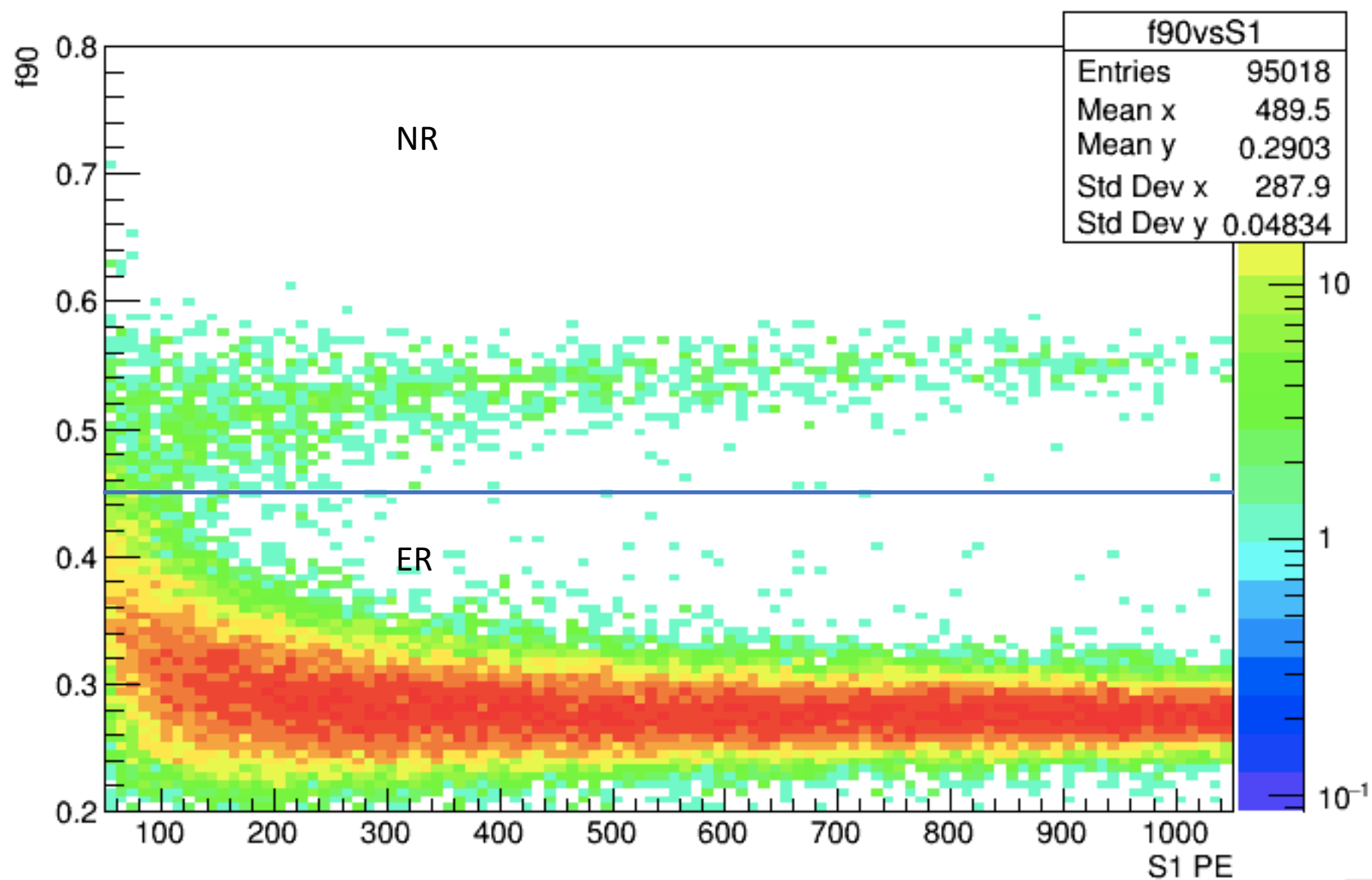


NR with AmBe

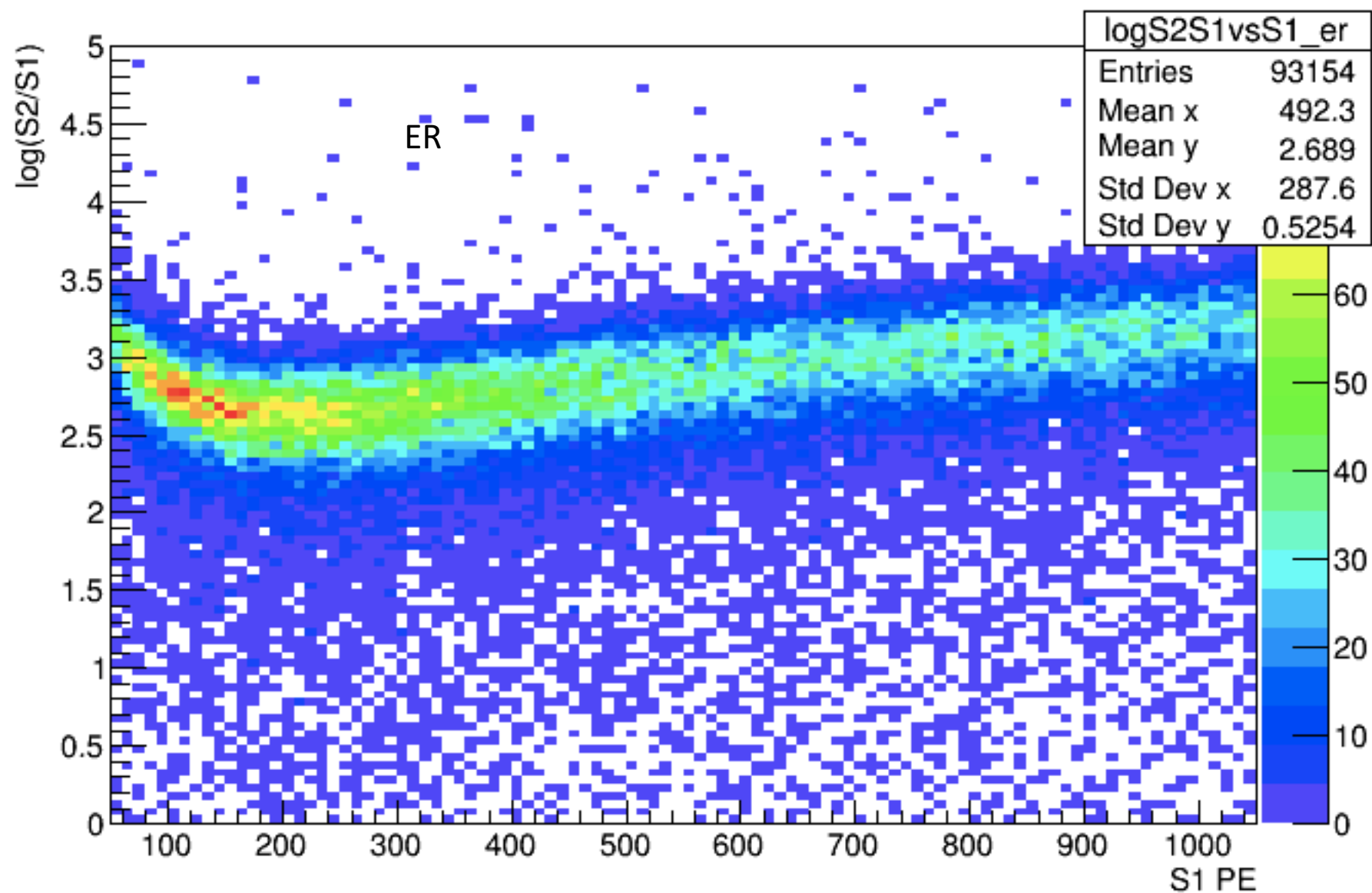
- Run 1186 through 1193 (12 hr data taking)
- 480 k event total
- Select event with 2 clusters, $n.1 f90 > 0.2$, $n.2 f90 < 0.2$, $T_{drift} < 65 \text{ us}$
-

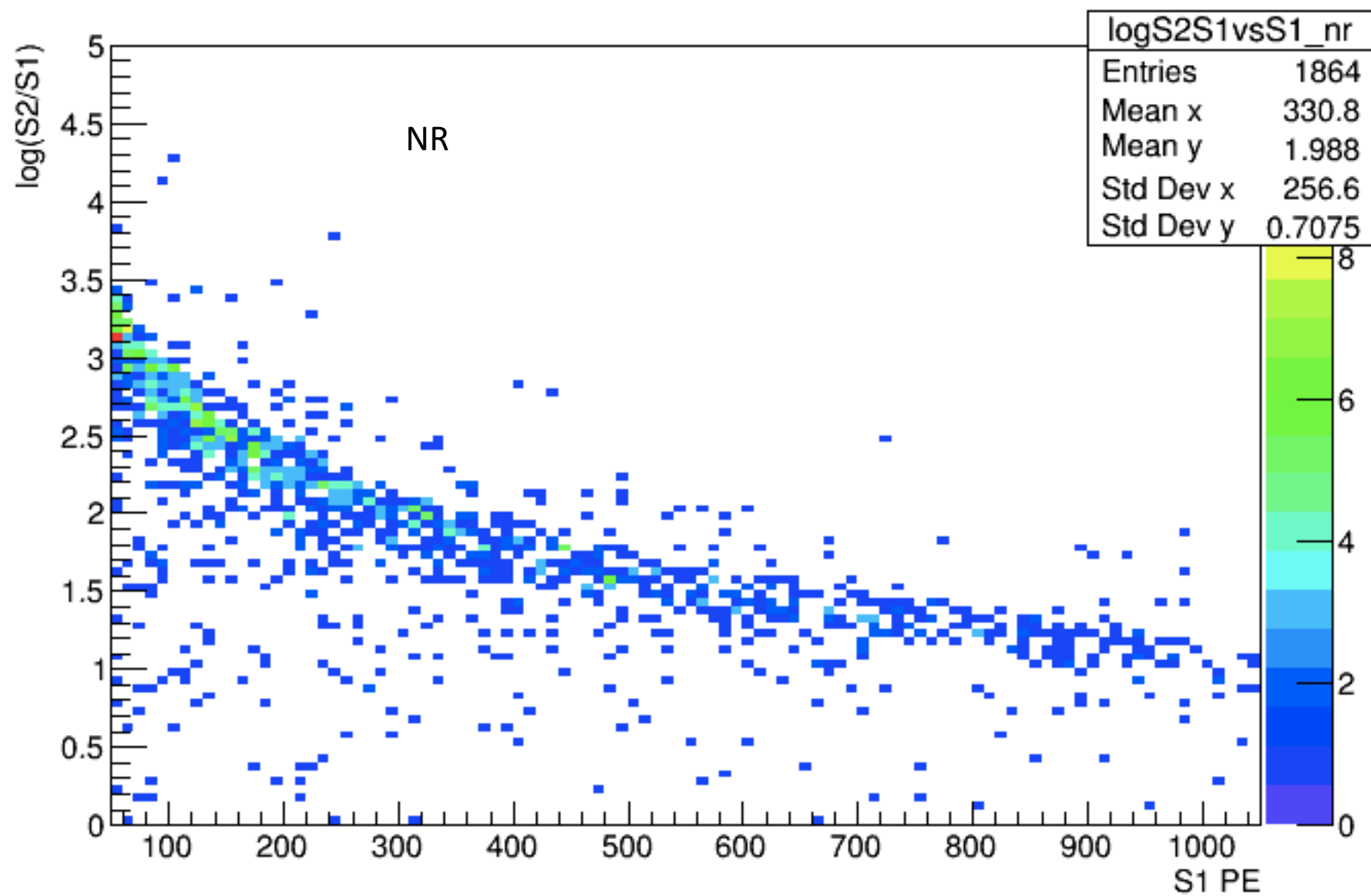
```
cluster[1]/90;cluster[2]/change;[nba;cluster[3]/col_time/49104+0.00;[k;[k;cluster[4]/50+0.2;[k;[cluster[5]/load;fire;cluster[6]/col_time/721000+0.5;[k;[cluster[7]/50+0.2;[k;[number_of_clusters=2]
```

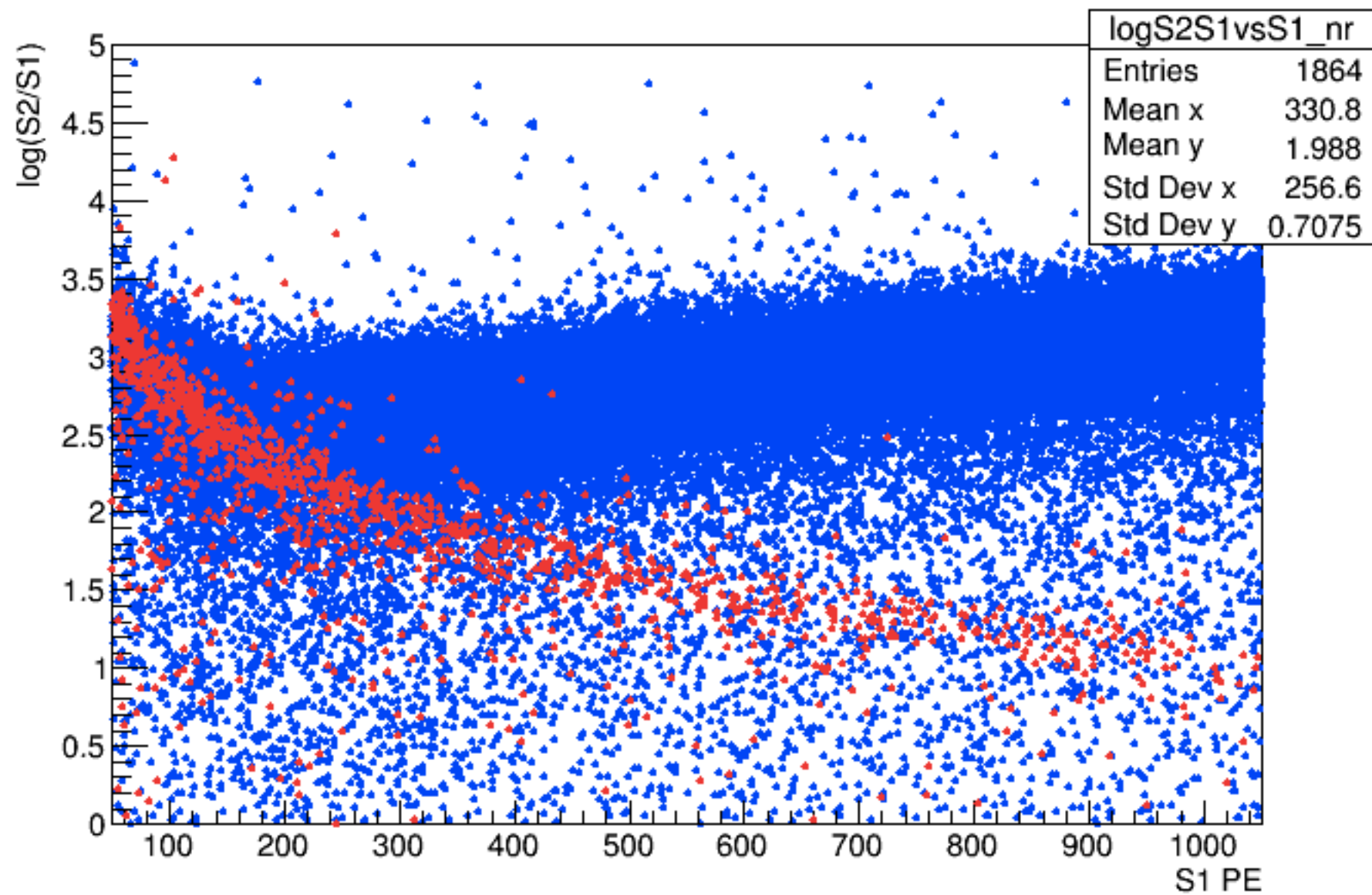


- 1864 “neutrons” ($f_{90} > 0.45$) 0.4% of total
- 0.7 % of total eventse in runs < 1191
- Something happened at run 1191 good event fraction drops from 0.7% to 0.2 %
- Event with no cluster found increases by factor 10...

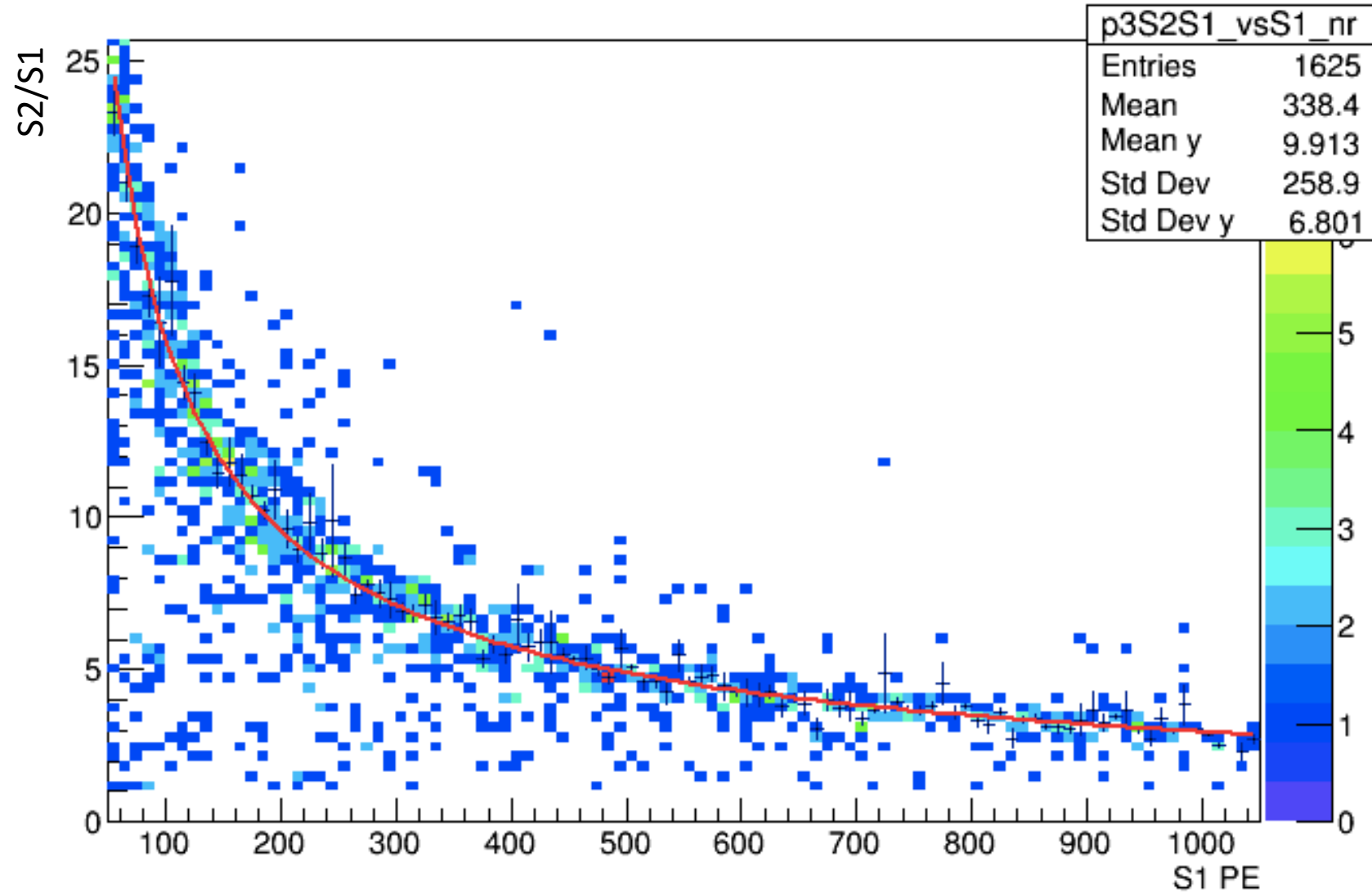
log(cluster(1)charge/cluster(2)charge)/cluster(2)charge (axis/cluster(2)cell_time - 0.15) < 0.8 && cluster(2)Rho < 0.2 && (cluster(2)fixed_time - cluster(2)cell_time) < 10000 - 50 && cluster(1)Rho < 0.2 && number_of_clusters > 2 && cluster(1)Rho < 0.8

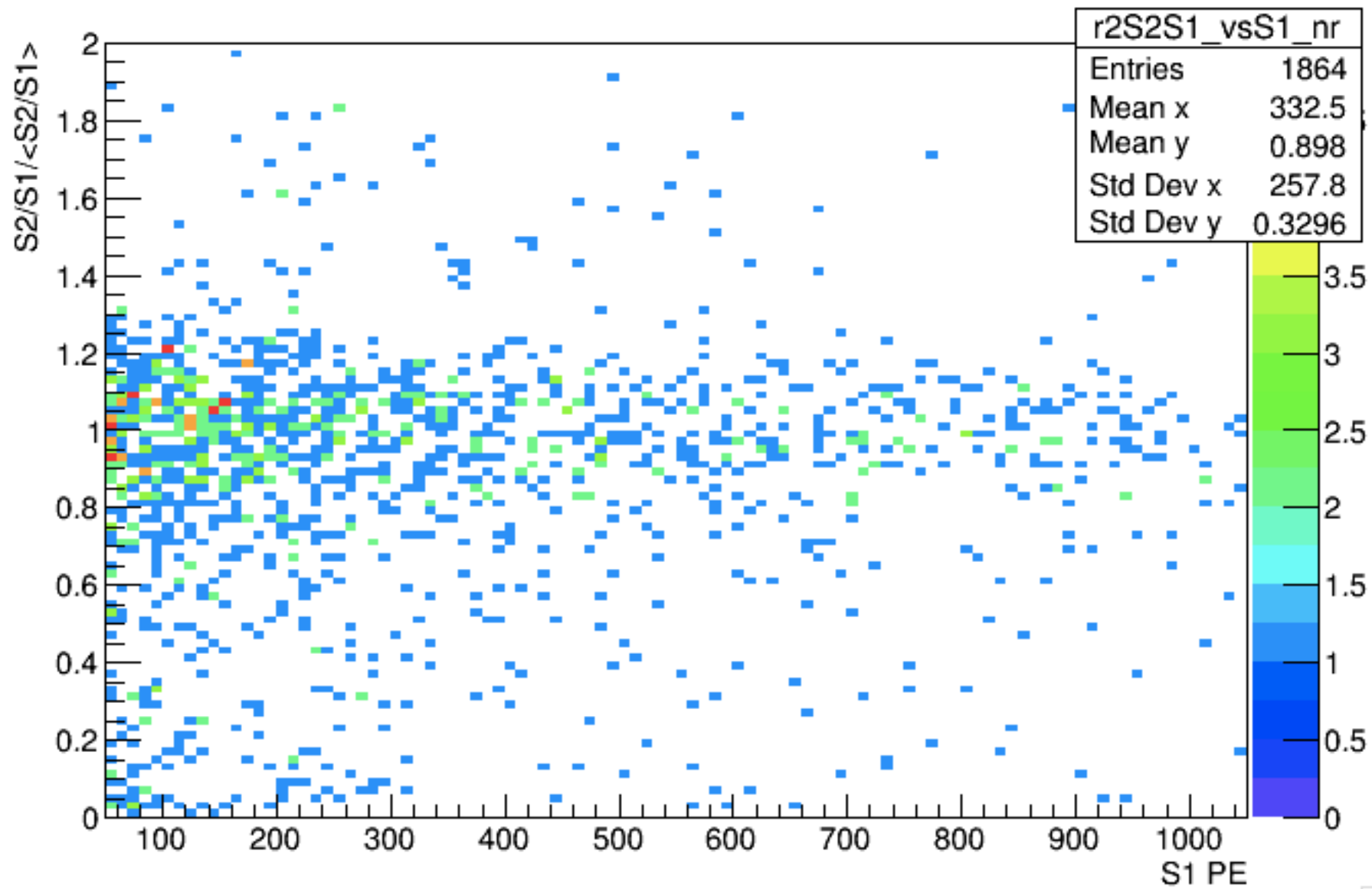


[illegible]

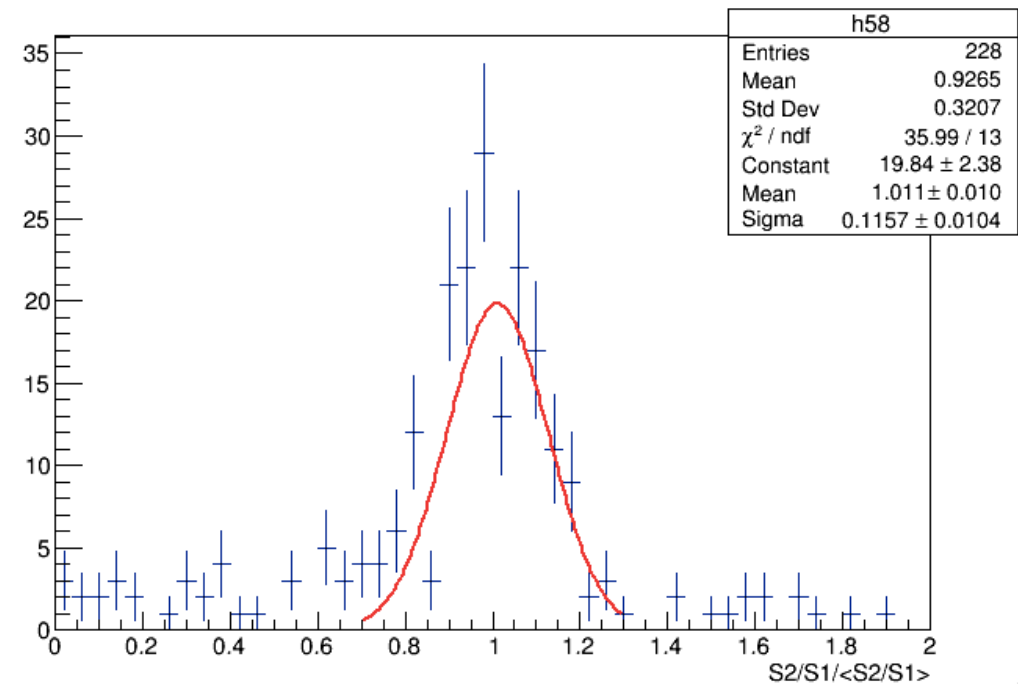
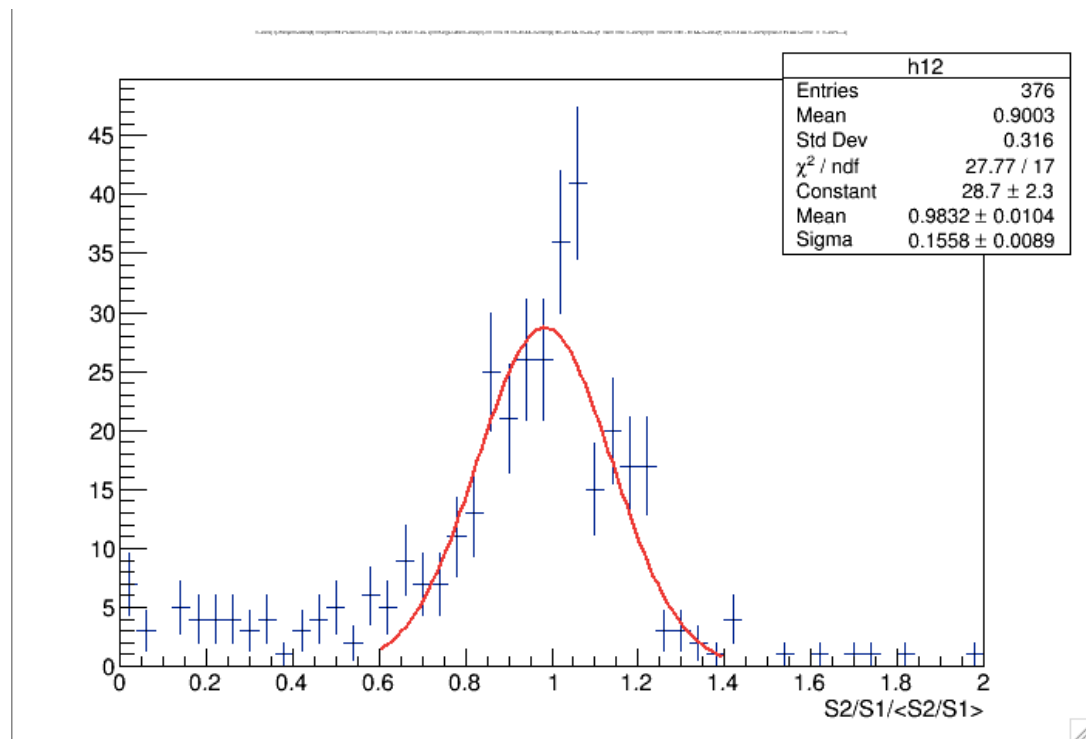
[illegible]

S2/S parametrization for NR



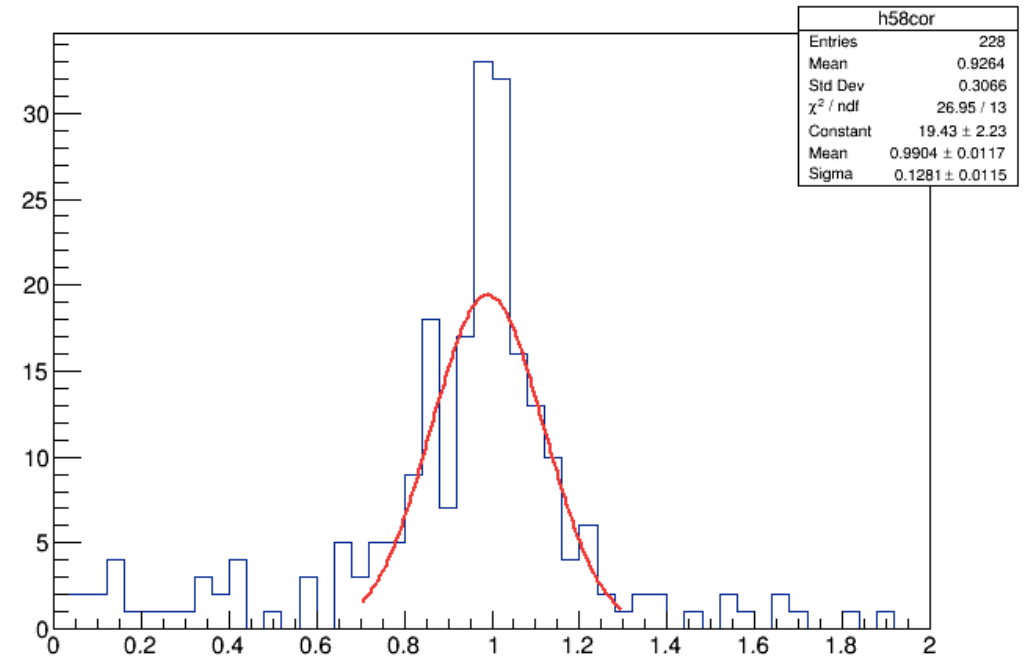
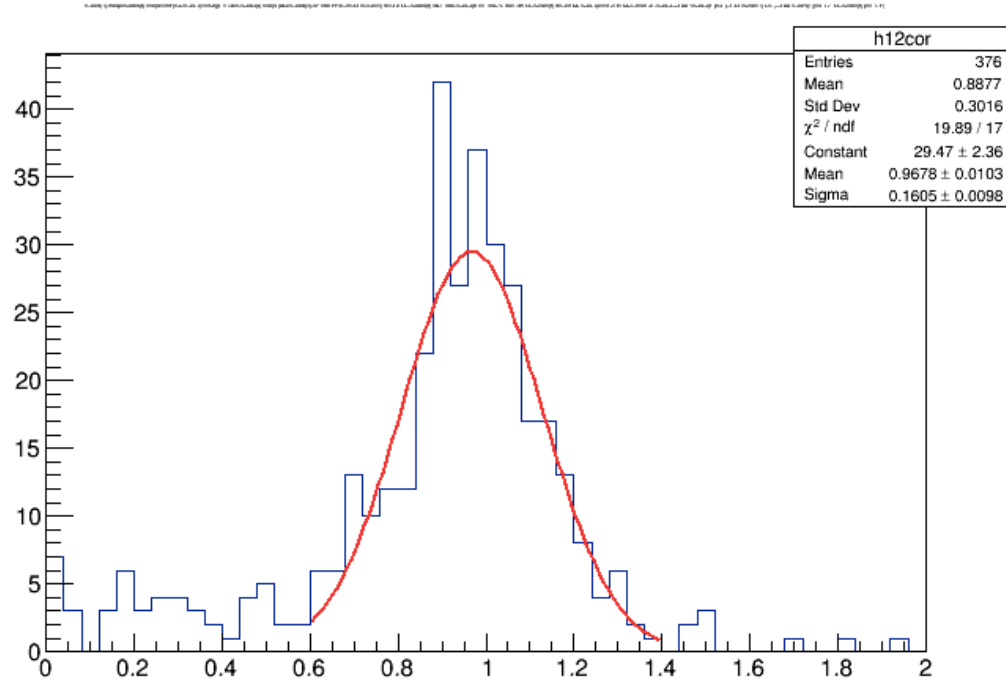


$100 < S1 < 200$ vs $500 < S1 < 800$



100<S1<200 vs 500<S1<800

with XY correction on S2



Conclusions

- Statistics so far is quite low. Difficult to really characterize the TPC or optimize PSD
- In addition in the relevant 100 to 200 PE pulses there is some ER bkg
- However it is confirmed that the NR $S2/S1$ rms is significantly smaller than ER ones for the same $S1$ size: e.g. in $500 < S1 < 800$ range this is about 12% vs 18%.