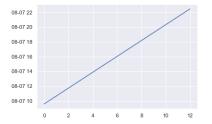
Krypton Calibration Run 7428

Krypton Calibration Group

Conditions and data

Table: Conditions and data for run 7428

Conditions	Data	
run number	7428	
file range	(0,5750)	
date	2019-08-07	
lab temperature:	20.2 deg	
Total number of S2s	2051376	
Total number of events	1016691	



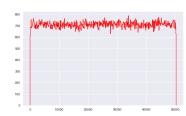


Figure: Run data.

Table: S1 & S2 for run 7428

Conditions	Data
fraction of S1s	0.51
fraction of S2s (1 S1)	0.56
fraction 1 S2 & 1 S1	0.29

Table: S1 & S2 selection for run 7428

Variables	Data
s ₁ energy	3 pes to 25 pes
s ₂ energy (PMTs)	3000 pes to 13000 pes
s_2 charge (SiPMs)	200 pes to 800 pes
s ₂ width	5 μs to 15 μs
n _{sipm} min	15

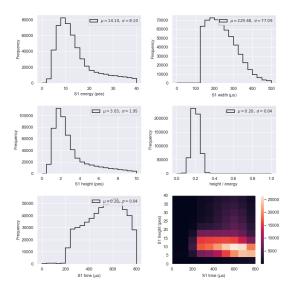


Figure: S1 distributions.

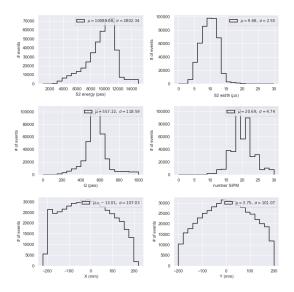


Figure: S2 distributions.

Control distributions

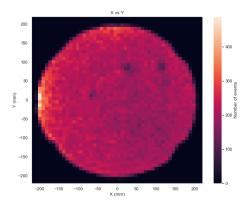


Figure: XY distribution.

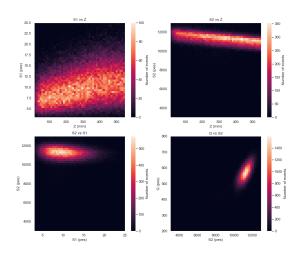


Figure: S1, S2 & Q distributions.

Lifetime distributions

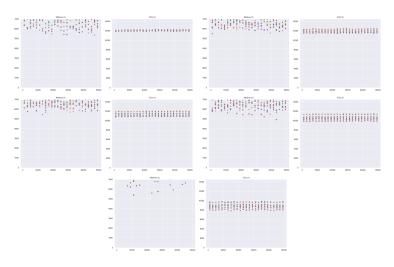


Figure: Distributions of lifetime and E₀ for 5 radial sectors (40, 80, 120, 160, 200).

Lifetime maps

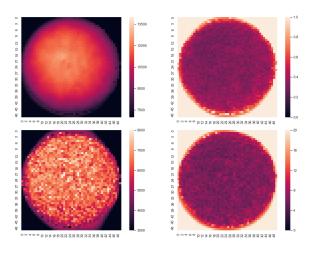


Figure: Lifetime and geometrical map.

Lifetime maps

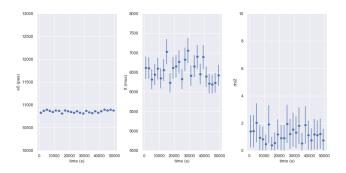


Figure: Average lifetime.

Lifetime and geometry correction

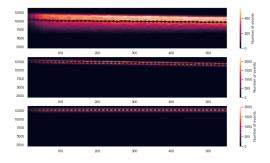


Figure: Lifetime and geometry correction.

R Profile showing R dropout

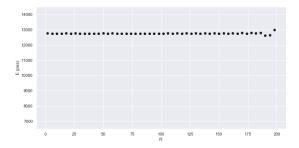


Figure: R profile shows that fiducial volume must be R < 180mm.

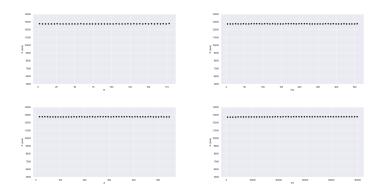


Figure: Profiles showing correction is robust.

Resolution fits as a function of R and Z

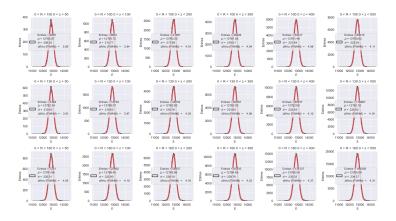


Figure: Resolution fits.

Resolution as a function of R and Z

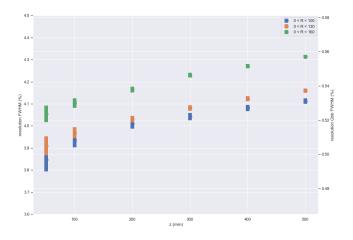


Figure: Resolution fits.

Efficiency over time



Figure: Efficiency tracking over time.

Response over time

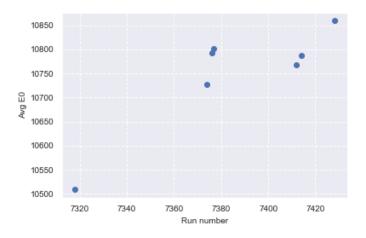


Figure: Response tracking over time.

Lifetime over time

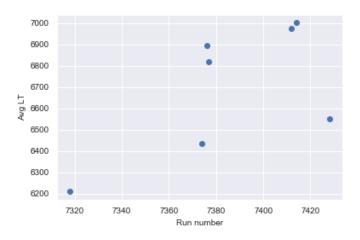


Figure: Lifetime tracking over time.

Resolution over time

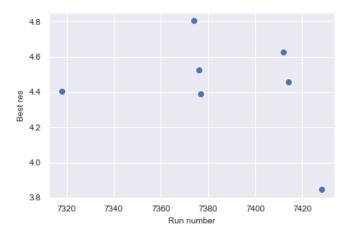


Figure: Resolution tracking over time.