

Krypton Calibration

Run 8420

Krypton Calibration Group

Table: Conditions and data for run 8420

| Conditions | Data |
|------------------------|------------|
| run number | 8420 |
| file range | (0,6869) |
| date | 2021-01-26 |
| lab temperature: | 20.5 deg |
| Total number of S2s | 1911588 |
| Total number of events | 1850985 |

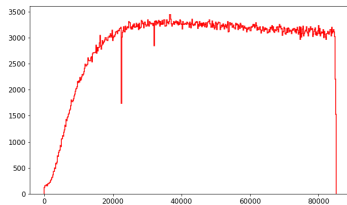
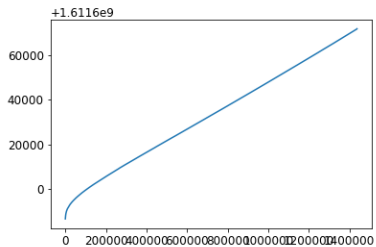


Figure: Run data.

Table: S1 & S2 for run 8420

| Conditions | Data |
|------------------------|------|
| fraction of S1s | 0.85 |
| fraction of S2s (1 S1) | 0.98 |
| fraction 1 S2 & 1 S1 | 0.83 |

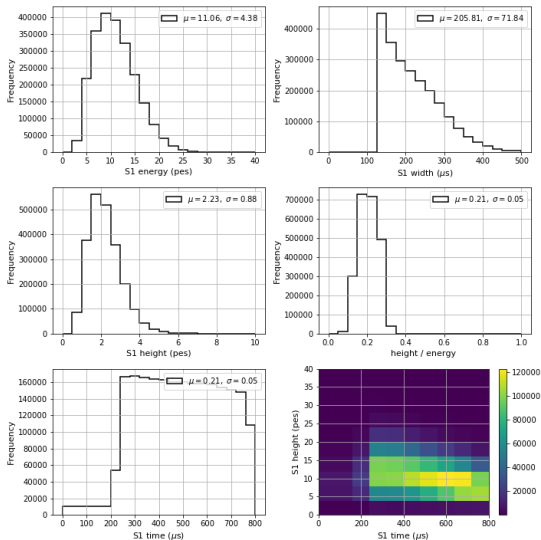


Figure: S1 distributions.

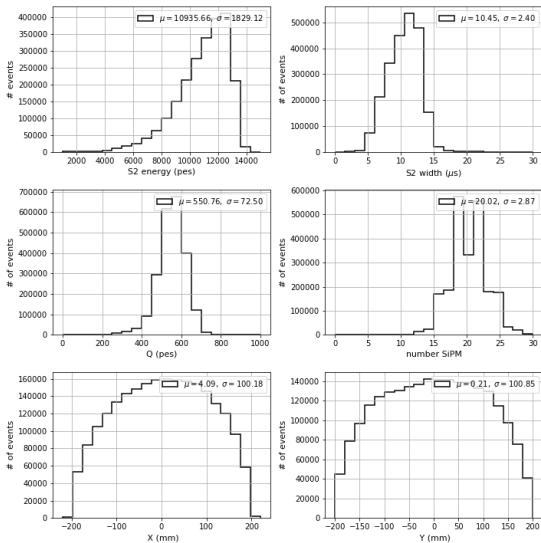


Figure: S2 distributions.

Control distributions

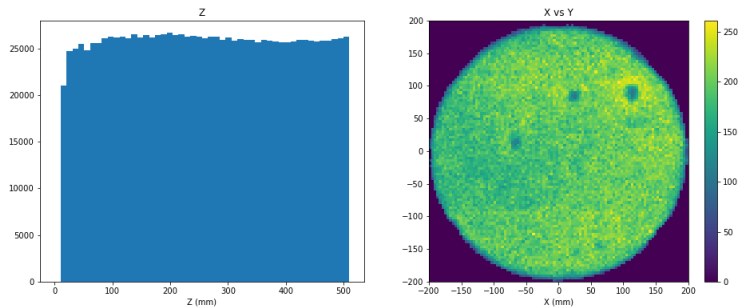


Figure: XYZ distribution.

Lifetime maps

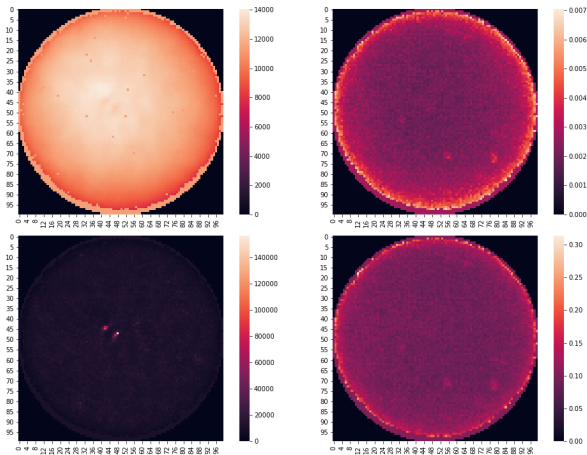


Figure: Lifetime and geometrical map.

Lifetime maps

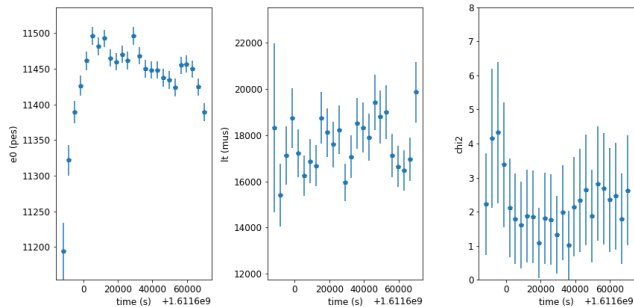
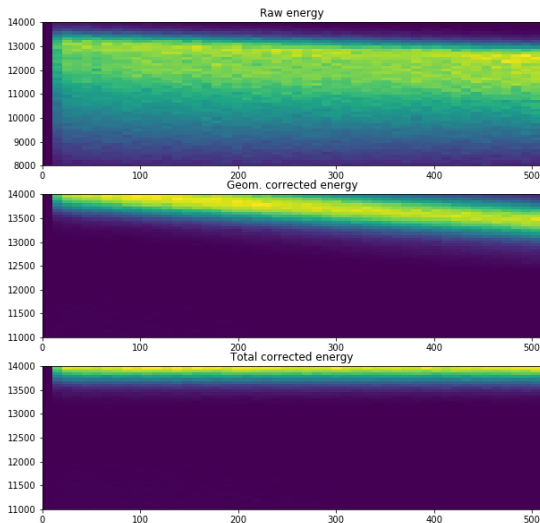


Figure: Average lifetime.

Lifetime and geometry correction



R Profile showing R dropout

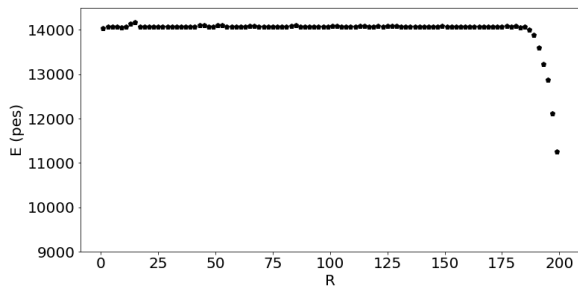


Figure: R profile shows that fiducial volume must be $R < 180\text{mm}$.

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

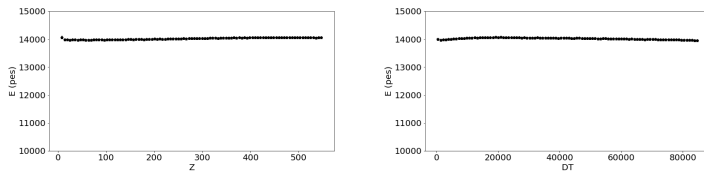


Figure: Profiles showing correction is robust.

Resolution fits as a function of R and Z

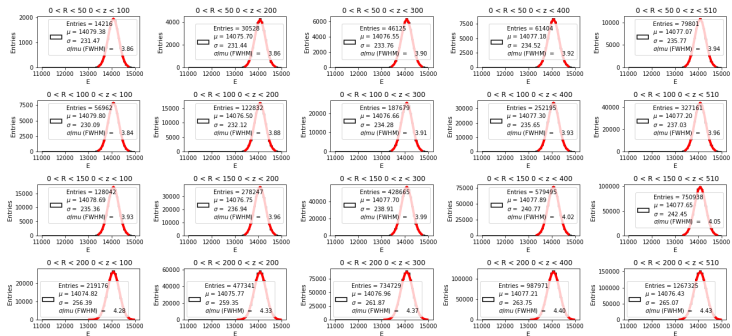


Figure: Resolution fits.

Resolution as a function of R and Z

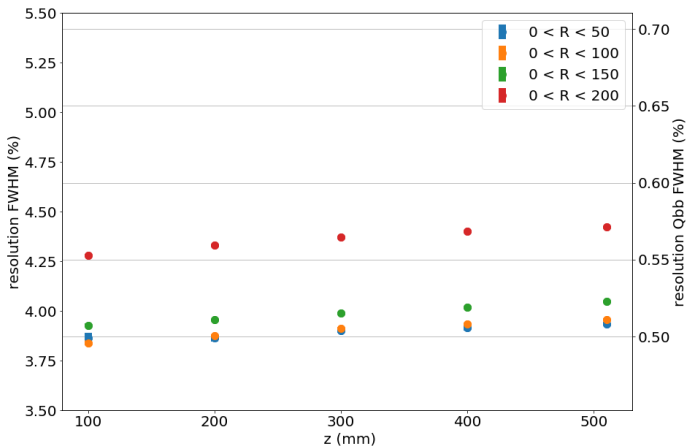


Figure: Resolution fits.

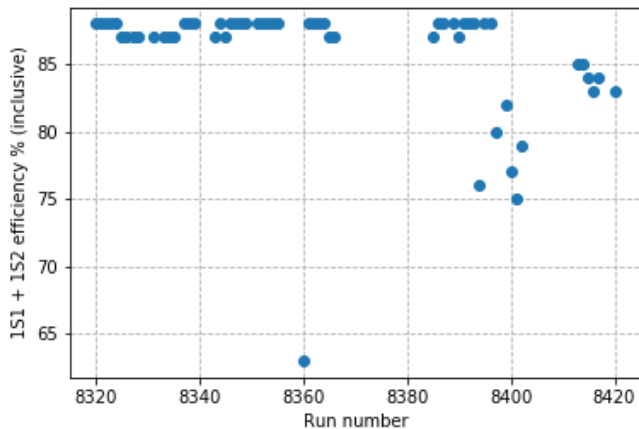


Figure: Efficiency tracking over time.

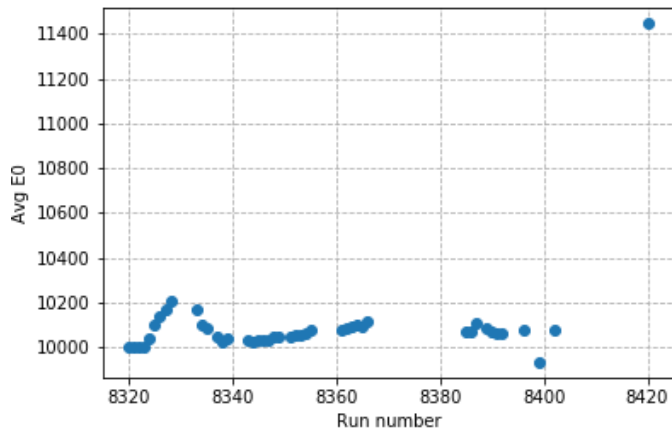


Figure: Response tracking over time.

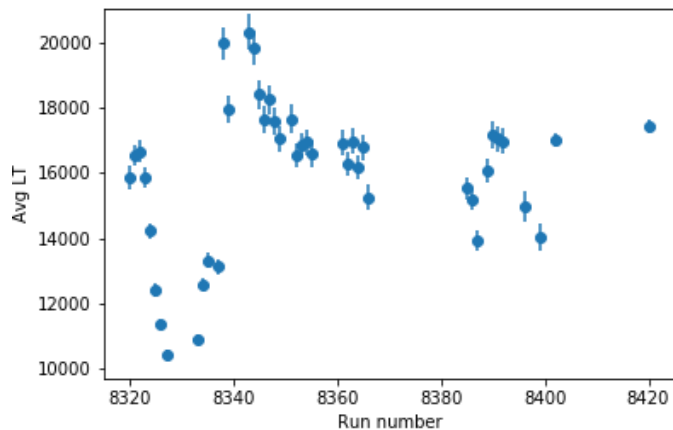


Figure: Lifetime tracking over time.

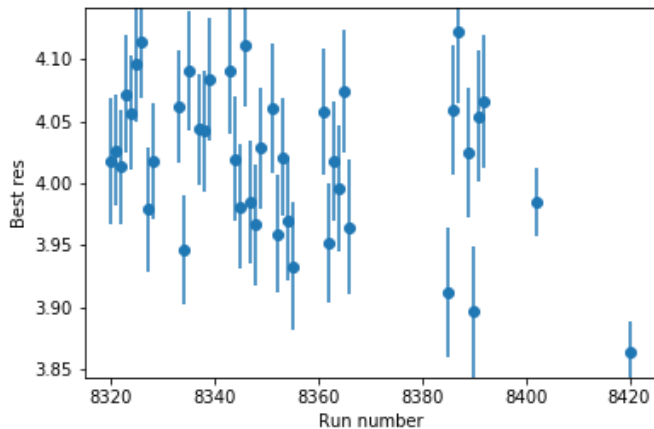


Figure: Resolution tracking over time.