

# Krypton Calibration

Run 8583

Krypton Calibration Group

**Table:** Conditions and data for run 8583

| Conditions             | Data       |
|------------------------|------------|
| run number             | 8583       |
| file range             | (0,2263)   |
| date                   | 2021-04-16 |
| lab temperature:       | nan deg    |
| Total number of S2s    | 594091     |
| Total number of events | 586328     |

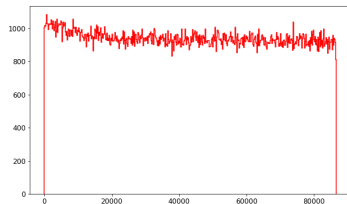
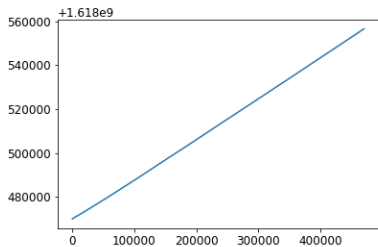


Figure: Run data.

Table: S1 & S2 for run 8583

| Conditions             | Data |
|------------------------|------|
| fraction of S1s        | 0.87 |
| fraction of S2s (1 S1) | 0.99 |
| fraction 1 S2 & 1 S1   | 0.86 |

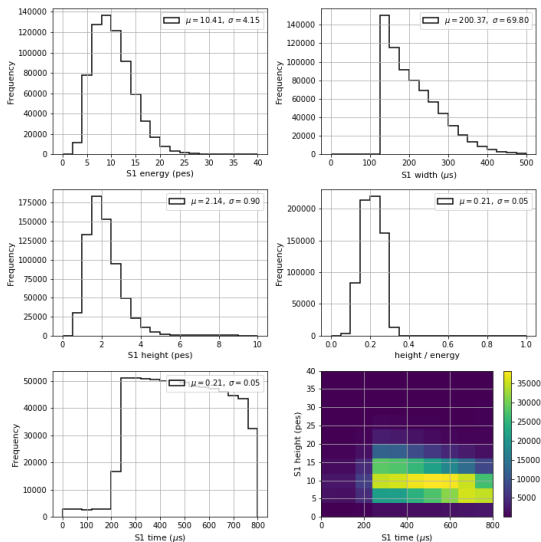


Figure: S1 distributions.

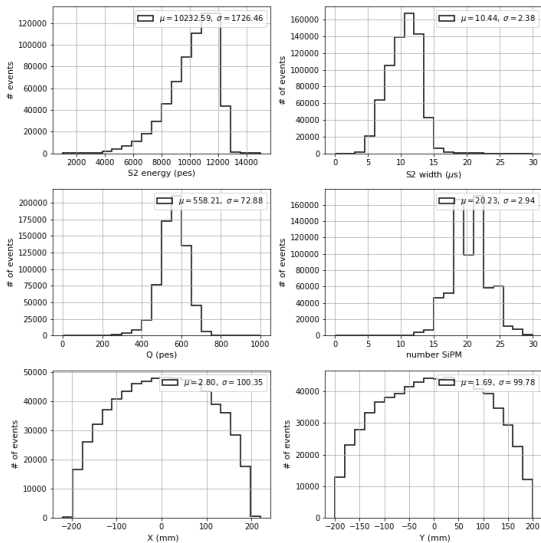


Figure: S2 distributions.

# Control distributions

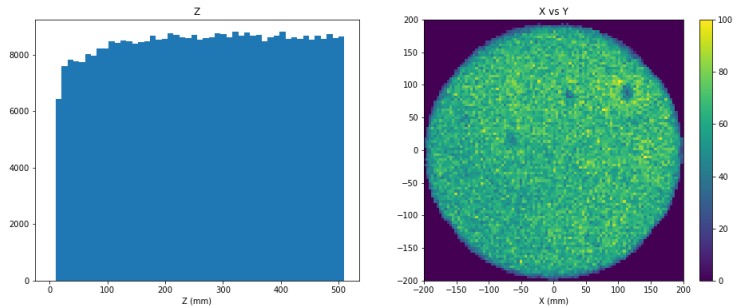


Figure: XYZ distribution.

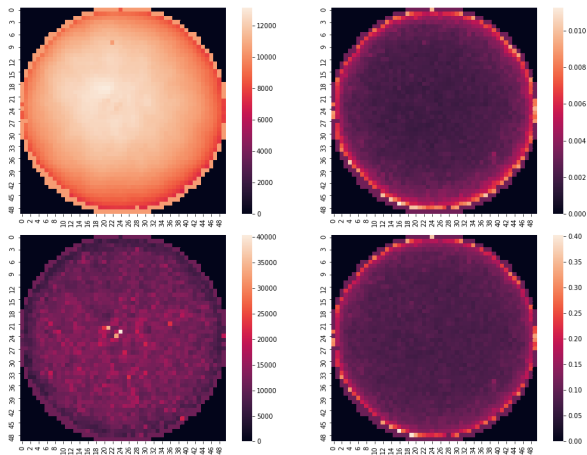
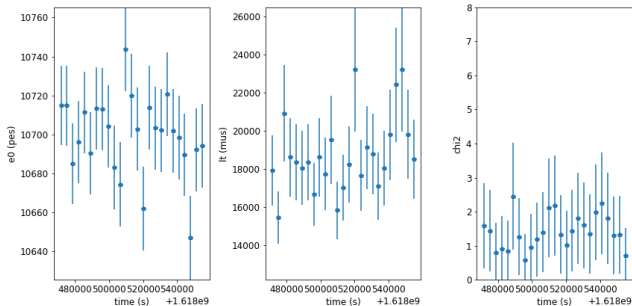
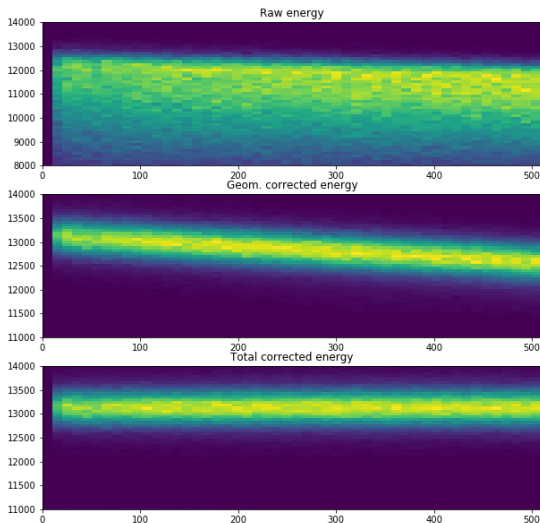


Figure: Lifetime and geometrical map.





# Lifetime and geometry correction



## R Profile showing R dropout

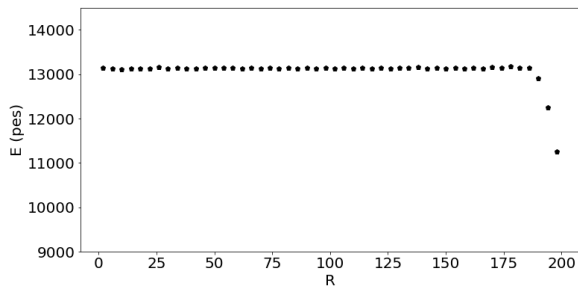


Figure: R profile shows that fiducial volume must be  $R < 180\text{mm}$ .

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

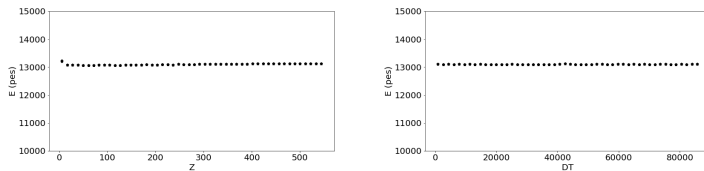


Figure: Profiles showing correction is robust.

# Resolution fits as a function of R and Z

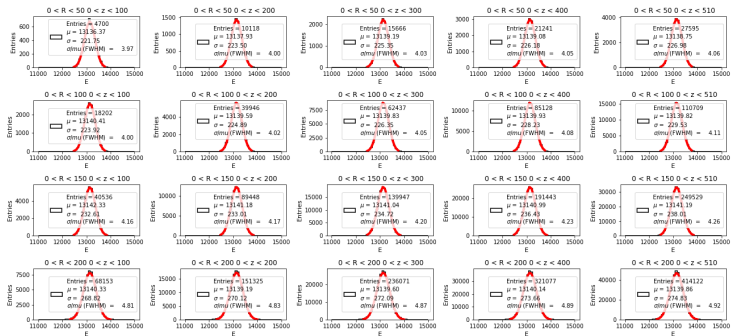


Figure: Resolution fits.

# Resolution as a function of R and Z

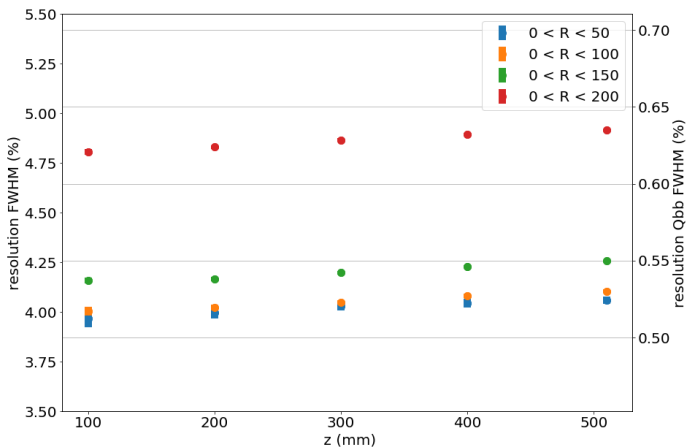


Figure: Resolution fits.

# Efficiency over time

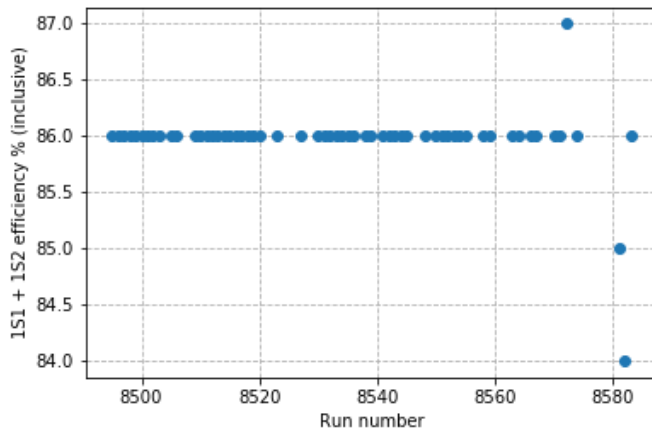


Figure: Efficiency tracking over time.

# Response over time

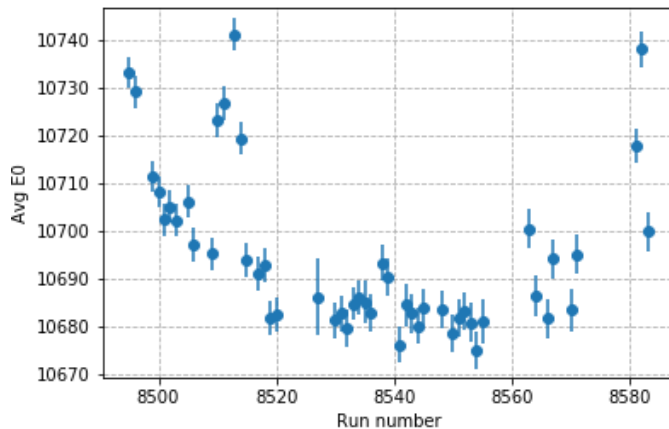


Figure: Response tracking over time.



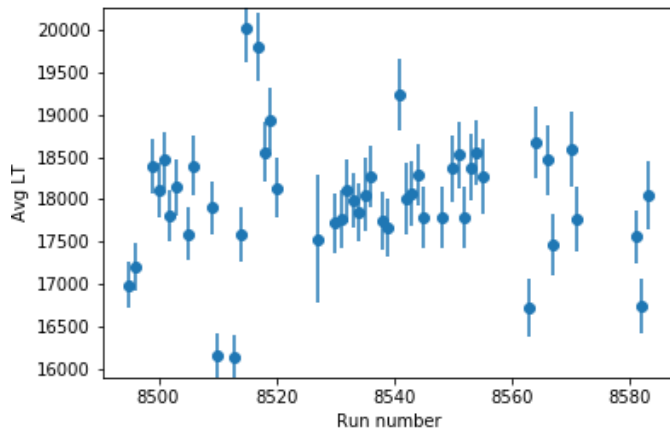


Figure: Lifetime tracking over time.

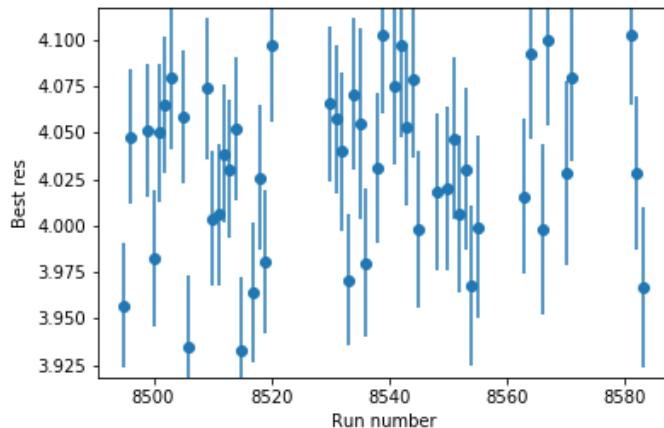


Figure: Resolution tracking over time.