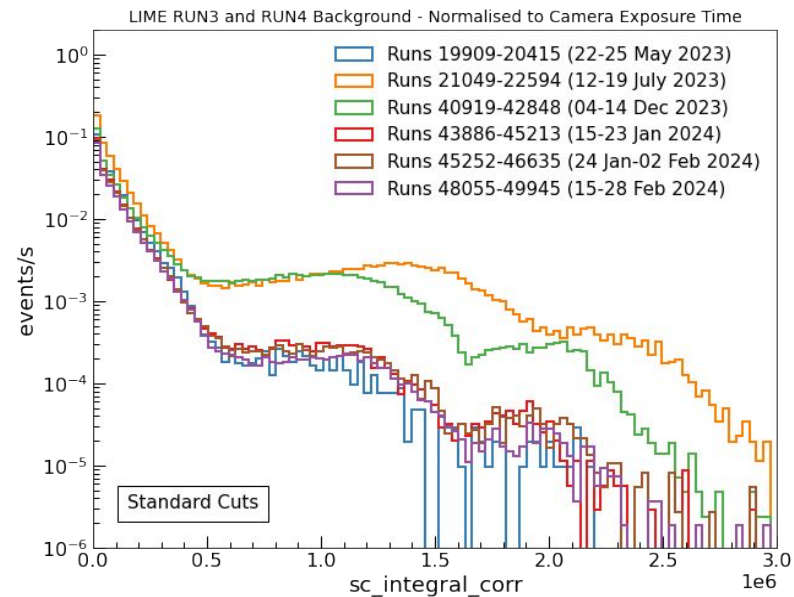
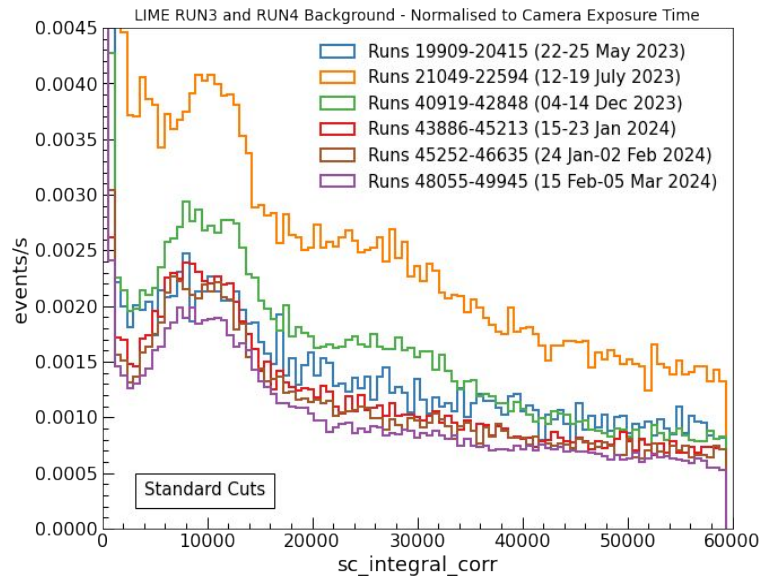


# Rn, Cu and Fiorina Peaks



## Standard Cuts applied:

- $sc\_rms > 6$
- $sc\_tgausssigma * 0.152 > 0.5$
- $sc\_xmin > 255$  &  $sc\_xmax < 2000$
- $sc\_ymin > 300$  &  $sc\_ymax < 2000$

## Data taking periods:

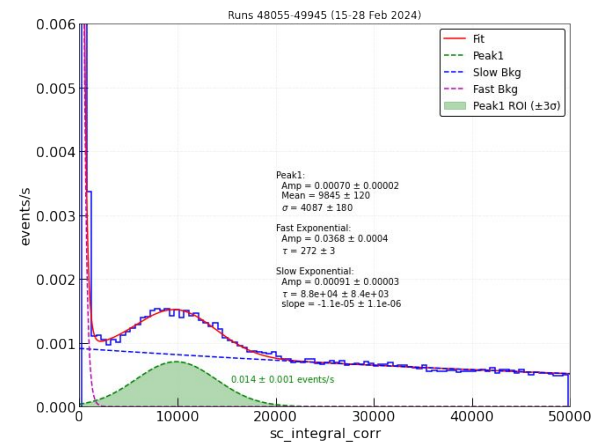
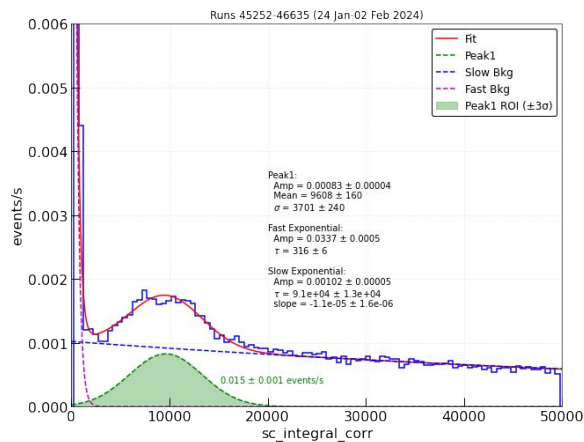
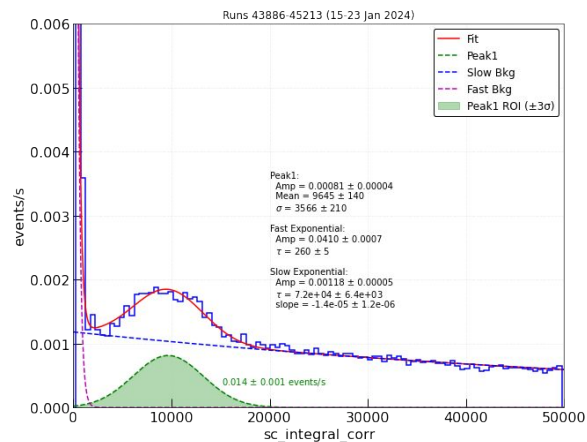
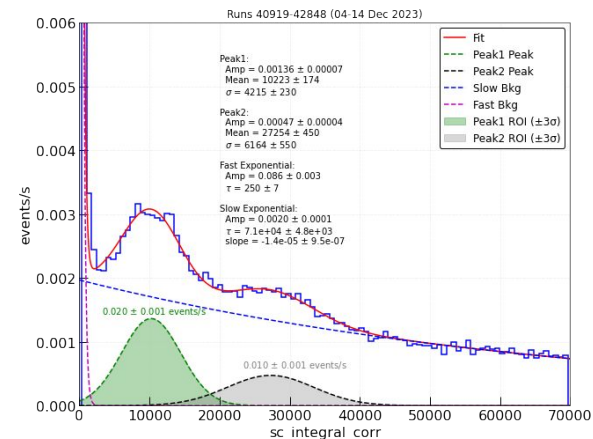
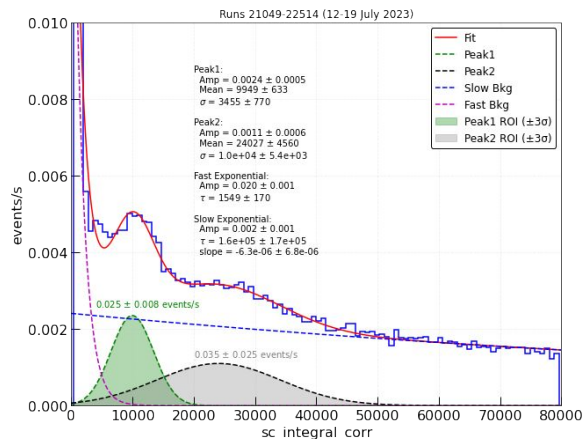
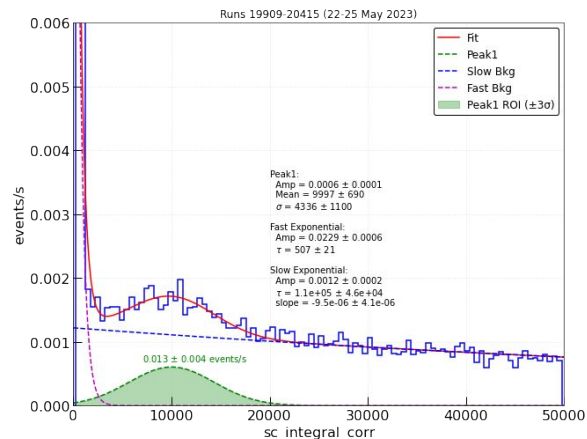
### RUN3

- 22-25 May 2023 → runs 19909 - 20415
- 12-19 July 2023 → runs 21049 - 22514

### RUN4

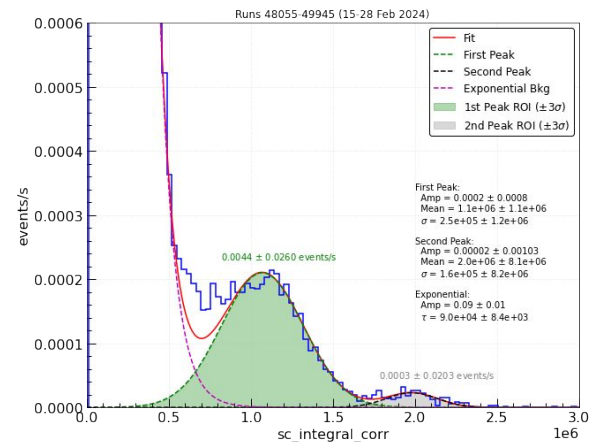
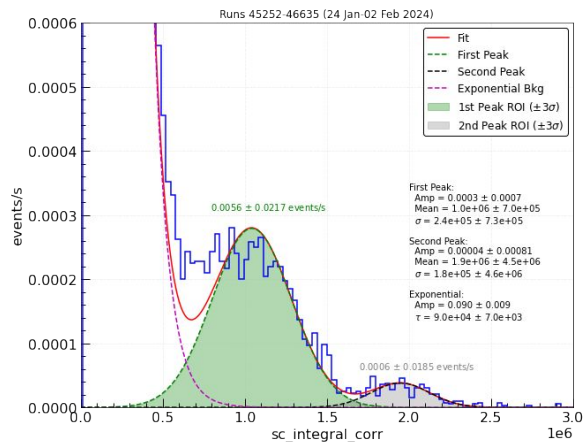
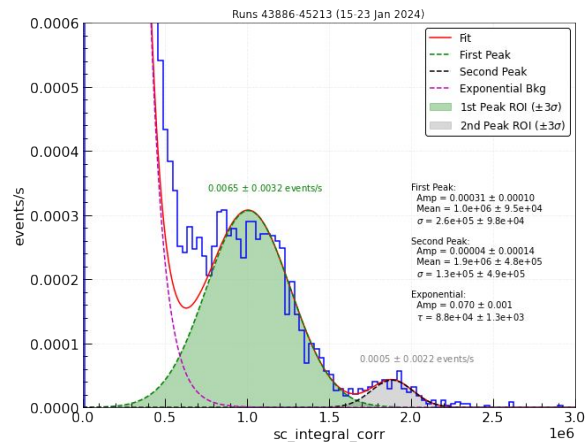
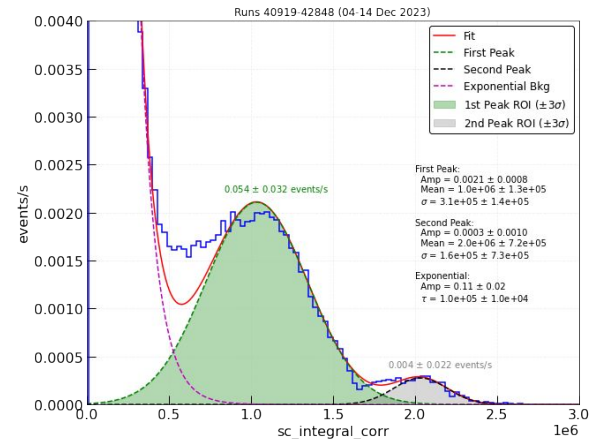
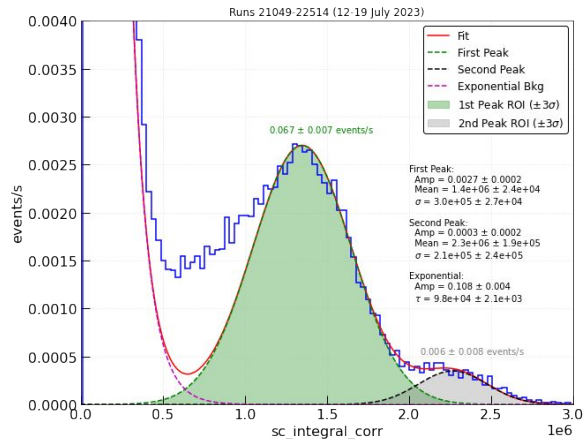
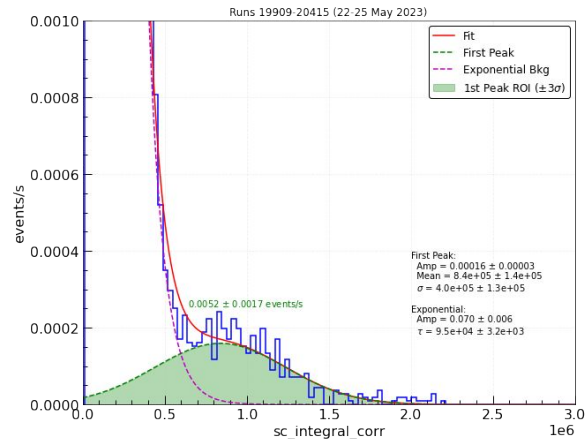
- 4-14 Dec 2023 → runs 40919 - 42848
- 15-23 Jan 2024 → runs 43886 - 45213
- 24 Jan-2 Feb 2024 → runs 45252 - 46635
- 15-28 Feb 2024 → runs 48055 - 49945

# Low energy events



- Total events/s for a peak: centroid identified,  $\pm 3\sigma$  region selected, and Gaussian values summed at bin centers.

# High energy events



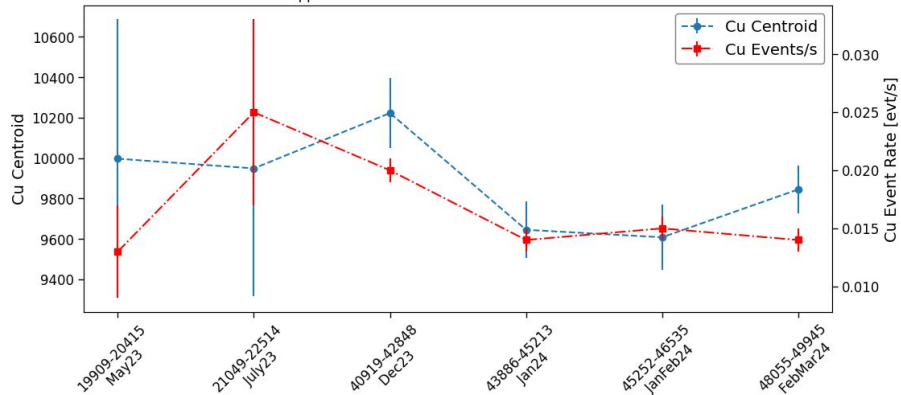
- Total events/s for a peak: centroid identified,  $\pm 3\sigma$  region selected, and Gaussian values summed at bin centers.

# Data summary

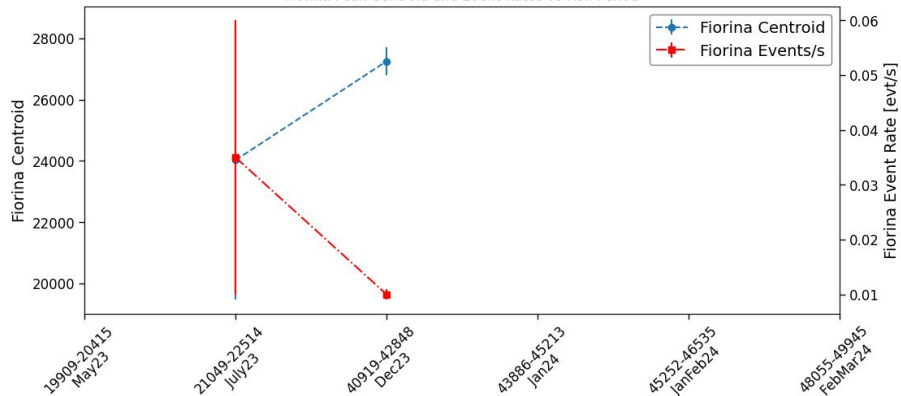
Run	Cu Peak		Fiorina Peak		Fast Exp. <small>(low energy region plots)</small>		Slow Exp. <small>(low energy region plots)</small>			Peak1 HiEn		Peak2 HiEn		Exponential <small>(whole energy region plots)</small>	
	μ	evt/s	μ	evt/s	A	τ	A	τ	Slope	μ	evt/s	μ	evt/s	A	τ
										-	-	-	-	-	-
<b>19909 - 20415</b> <small>22-25 May 2023</small>	9997 ± 690	0.013 ± 0.004	-	-	0.0229 ± 0.006	507 ± 21	0.0012 ± 0.002	1.1x10 <sup>5</sup> ± 4.6x10 <sup>4</sup>	-9.5x10 <sup>-6</sup> ± 4.1x10 <sup>-6</sup>	8.4x10 <sup>5</sup> ± 1.4x10 <sup>5</sup>	0.052 ± 0.002	-	-	0.070 ± 0.006	9.5x10 <sup>4</sup> ± 3.2x10 <sup>3</sup>
<b>21049 - 22514</b> <small>12-19 July 2023</small>	9949 ± 633	0.025 ± 0.008	24027 ± 4560	0.035 ± 0.025	0.002 ± 0.001	1549 ± 170	0.002 ± 0.001	1.6x10 <sup>5</sup> ± 1.7x10 <sup>5</sup>	-6.3x10 <sup>-6</sup> ± 6.8x10 <sup>-6</sup>	1.4x10 <sup>6</sup> ± 2.4x10 <sup>4</sup>	0.067 ± 0.007	2.3x10 <sup>6</sup> ± 1.9x10 <sup>5</sup>	0.006 ± 0.008	0.108 ± 0.004	9.8x10 <sup>4</sup> ± 2.1x10 <sup>3</sup>
<b>40919 - 42848</b> <small>4-14 Dec 2023</small>	10223 ± 174	0.020 ± 0.001	27254 ± 450	0.010 ± 0.001	0.086 ± 0.003	250 ± 7	2x10 <sup>-3</sup> ± 1x10 <sup>-4</sup>	7.1x10 <sup>4</sup> ± 4.8x10 <sup>3</sup>	-1.4x10 <sup>-5</sup> ± 9.5x10 <sup>-7</sup>	1.0x10 <sup>6</sup> ± 1.3x10 <sup>5</sup>	0.054 ± 0.032	2.0x10 <sup>6</sup> ± 7.2x10 <sup>5</sup>	0.004 ± 0.022	0.11 ± 0.02	1.0x10 <sup>5</sup> ± 1.0x10 <sup>4</sup>
<b>43886 - 45213</b> <small>15-23 Jan 2024</small>	9645 ± 140	0.014 ± 0.001	-	-	0.0410 ± 0.0007	260 ± 5	1.2x10 <sup>-3</sup> ± 5x10 <sup>-5</sup>	7.2x10 <sup>4</sup> ± 6.4x10 <sup>3</sup>	-1.4x10 <sup>-5</sup> ± 1.2x10 <sup>-6</sup>	1x10 <sup>6</sup> ± 9.5x10 <sup>4</sup>	0.0065 ± 0.0032	1.9x10 <sup>6</sup> ± 4.8x10 <sup>5</sup>	0.0005 ± 0.0022	0.070 ± 0.001	8.8x10 <sup>4</sup> ± 1.3x10 <sup>3</sup>
<b>45252 - 46635</b> <small>24Jan-2Feb 2024</small>	9608 ± 160	0.015 ± 0.001	-	-	0.0336 ± 0.0005	316 ± 6	1.02x10 <sup>-3</sup> ± 5x10 <sup>-5</sup>	9.1x10 <sup>4</sup> ± 1.3x10 <sup>4</sup>	-1.1x10 <sup>-5</sup> ± 1.6x10 <sup>-6</sup>	1.0x10 <sup>6</sup> ± 7.0x10 <sup>5</sup>	0.0056 ± 0.0217	1.9x10 <sup>6</sup> ± 4.5x10 <sup>6</sup>	0.0006 ± 0.0185	0.009 ± 0.009	9.0x10 <sup>4</sup> ± 7.0x10 <sup>3</sup>
<b>48055 - 49945</b> <small>15-28 Feb 2024</small>	9845 ± 120	0.014 ± 0.001	-	-	0.0368 ± 0.0004	272 ± 3	9.1x10 <sup>-4</sup> ± 3x10 <sup>-5</sup>	8.8x10 <sup>4</sup> ± 8.4x10 <sup>3</sup>	-1.1x10 <sup>-5</sup> ± 1.1x10 <sup>-6</sup>	1.1x10 <sup>6</sup> ± 1.1x10 <sup>6</sup>	0.0044 ± 0.0260	2.0x10 <sup>6</sup> ± 8.1x10 <sup>6</sup>	0.0003 ± 0.0203	0.09 ± 0.01	9.0x10 <sup>4</sup> ± 8.4x10 <sup>3</sup>

# Data summary

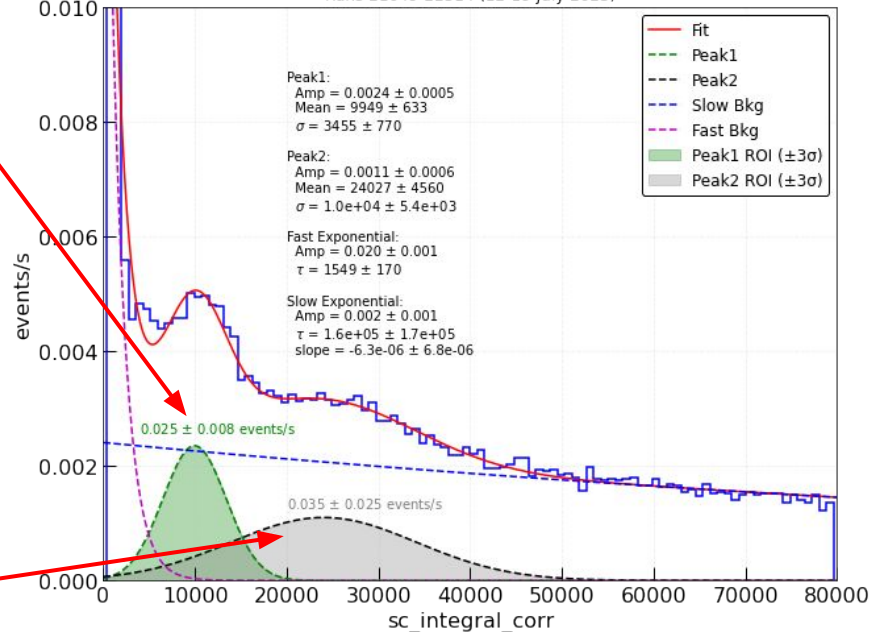
Copper Peak Centroid and Event Rates vs Run Period



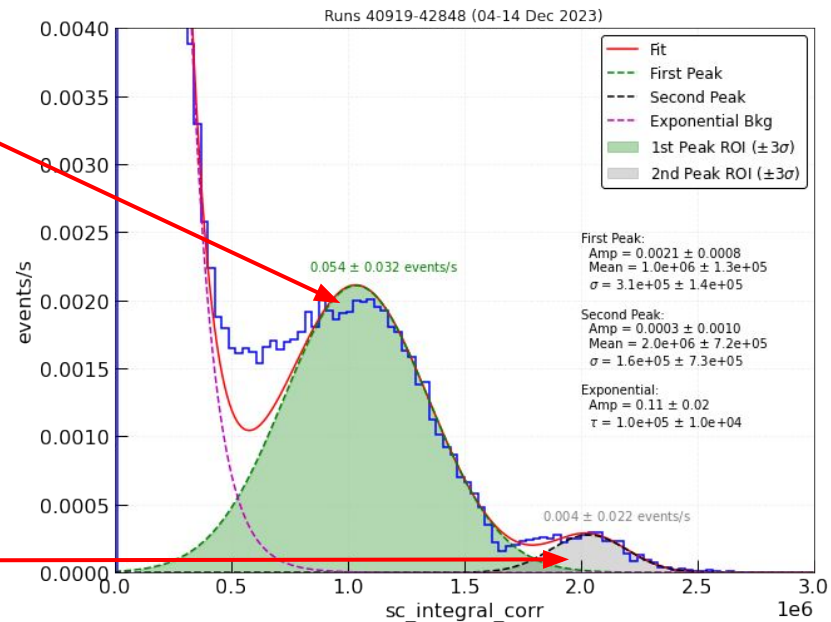
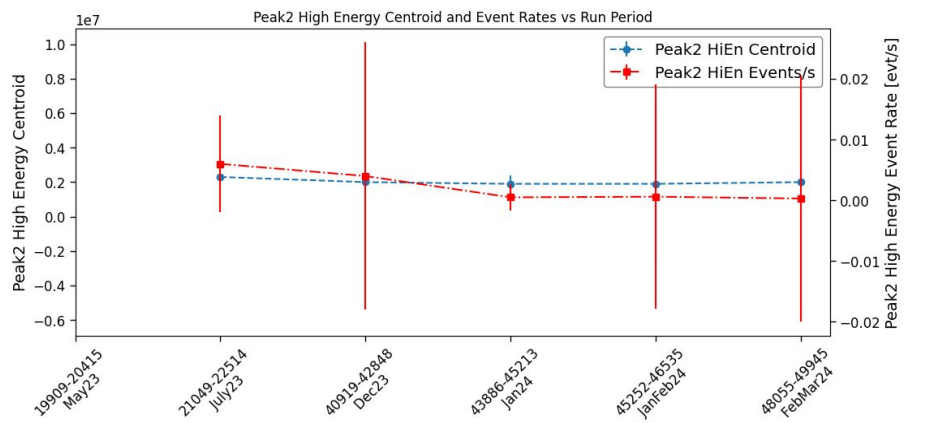
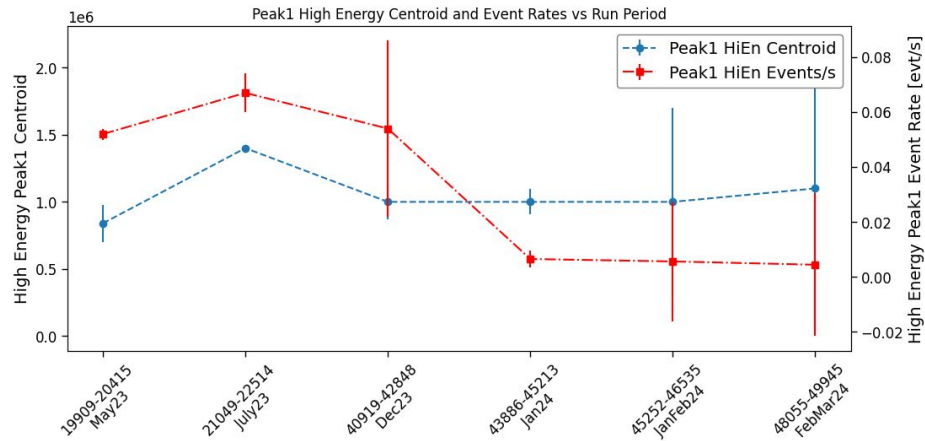
Fiorina Peak Centroid and Event Rates vs Run Period



Runs 21049-22514 (12-19 July 2023)



# Data summary



# Data summary

