

# Krypton Calibration

Run 8164

Krypton Calibration Group

**Table:** Conditions and data for run 8164

| Conditions             | Data       |
|------------------------|------------|
| run number             | 8164       |
| file range             | (0,11813)  |
| date                   | 2020-10-02 |
| lab temperature:       | 20.0 deg   |
| Total number of S2s    | 1542121    |
| Total number of events | 1492234    |

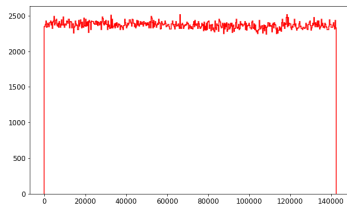
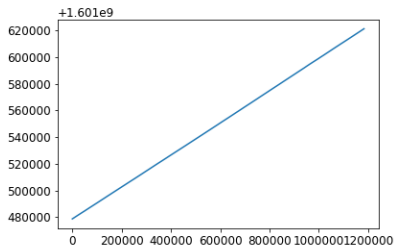


Figure: Run data.

Table: S1 & S2 for run 8164

| Conditions             | Data |
|------------------------|------|
| fraction of S1s        | 0.88 |
| fraction of S2s (1 S1) | 0.98 |
| fraction 1 S2 & 1 S1   | 0.86 |

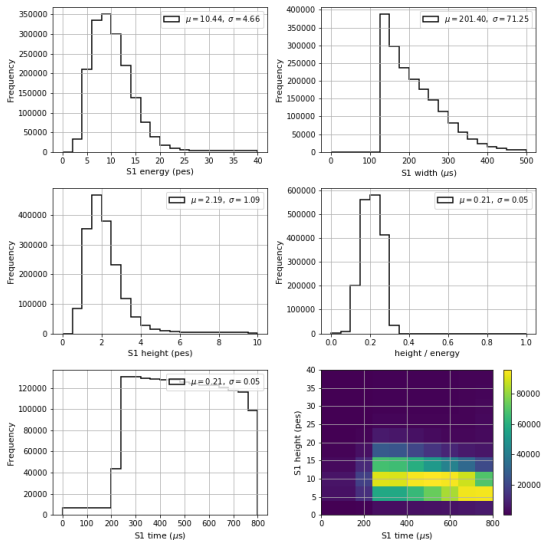


Figure: S1 distributions.

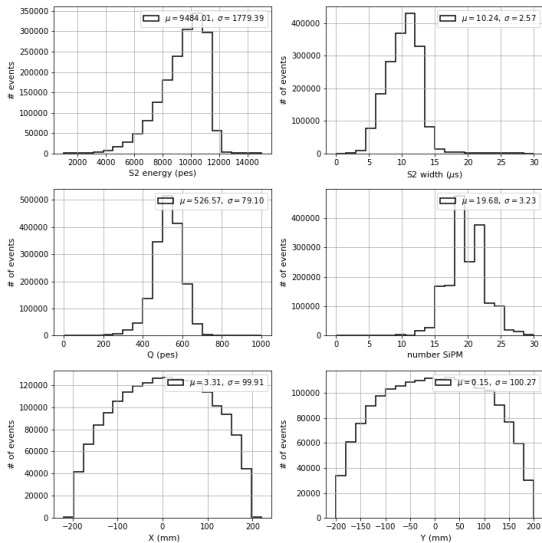


Figure: S2 distributions.

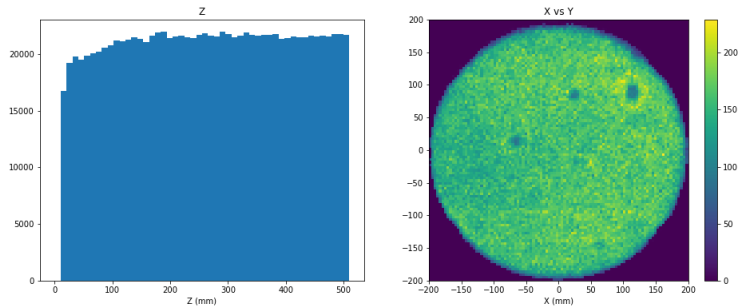


Figure: XYZ distribution.

# Lifetime maps

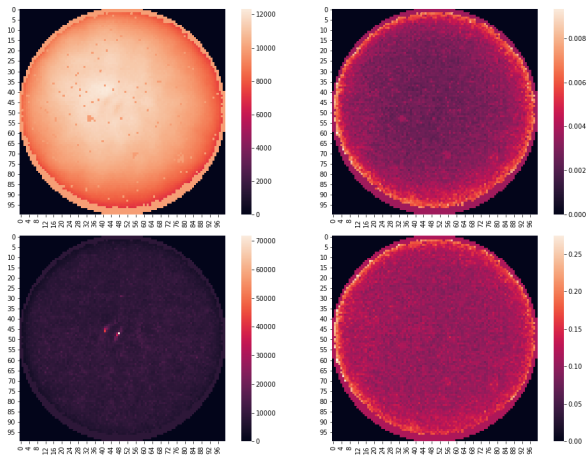


Figure: Lifetime and geometrical map.



# Lifetime maps

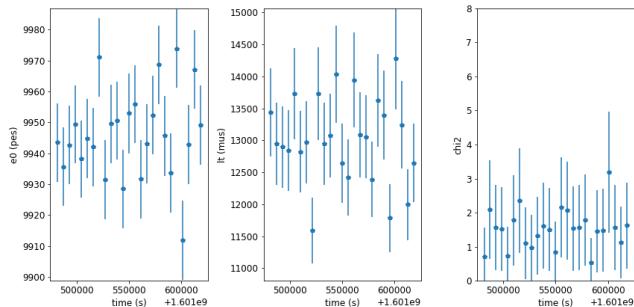
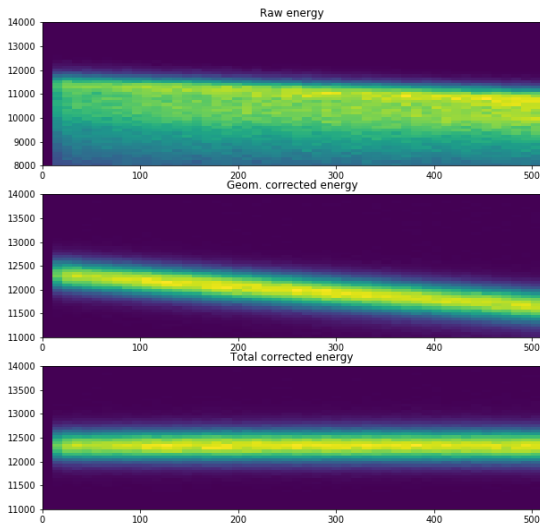


Figure: Average lifetime.

# Lifetime and geometry correction



## R Profile showing R dropout

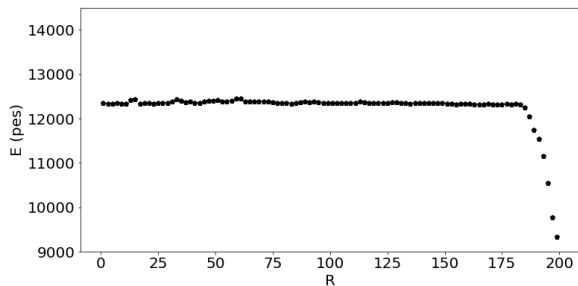


Figure: R profile shows that fiducial volume must be  $R < 180\text{mm}$ .

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

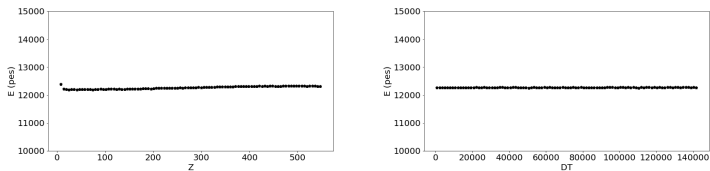


Figure: Profiles showing correction is robust.

# Resolution fits as a function of R and Z

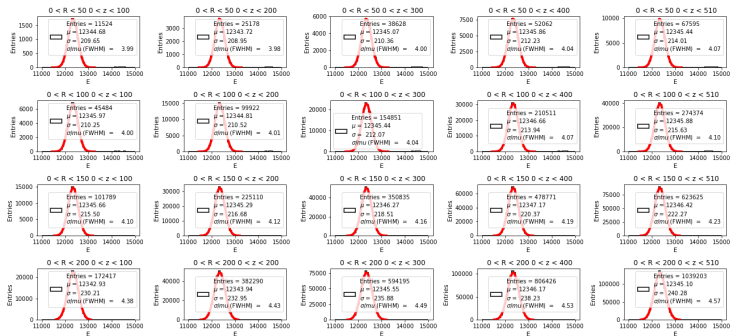


Figure: Resolution fits.

# Resolution as a function of R and Z

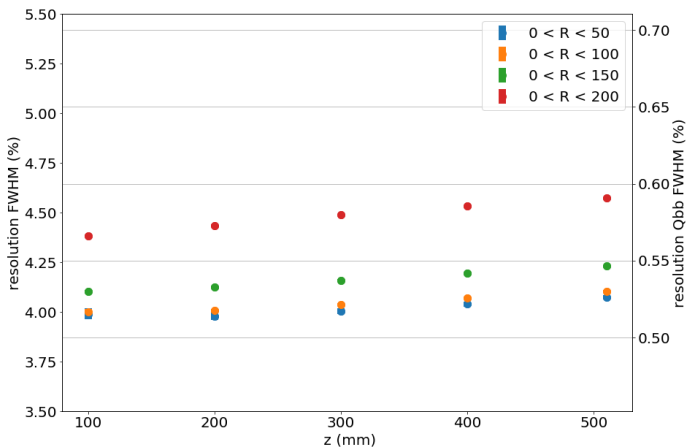


Figure: Resolution fits.

# Efficiency over time

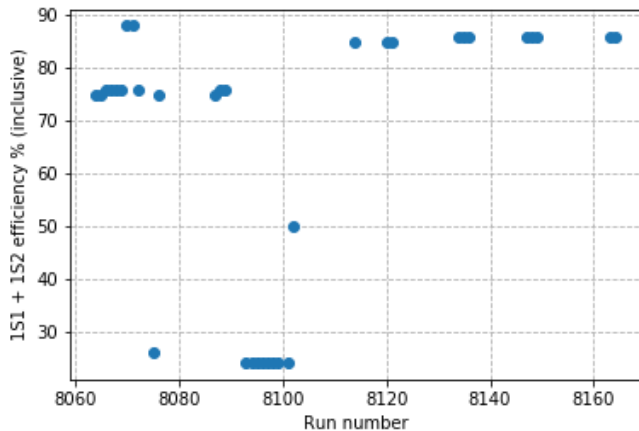


Figure: Efficiency tracking over time.

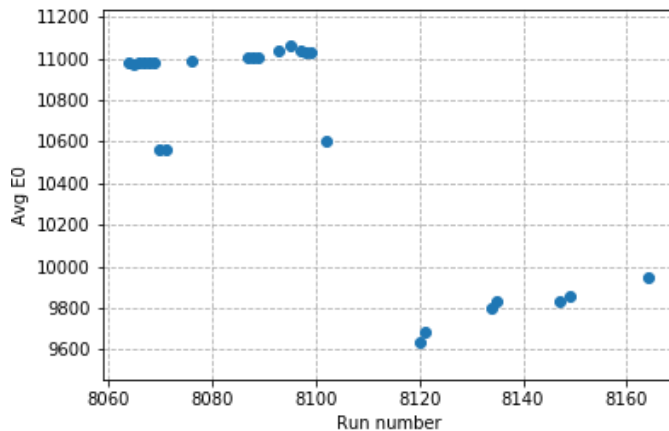


Figure: Response tracking over time.



## Lifetime over time

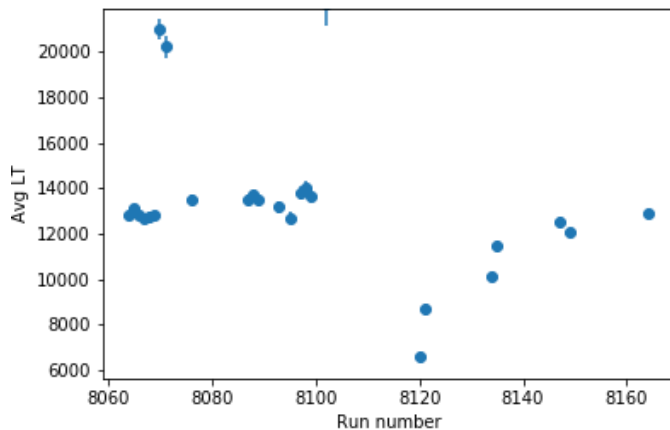


Figure: Lifetime tracking over time.

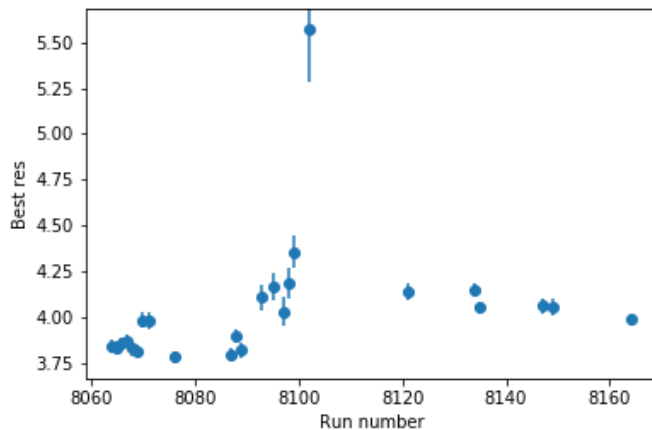


Figure: Resolution tracking over time.