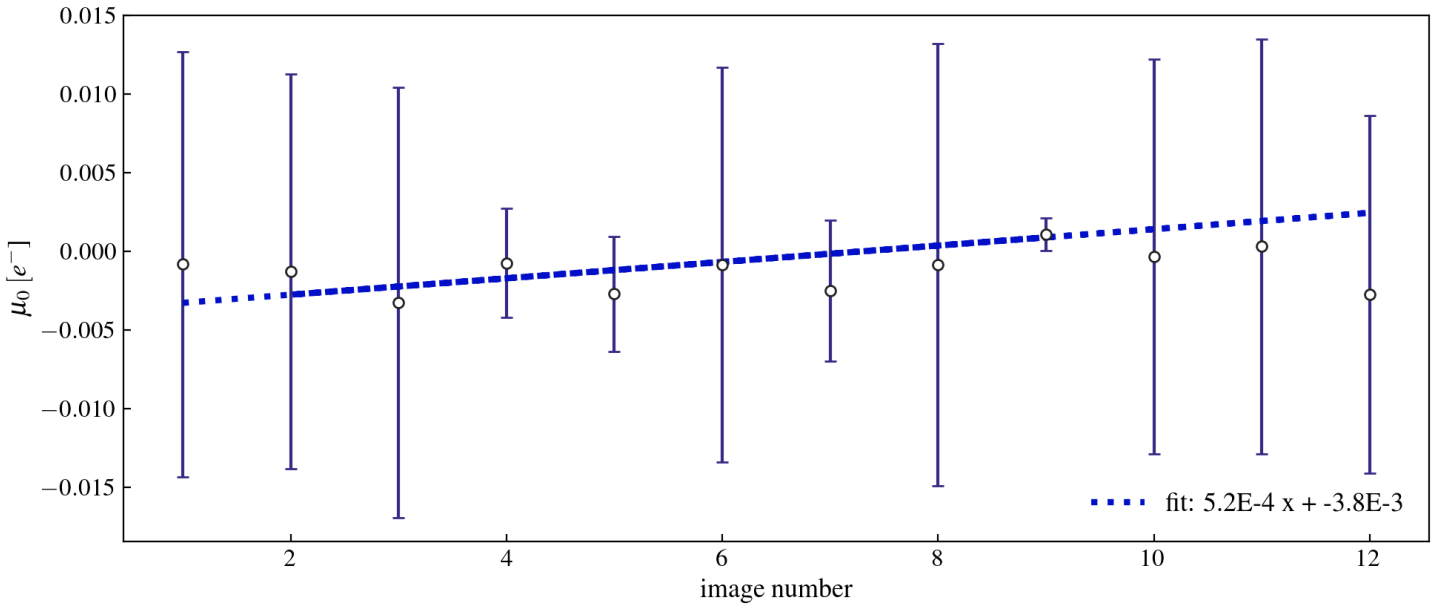


Figure 26: *Overscan. PCD Gaussian fit: μ_0*

Overscan. PCD Gaussian fit: σ_0
[class MEOverscanPCDSigma]

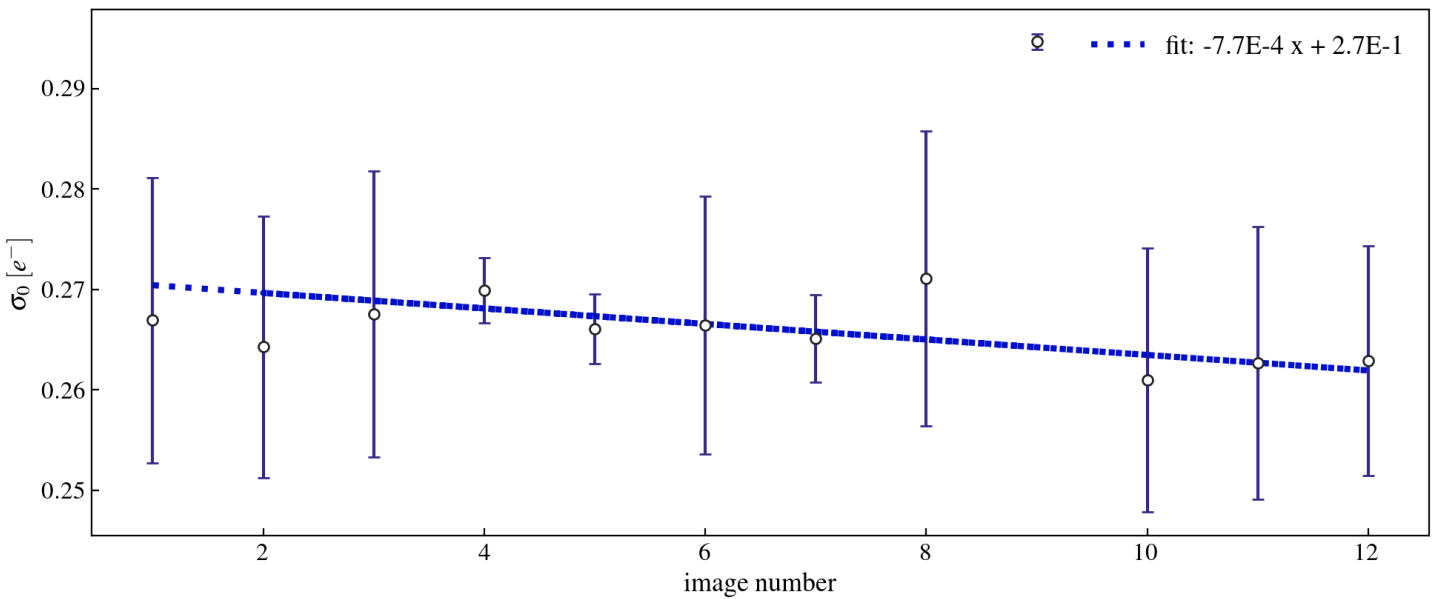


Figure 27: *Overscan. PCD Gaussian fit: σ_0*

Electronic column transient showing an exponential behaviour
[class MEColTransient]

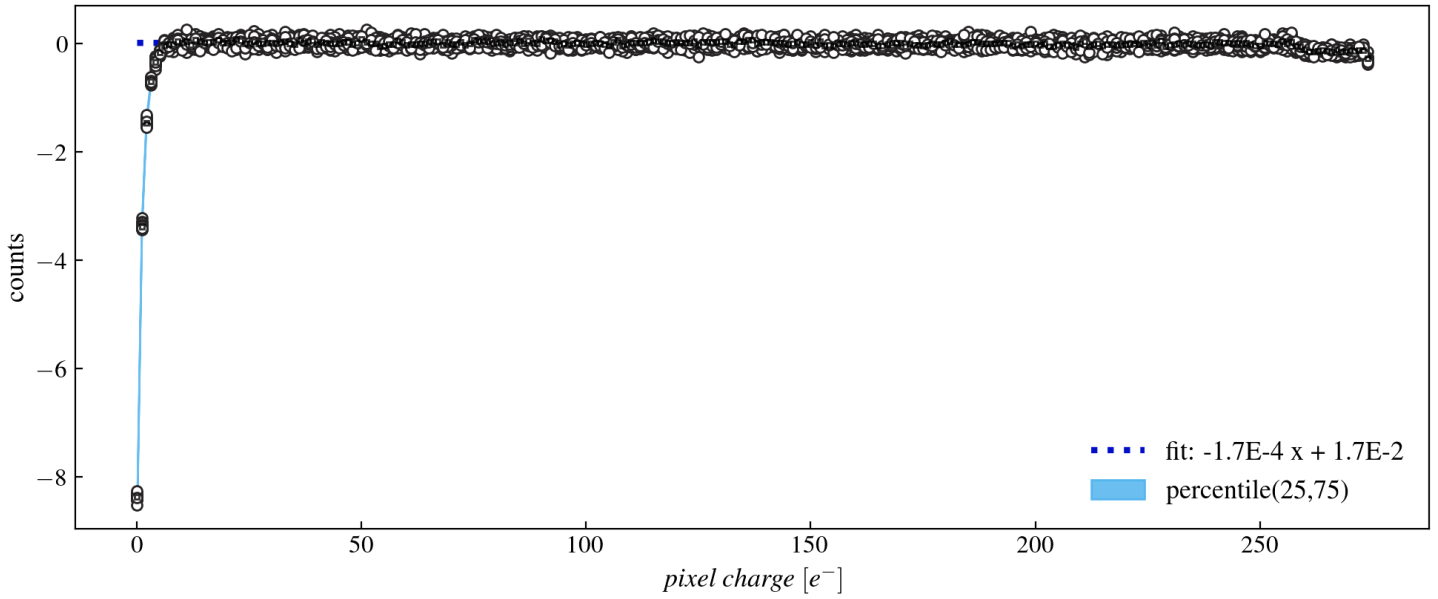


Figure 28: Electronic column transient showing an exponential behaviour

Column transient decay constant (from MEColTransient) vs Image
[class MEColTransientMu]

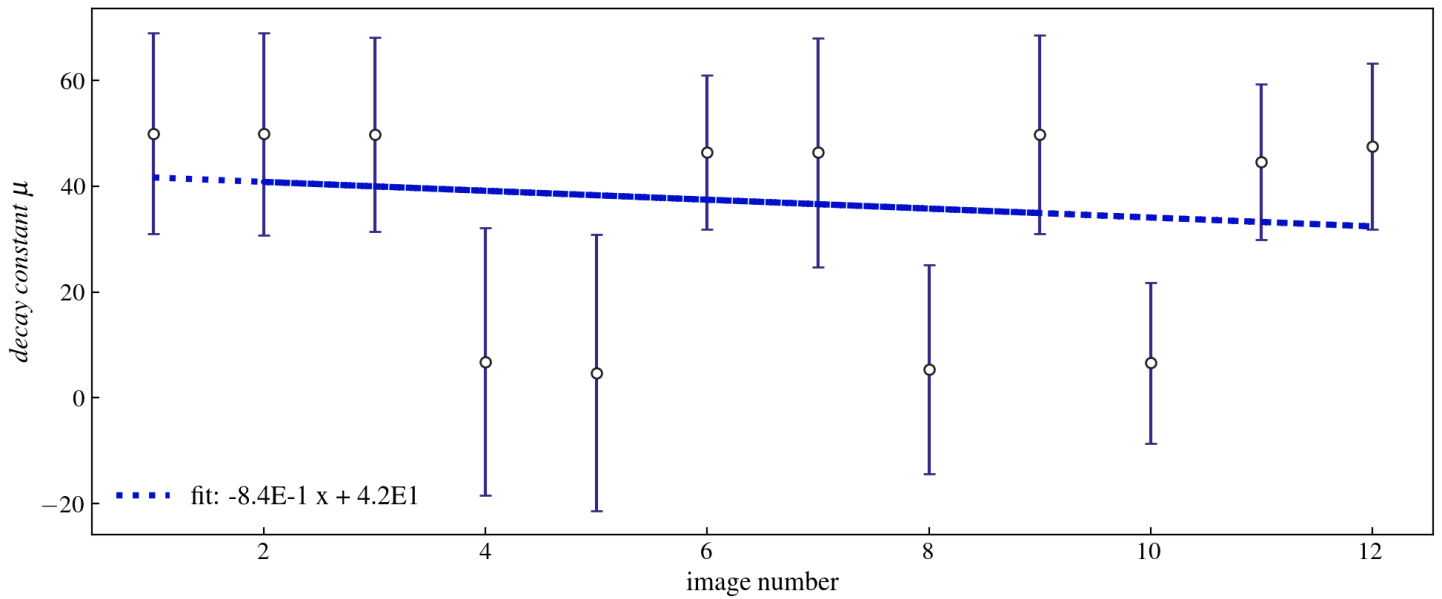


Figure 29: Column transient decay constant (from MEColTransient) vs Image

Column transient amplitude (from MEColTransient) vs Image
[class MEColTransientAmplitude]

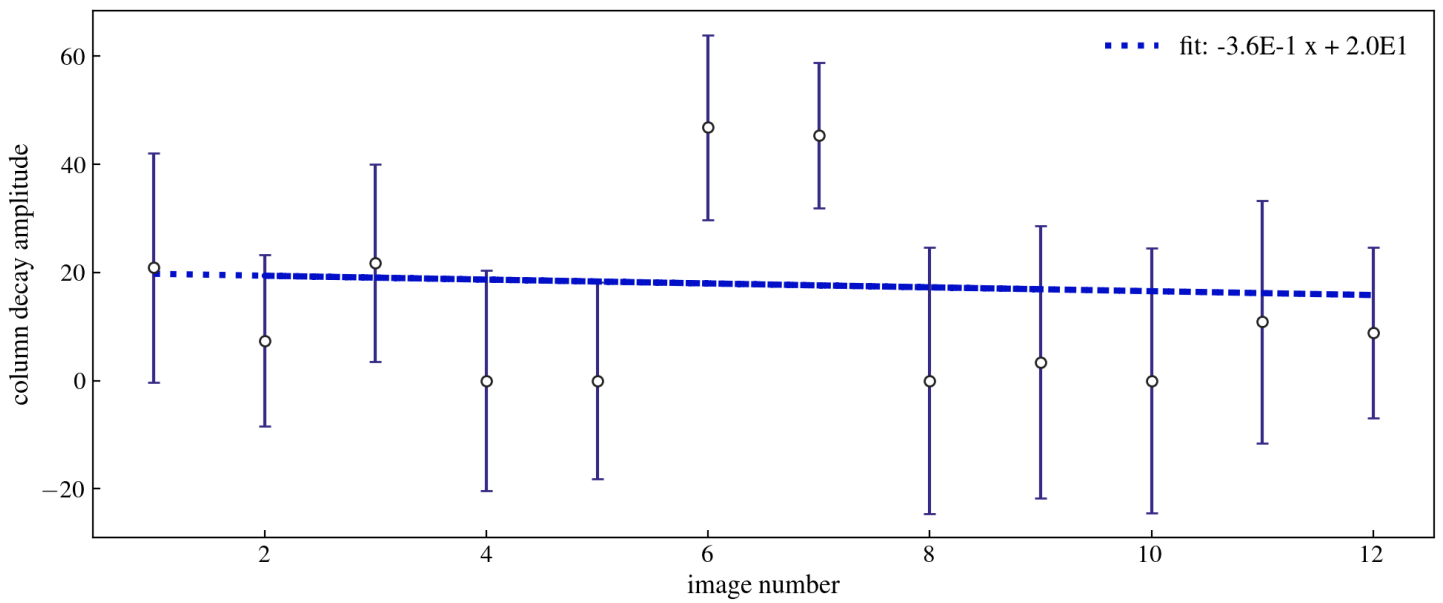


Figure 30: Column transient amplitude (from MEColTransient) vs Image

CCD Image: run 10, image 1
[class MECCDImage]

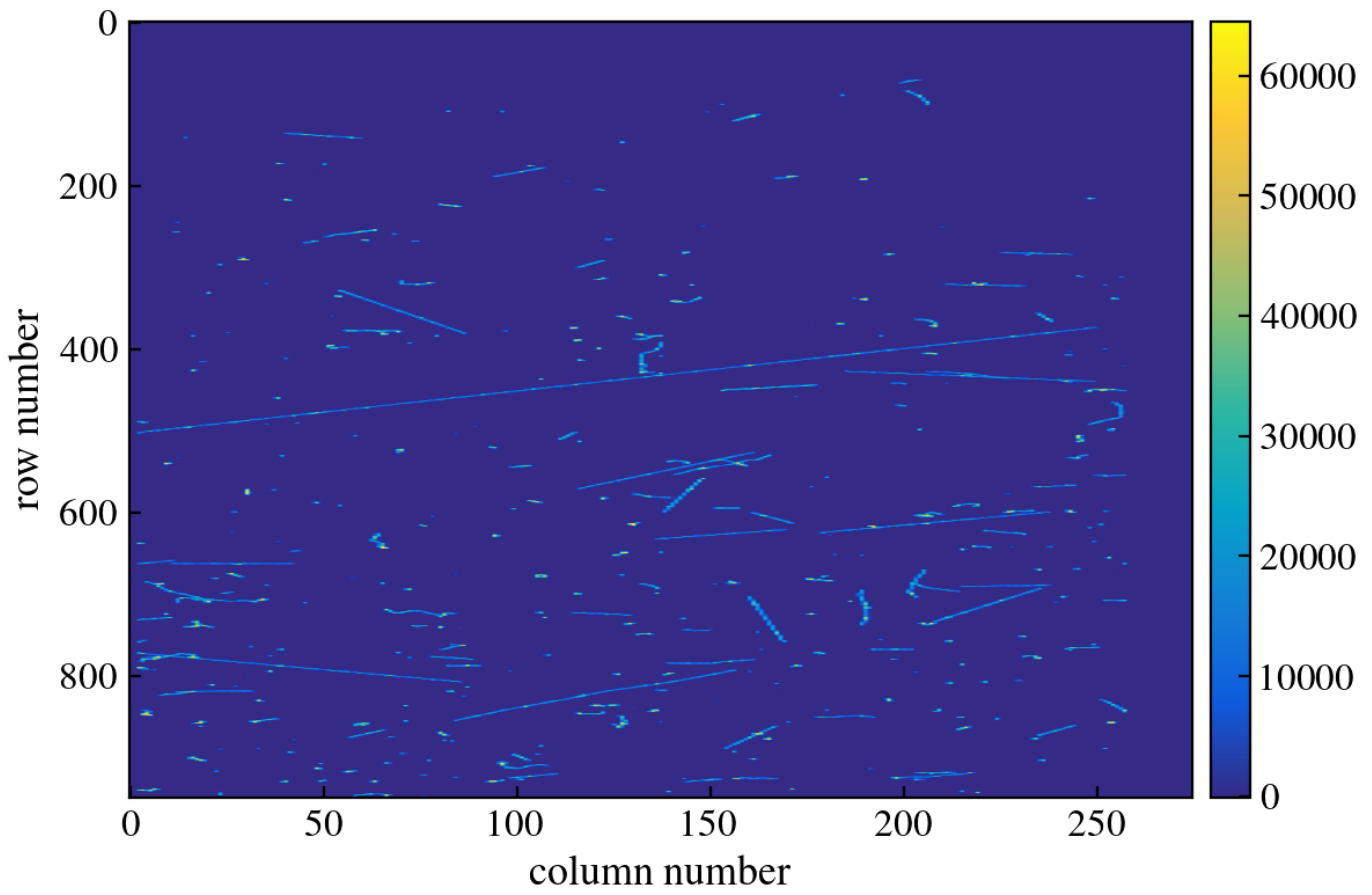


Figure 31: CCD Image

CCD Image: run 10, image 1
[class MECCDImage]

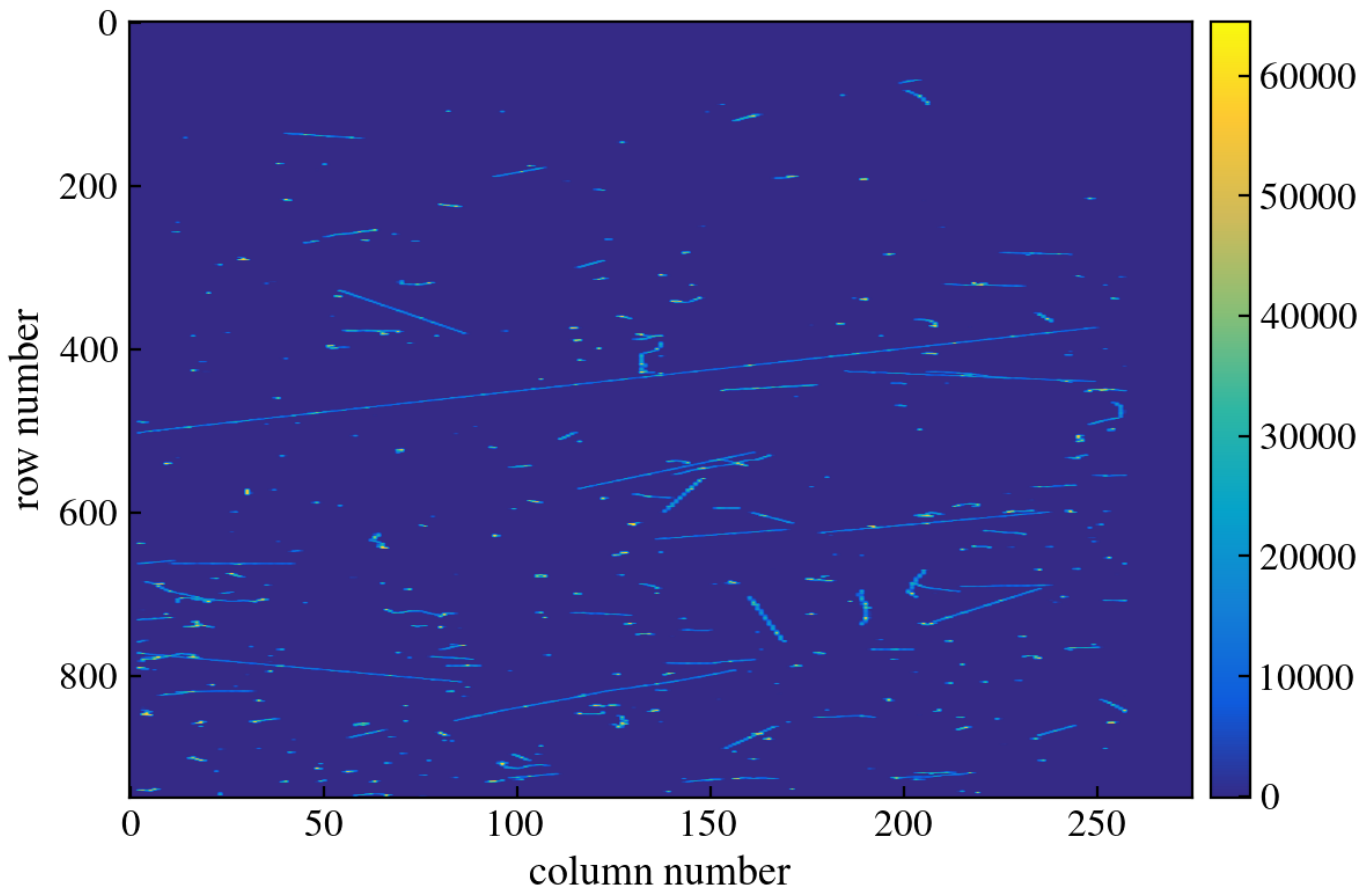


Figure 32: CCD Image

CCD Image: run 10, image 10
[class MECCDImage]

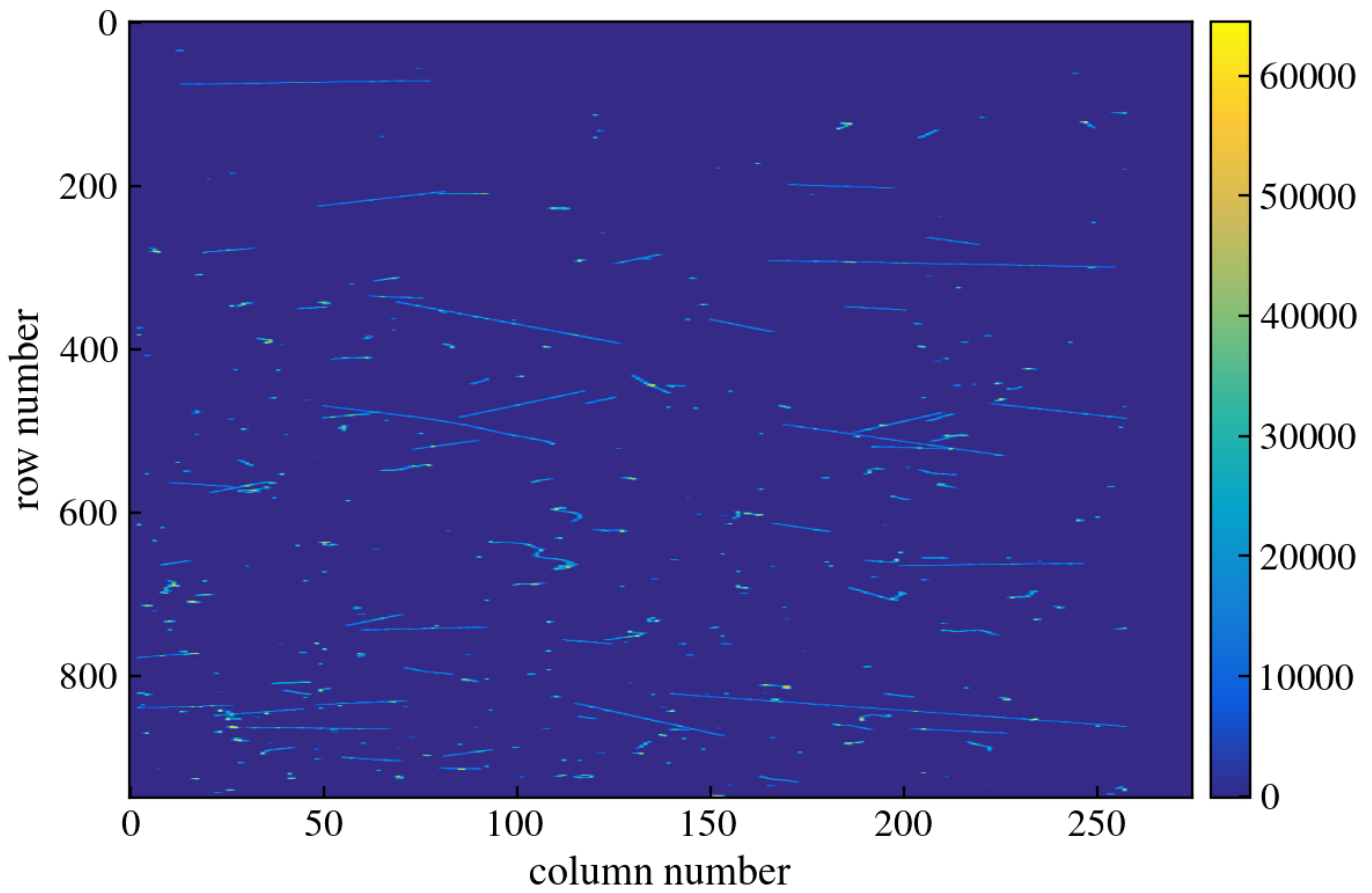


Figure 33: CCD Image

CCD Image: run 10, image 11
[class MECCDImage]

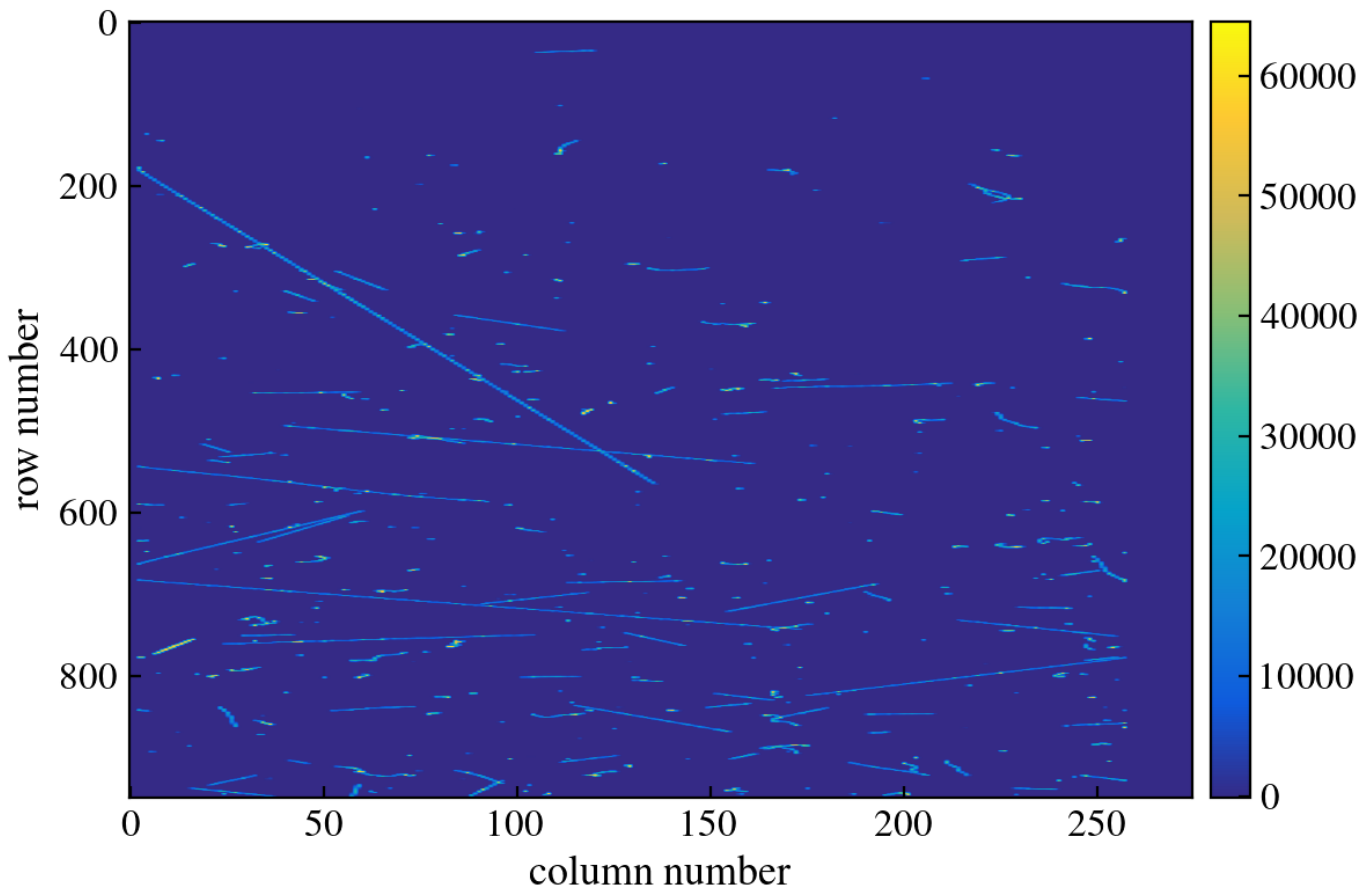


Figure 34: CCD Image

CCD Image: run 10, image 12
[class MECCDImage]

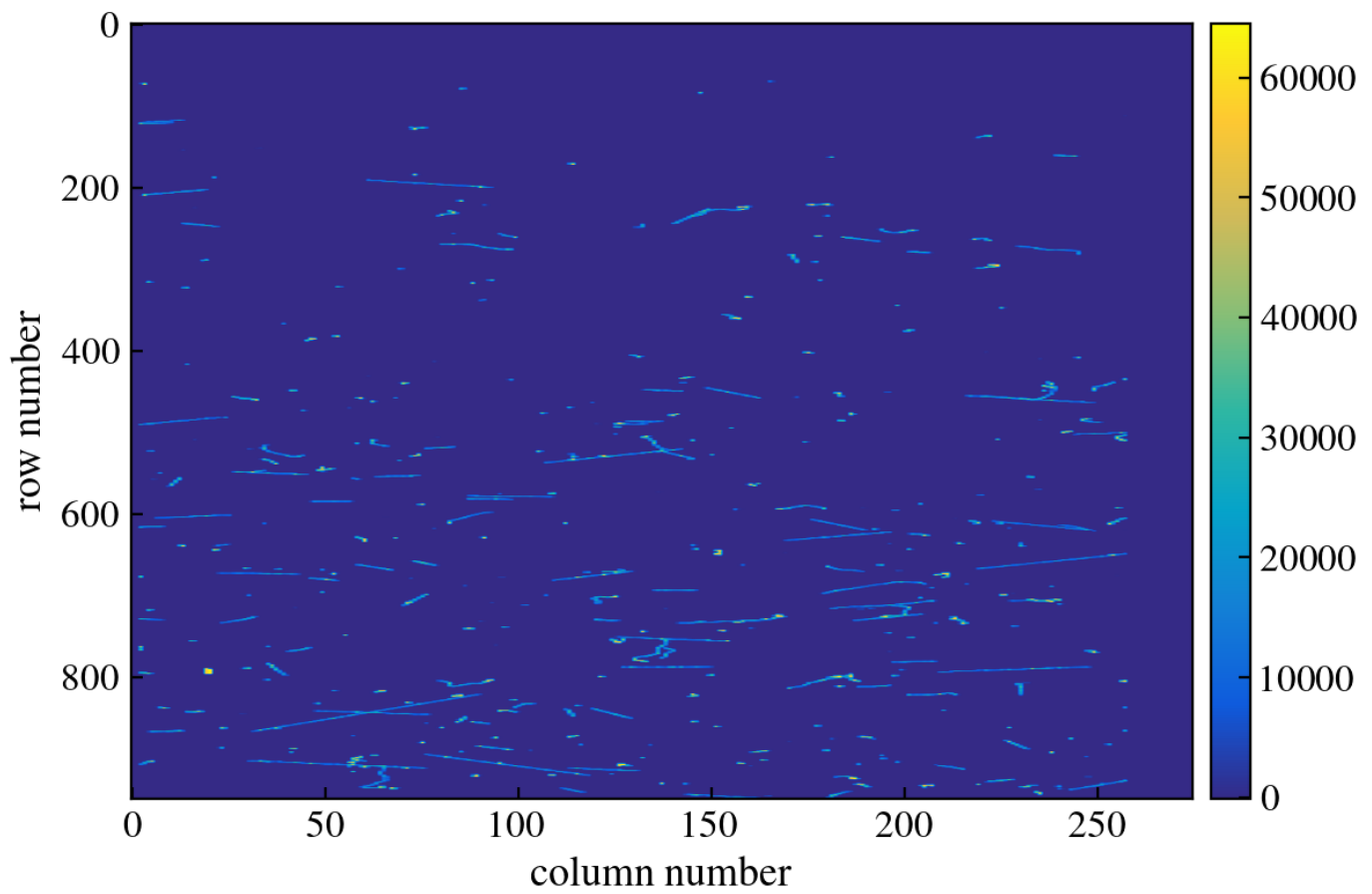


Figure 35: CCD Image

CCD Image: run 10, image 2
[class MECCDImage]

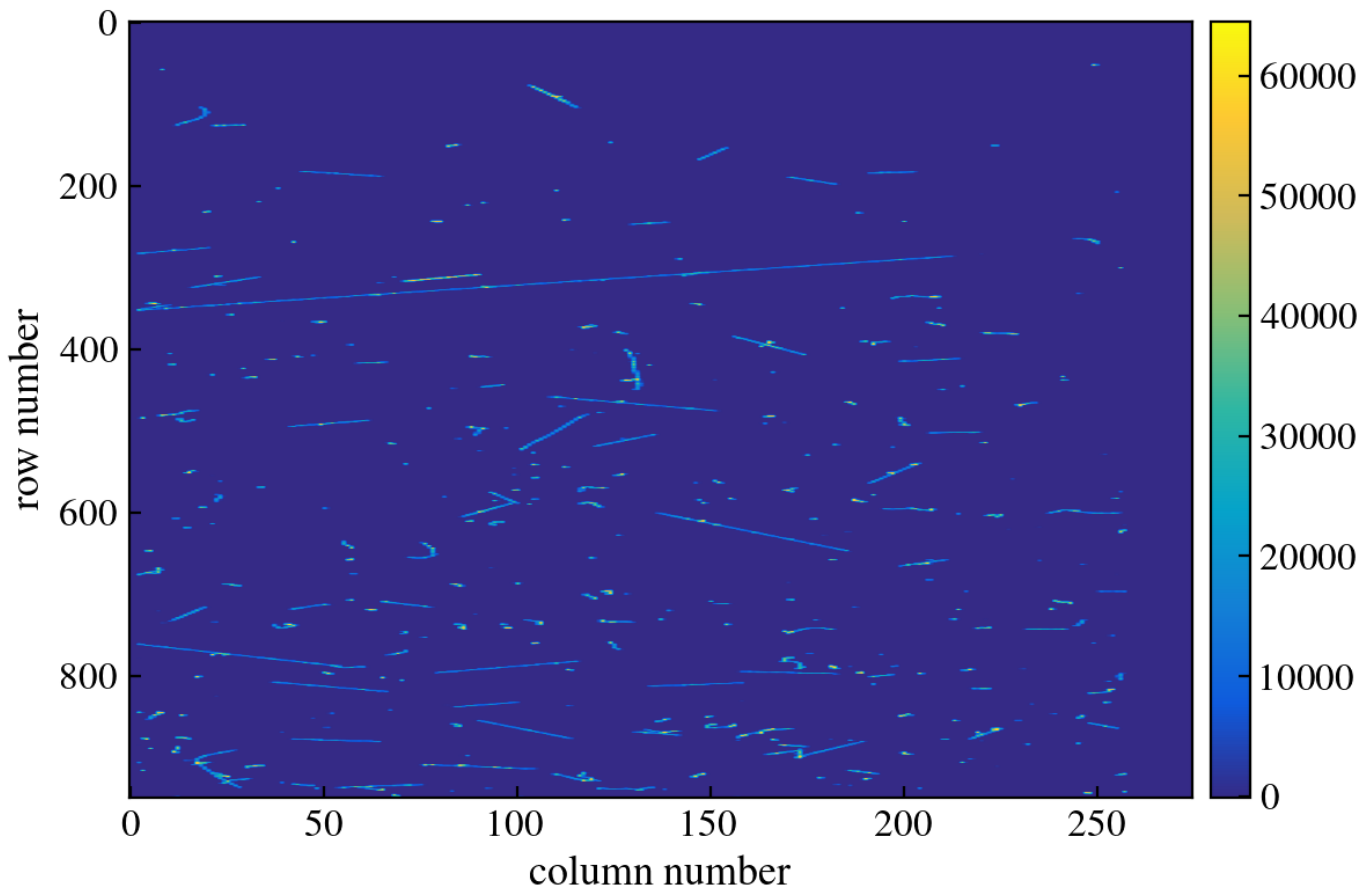


Figure 36: CCD Image

CCD Image: run 10, image 3
[class MECCDImage]

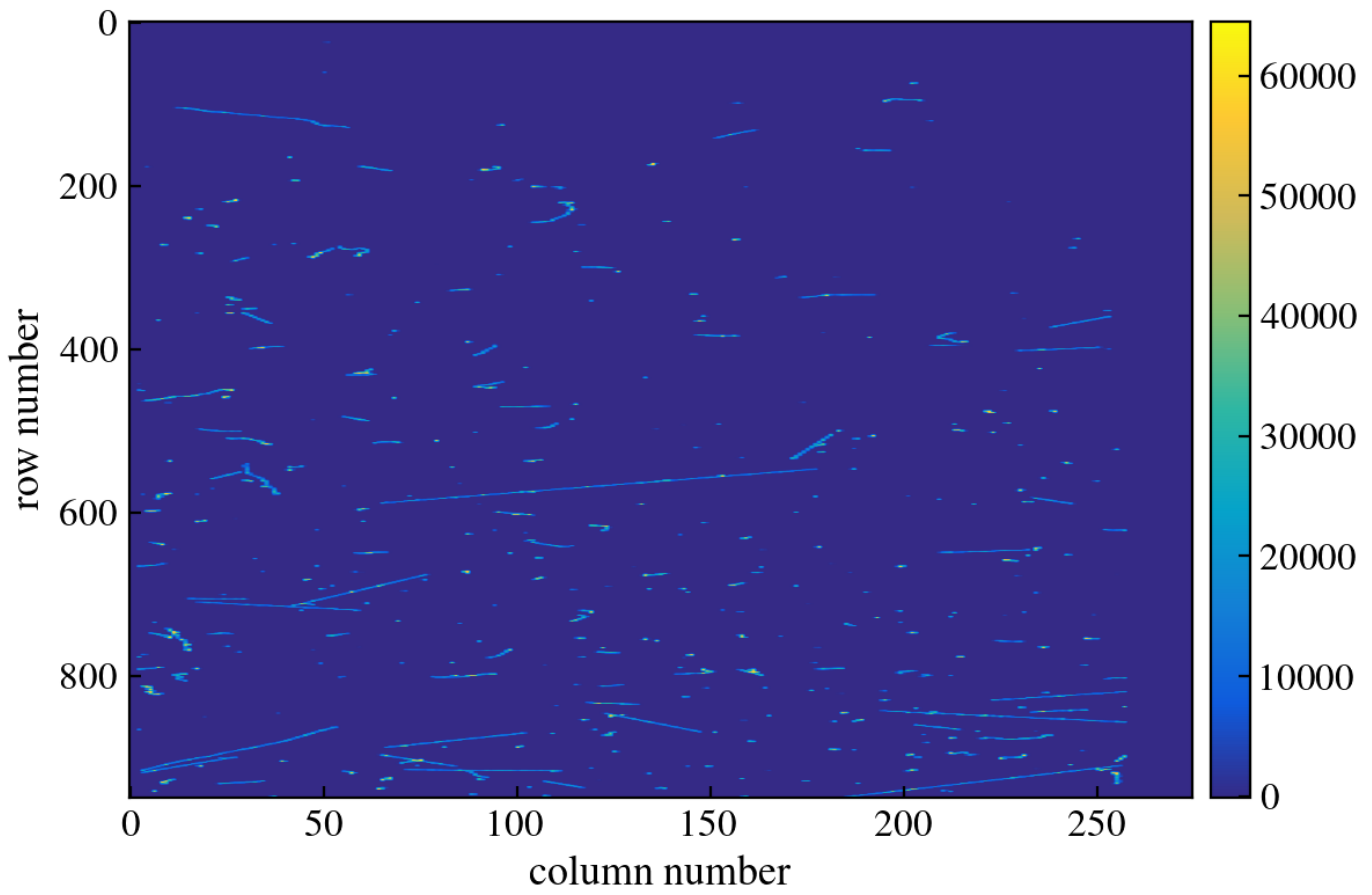


Figure 37: CCD Image

CCD Image: run 10, image 4
[class MECCDImage]

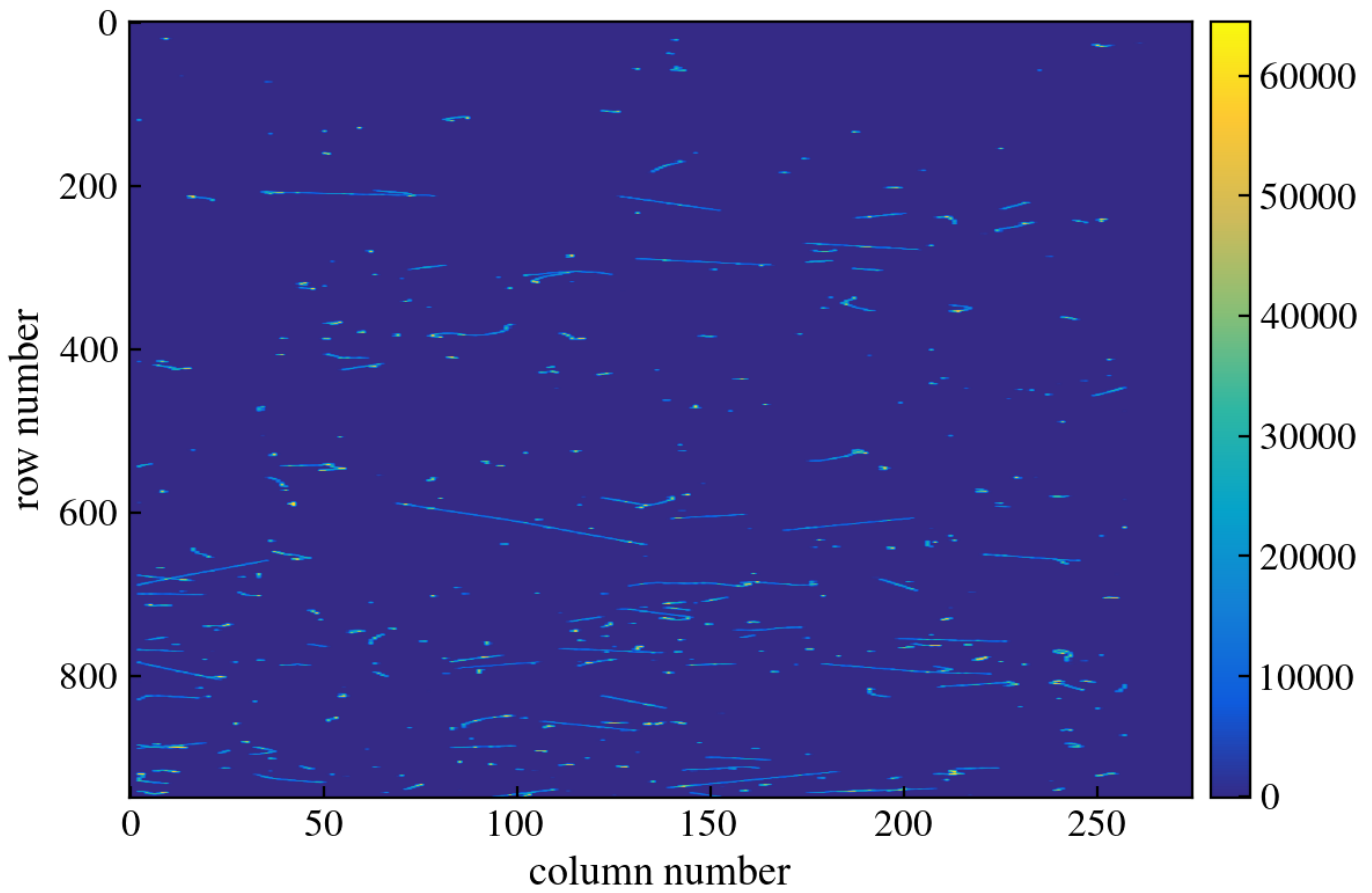


Figure 38: CCD Image

CCD Image: run 10, image 5
[class MECCDImage]

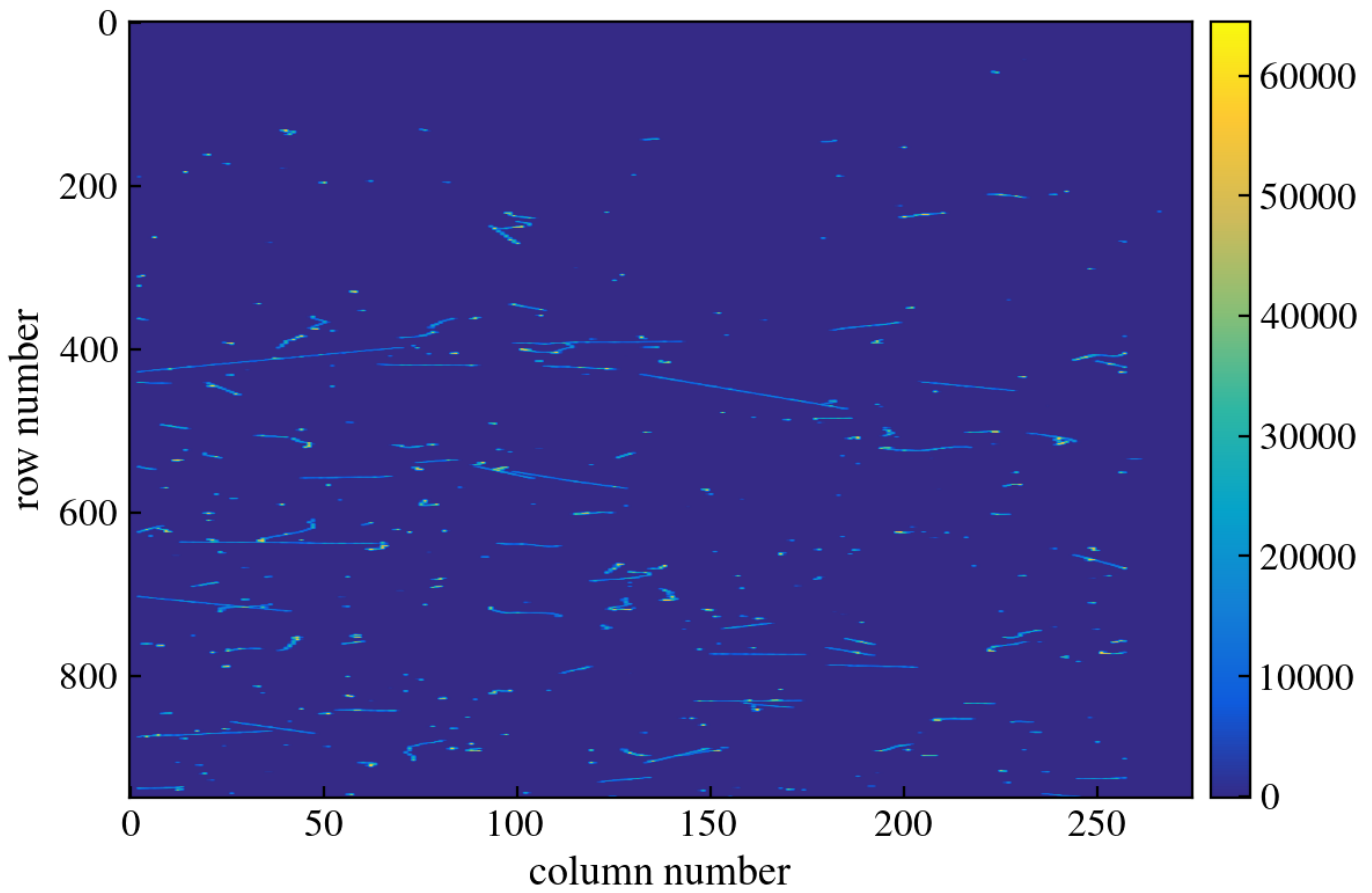


Figure 39: CCD Image

CCD Image: run 10, image 6
[class MECCDImage]

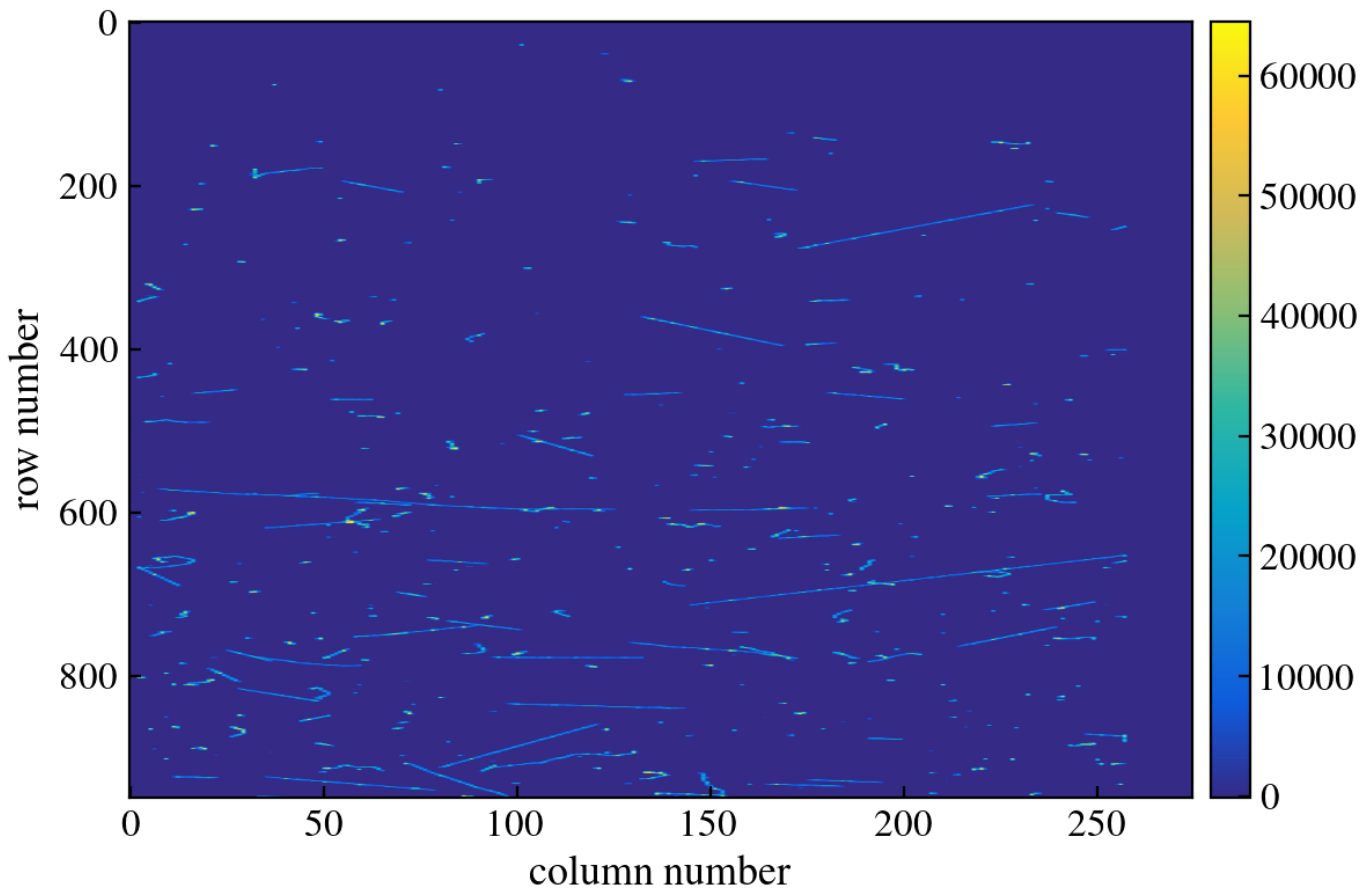


Figure 40: CCD Image

CCD Image: run 10, image 7
[class MECCDImage]

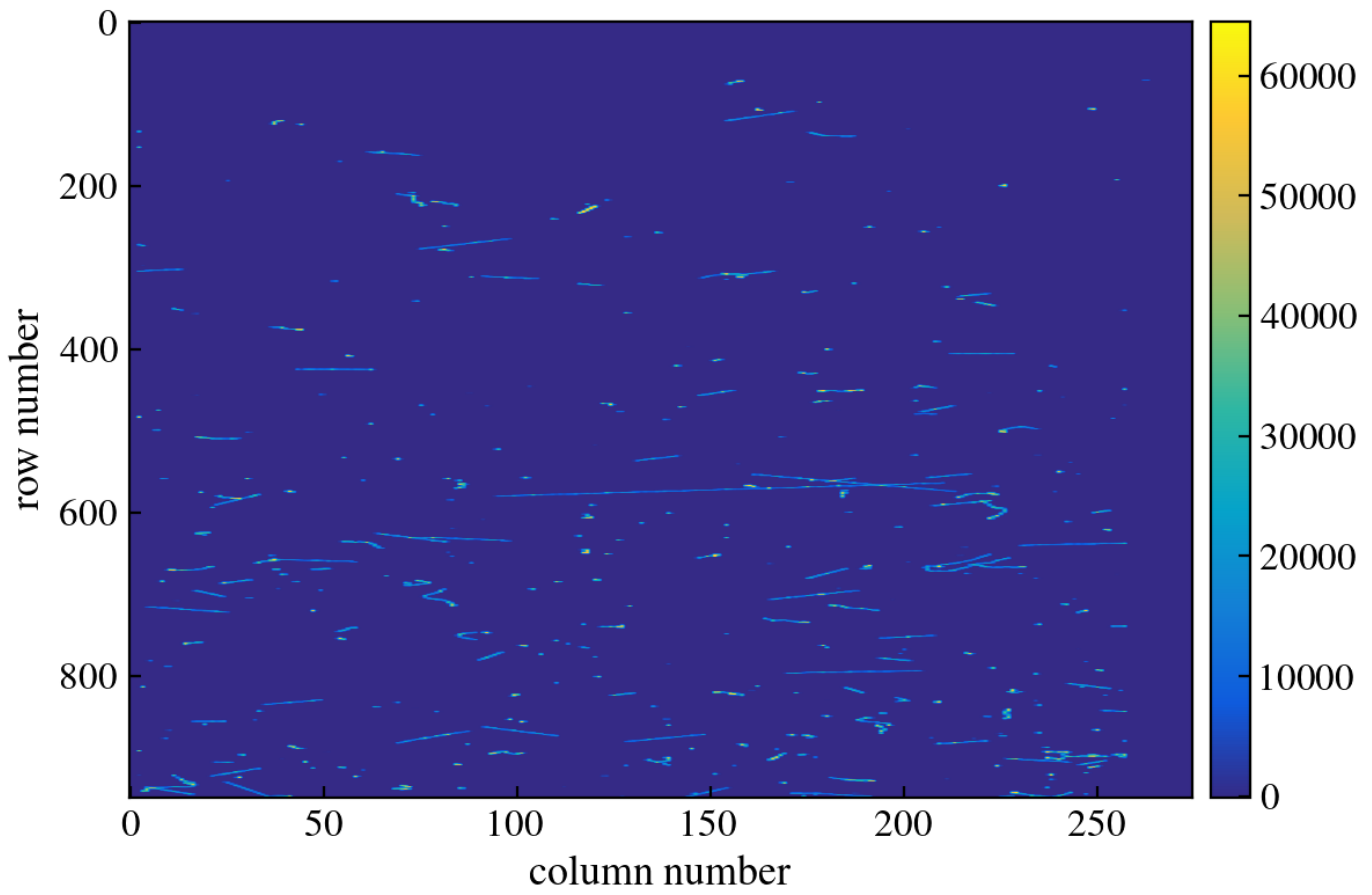


Figure 41: CCD Image

CCD Image: run 10, image 8
[class MECCDImage]

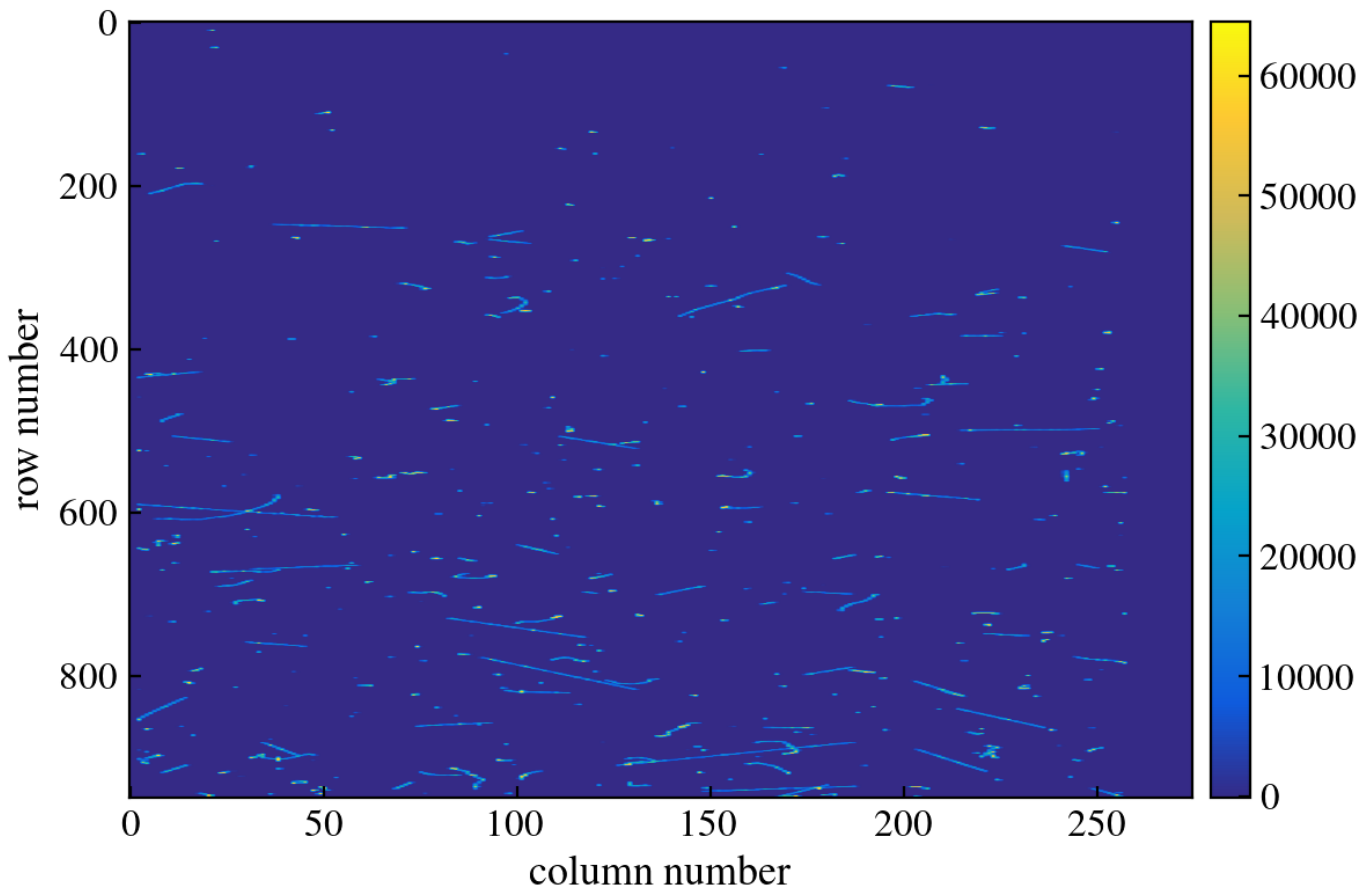


Figure 42: CCD Image

CCD Image: run 10, image 9
[class MECCDImage]

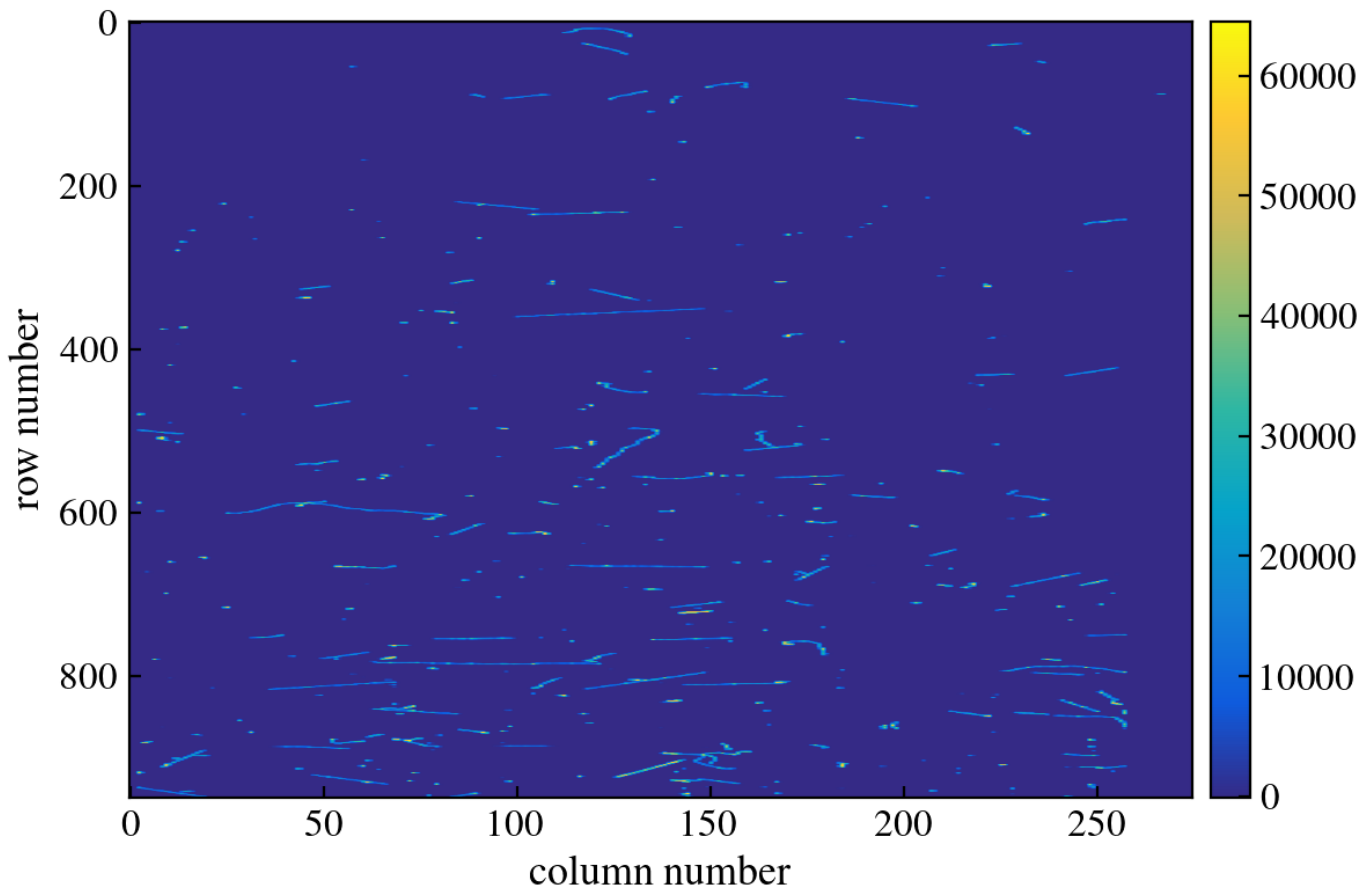


Figure 43: CCD Image

Overscan. Baseline Shift Status vs Image
[class MEBaselineShift]

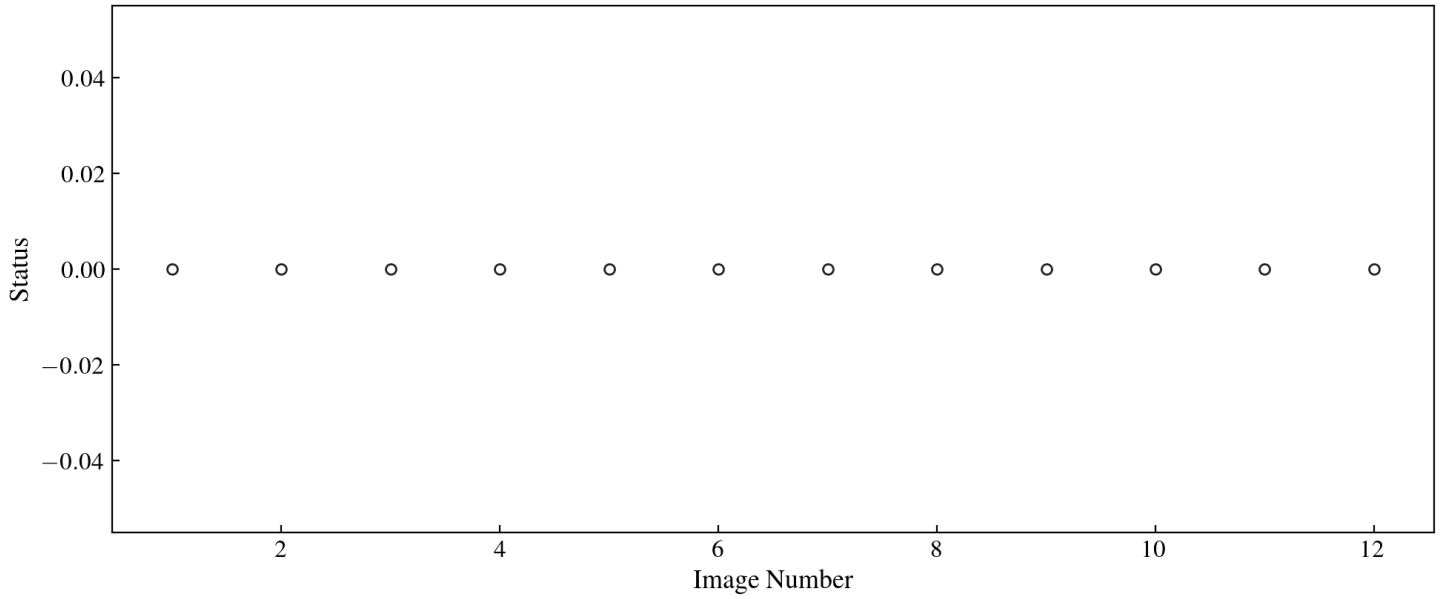


Figure 44: Overscan. Baseline Shift Status vs Image

Overscan. Horizontal Clusters vs Image
[class MEHorizontalClusters]

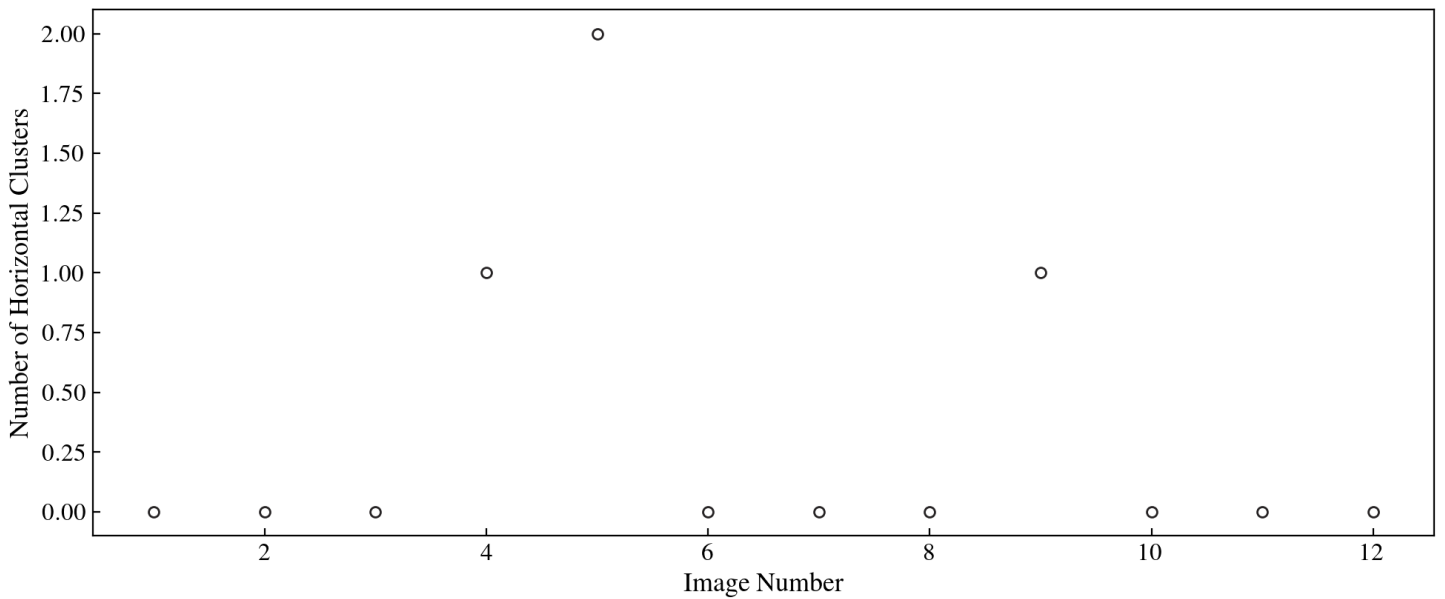


Figure 45: Overscan. Horizontal Clusters vs Image

Overscan. Miscellaneous Noise Found Status
[class MESigmaCutoffNoise]



Figure 46: Overscan. Miscellaneous Noise Found Status