

Krypton Calibration

Run 7005

Krypton Calibration Group

Table: Conditions and data for run 7005

Conditions	Data
run number	7005
file range	(0,2815)
date	«date»
lab temperature:	«labTempC» deg
Total number of S2s	940121
Total number of events	773767

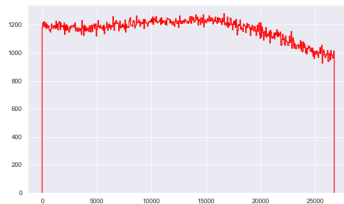
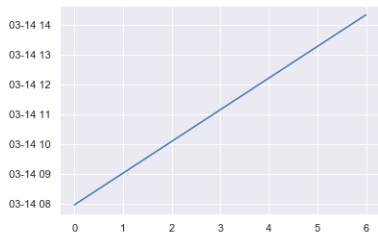


Figure: Run data.

Table: S1 & S2 for run 7005

Conditions	Data
fraction of S1s	0.75
fraction of S2s (1 S1)	0.75
fraction 1 S2 & 1 S1	«fracS1S2»

Table: S1 & S2 selection for run 7005

Variables	Data
s_1 energy	«s1Min» pes to «s1Max» pes
s_2 energy (PMTs)	«s2MinPMT» pes to «s2MaxPMT» pes
s_2 charge (SiPMs)	«s2MinQ» pes to «s2MaxQ» pes
s_2 width	«widthMin» μs to «widthMax» μs
n_{sipm} min	«numSipmMin»

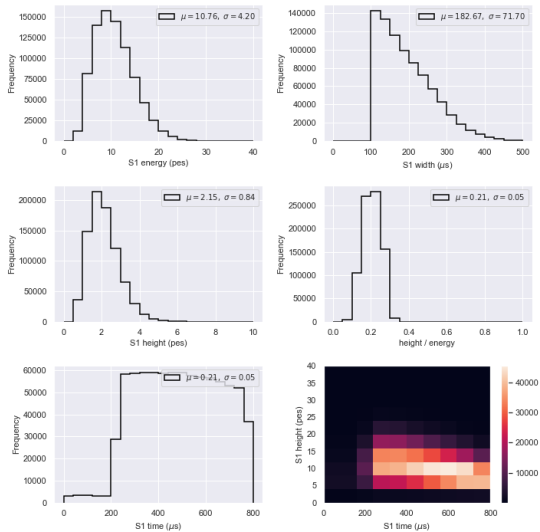


Figure: S1 distributions.

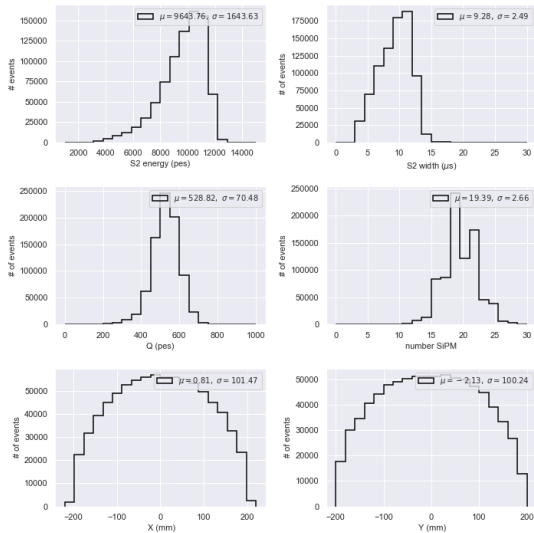


Figure: S2 distributions.

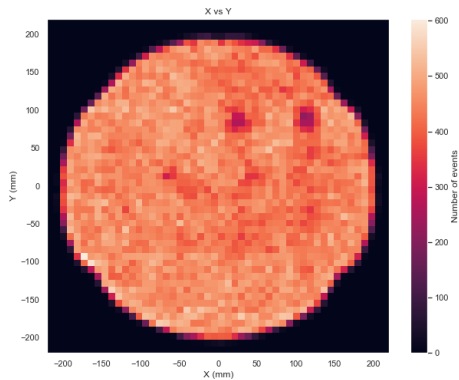


Figure: XY distribution.

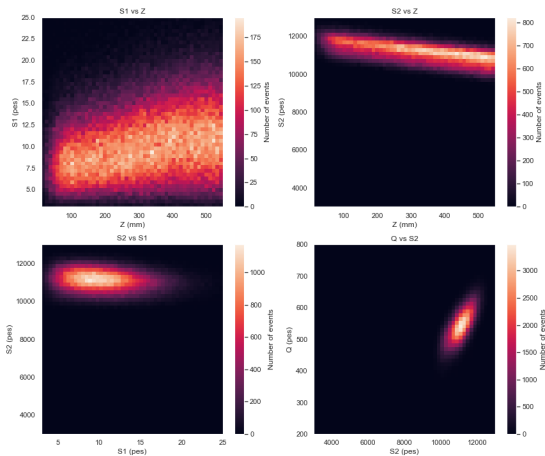


Figure: S1, S2 & Q distributions.

Lifetime distributions

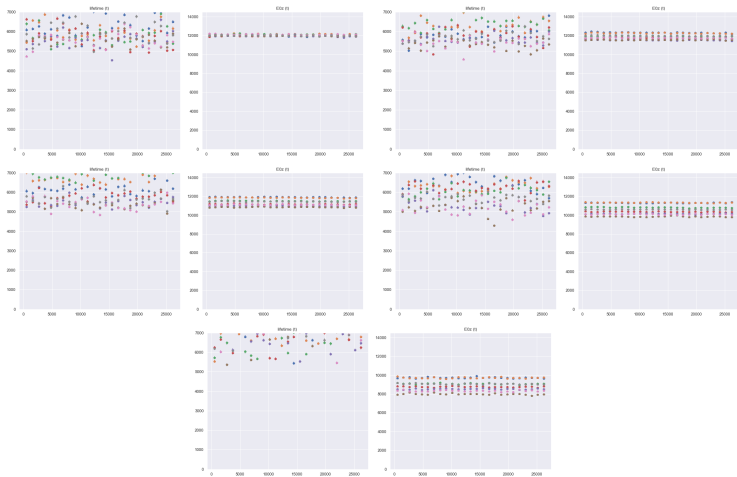


Figure: Distributions of lifetime and E_0 for 5 radial sectors (40, 80, 120, 160, 200).

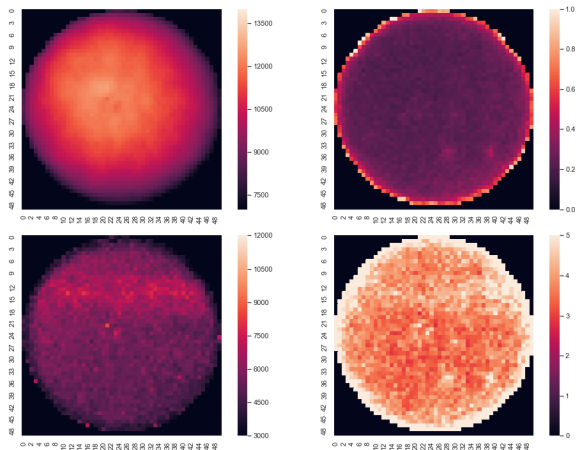


Figure: Lifetime and geometrical map.

Lifetime maps

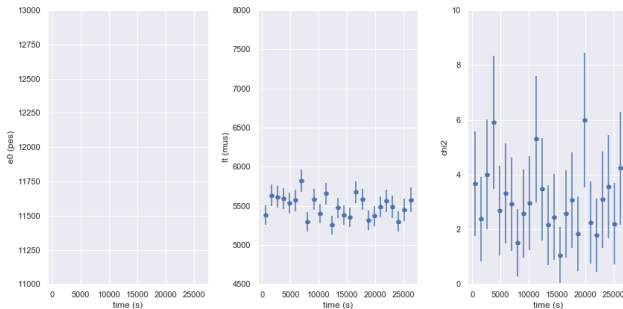


Figure: Average lifetime.

Lifetime and geometry correction

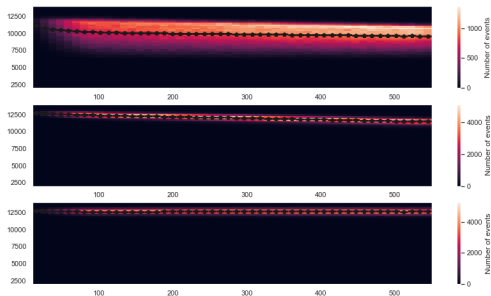


Figure: Lifetime and geometry correction.

R Profile showing R dropout

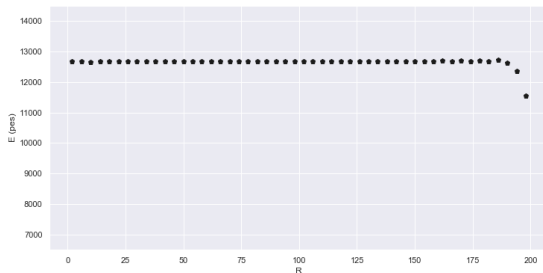


Figure: R profile shows that fiducial volume must be $R < 180\text{mm}$.

Profiles after $R < 180\text{mm}$

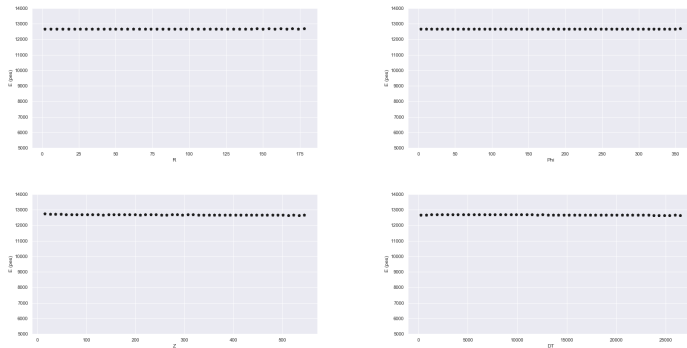


Figure: Profiles showing correction is robust.

Resolution fits as a function of R and Z

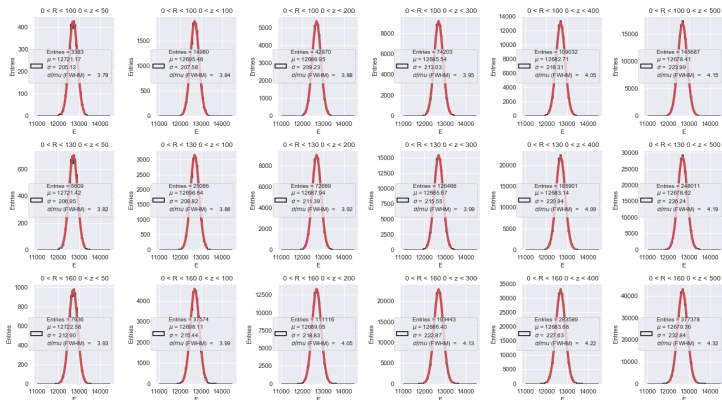


Figure: Resolution fits.

Resolution as a function of R and Z

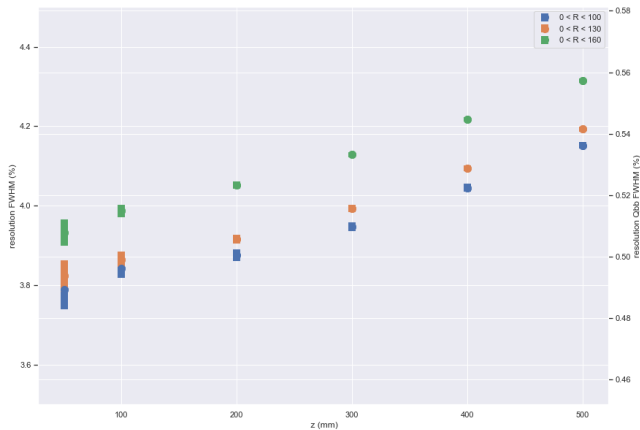


Figure: Resolution fits.

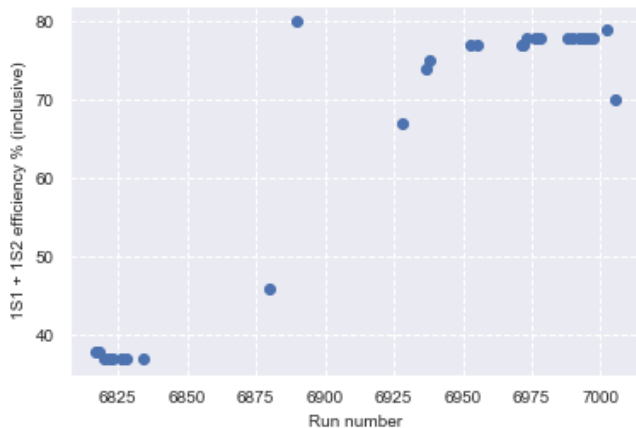


Figure: Efficiency tracking over time.