Possible Source Scan Cd109 Criteria

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Possible Source Scan Cd109 Criteria

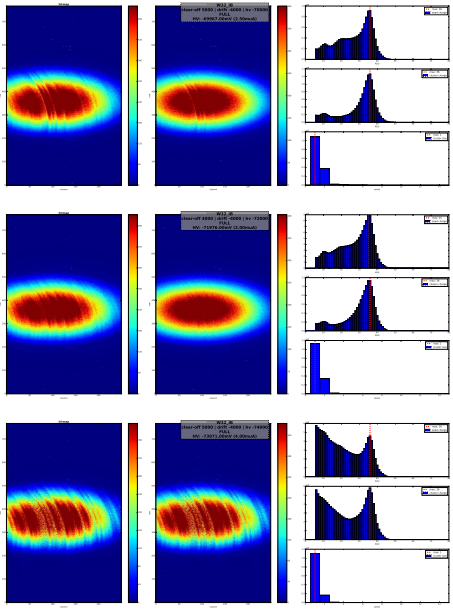
Possible Criteria

- peak-valley ratio in cluster and seed charge plot
- distribution of cluster size
- Gauss fit: σ and quality of fit

Peak-Valley Ratio

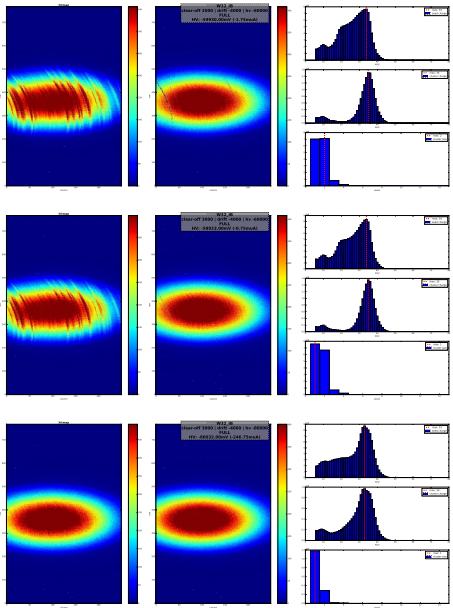
- peak: ADU of signal maximum
- valley: 2/3 of ADU peak
  (or peak - 3 σ)

$\frac{\#\ hits\ at\ peak}{\#\ hits\ at\ valley}$ should be max



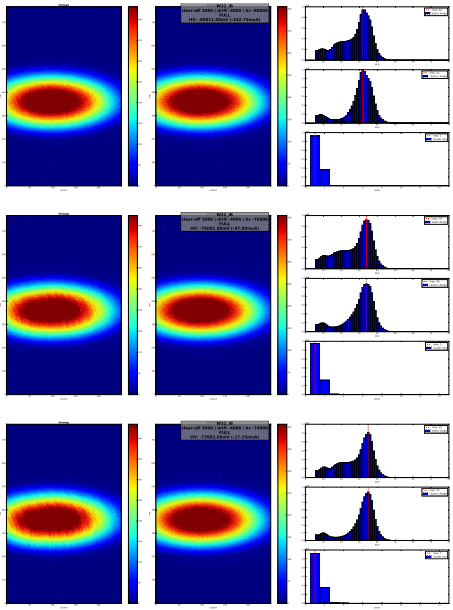
Cluster Size Distribution

- $1 > 2 > 3 > 4$
  (plot 1)
- 2 between [35-55]% of 1
  (plot 1, 2, 3)
- $3 <$ [5-7]% of 1
  (plot 2)
- (could also be referenced to total)



Gauss Standard Deviation

- for Cd109 source: Gauss fit
- minimize σ
- find best quality of Gauss fit (kurtosis, skewness, ...)



Chosen by eye

A good one would be: