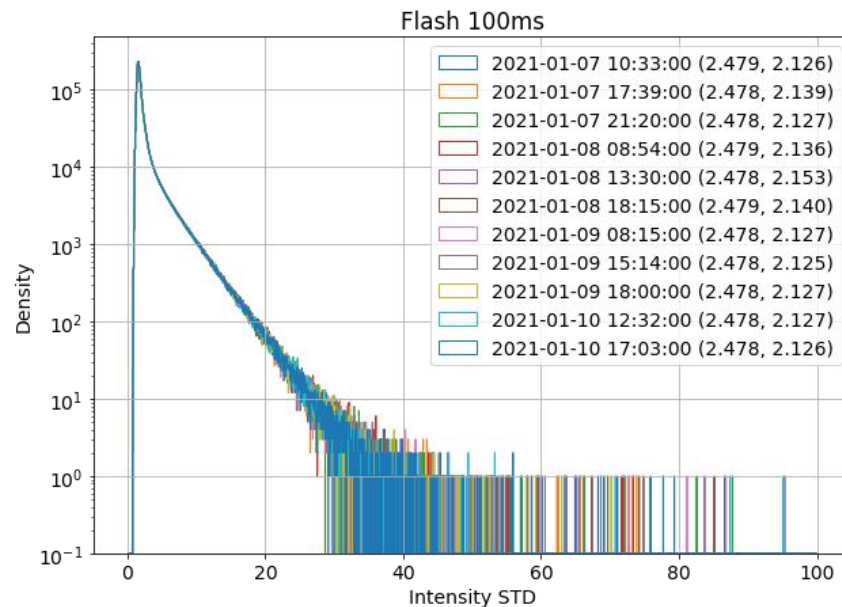
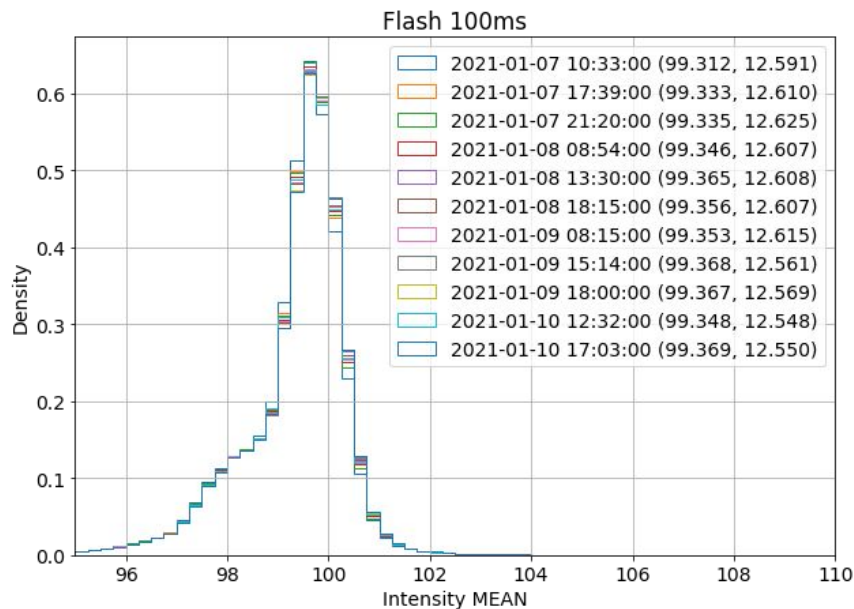


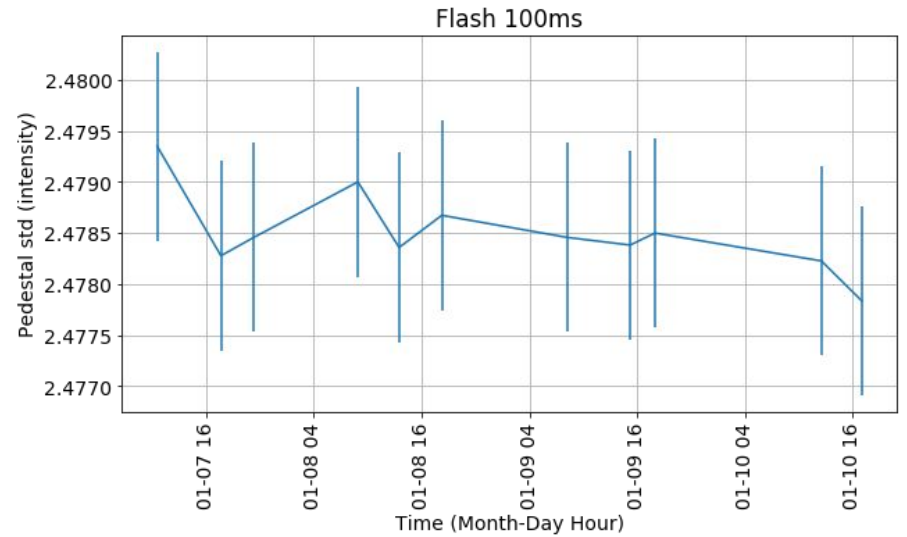
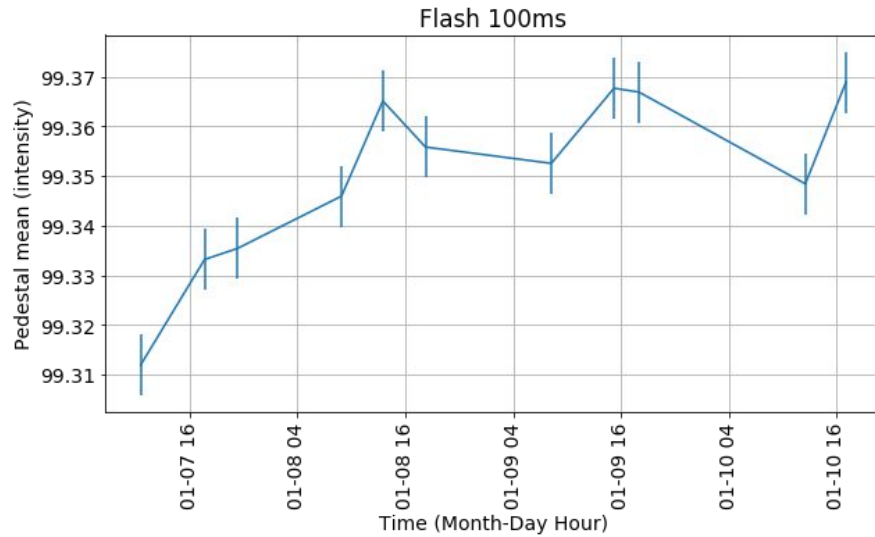
Pedestal variations across runs

Rafael Nóbrega, Igor Abritta, Davide Pinci, Giovanni Mazzitelli

Just the MEAN and STD distributions



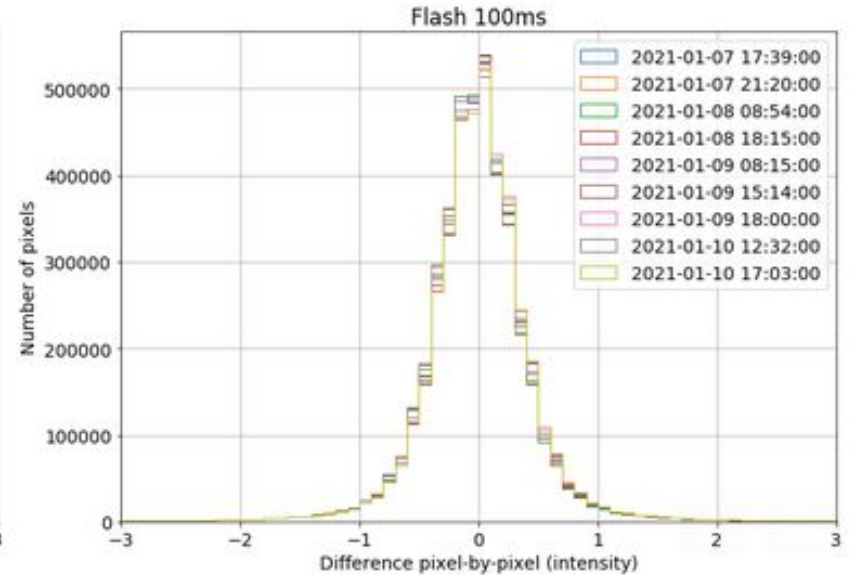
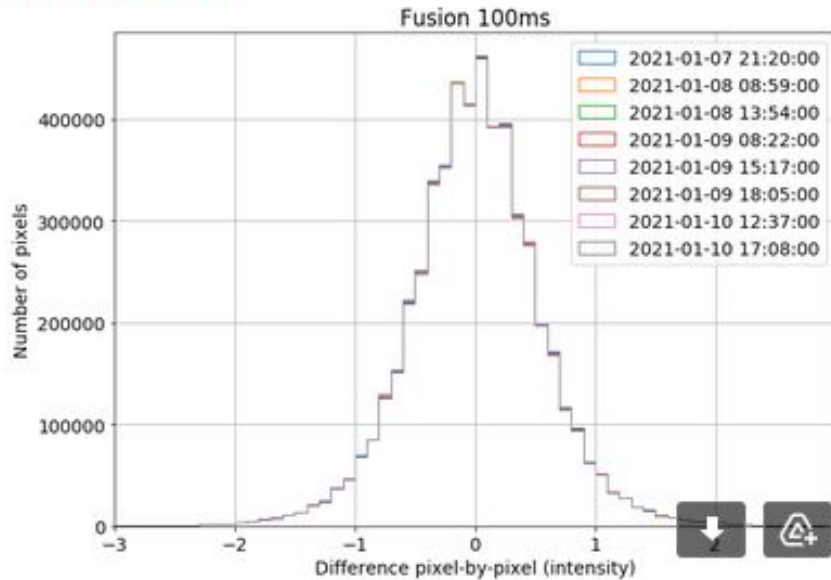
... and their average evolution



Subtracting from the first run (for 100 ms)

The MEAN of each pixel is subtracted from the its MEAN value found in the first run...

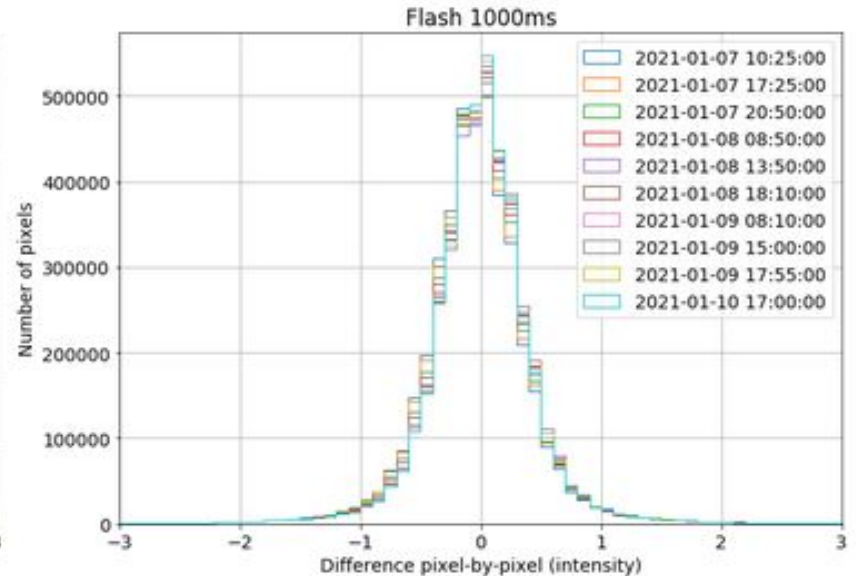
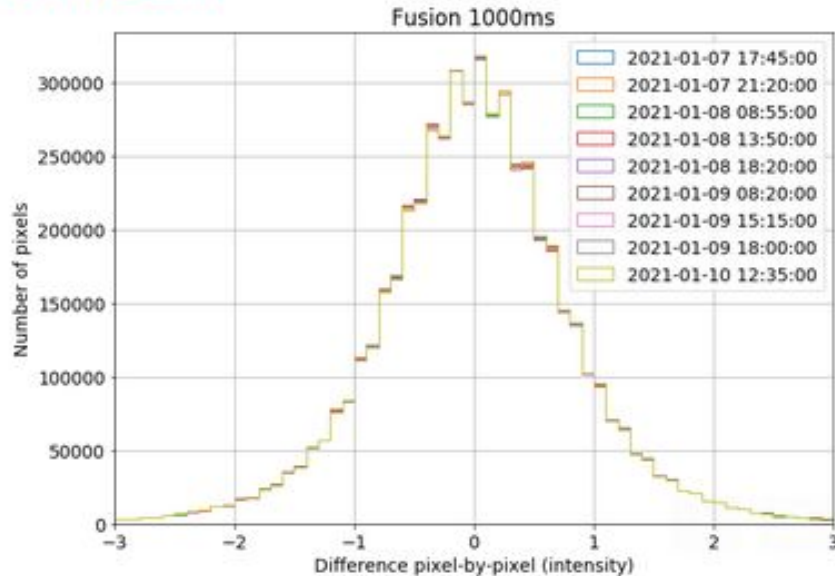
FOR THE MEAN



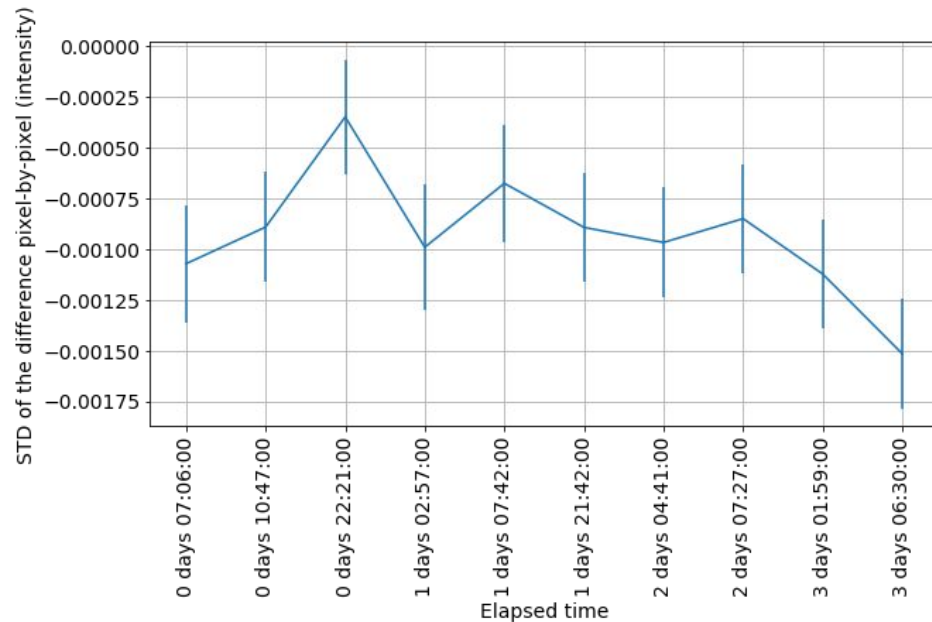
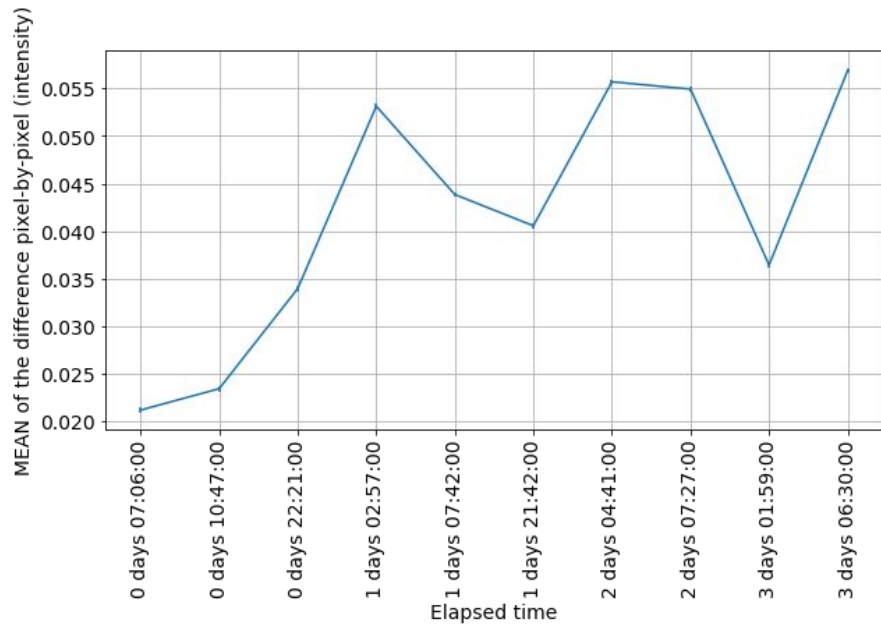
Subtracting from the first run (for 1000 ms)

The MEAN of each pixel is subtracted from the its MEAN value found in the first run...

FOR THE MEAN



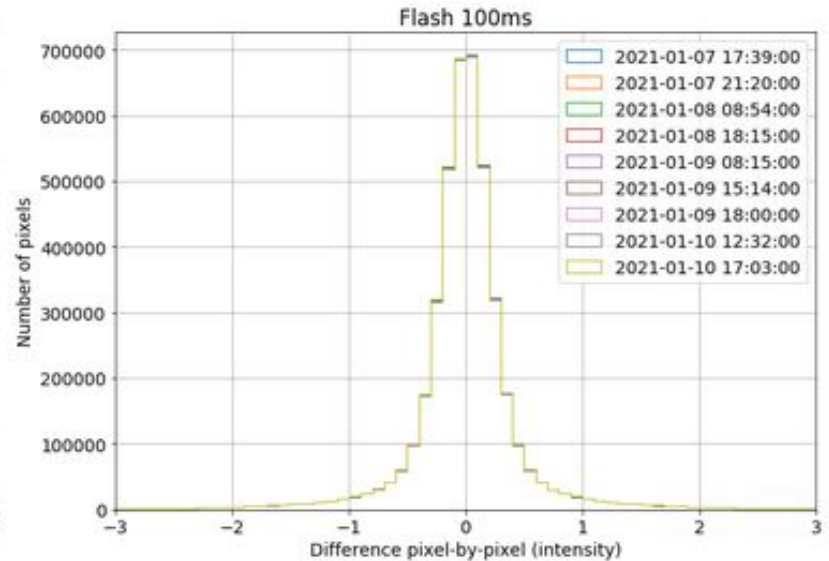
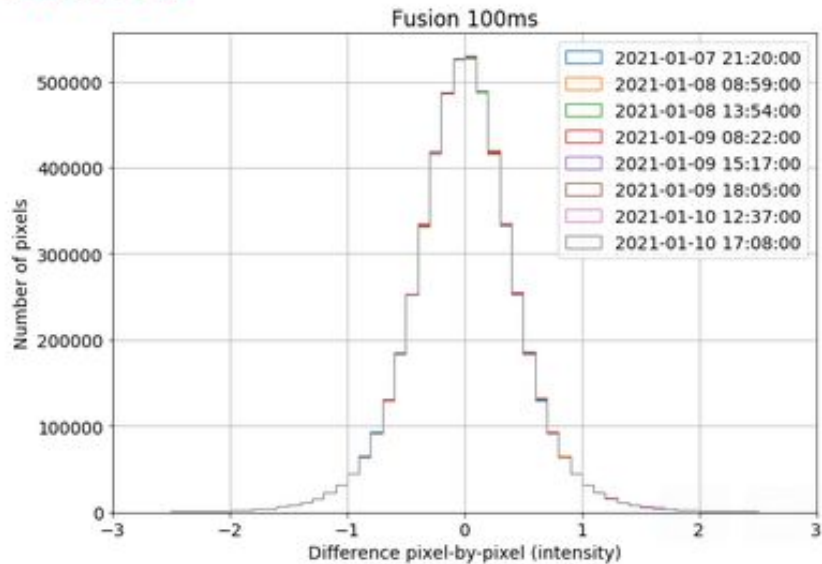
... and their average evolution



Subtracting from the first run (for 100 ms)

The STD of each pixel is subtracted from the its STD value found in the first run...

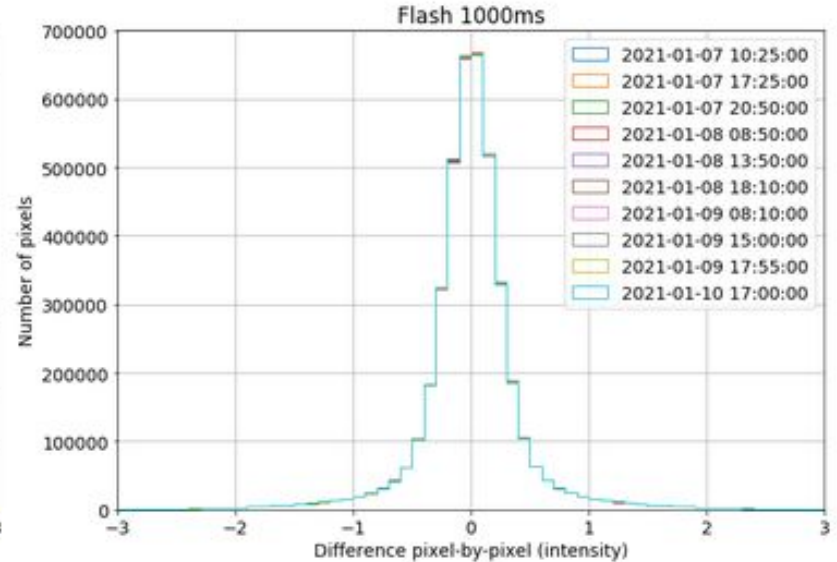
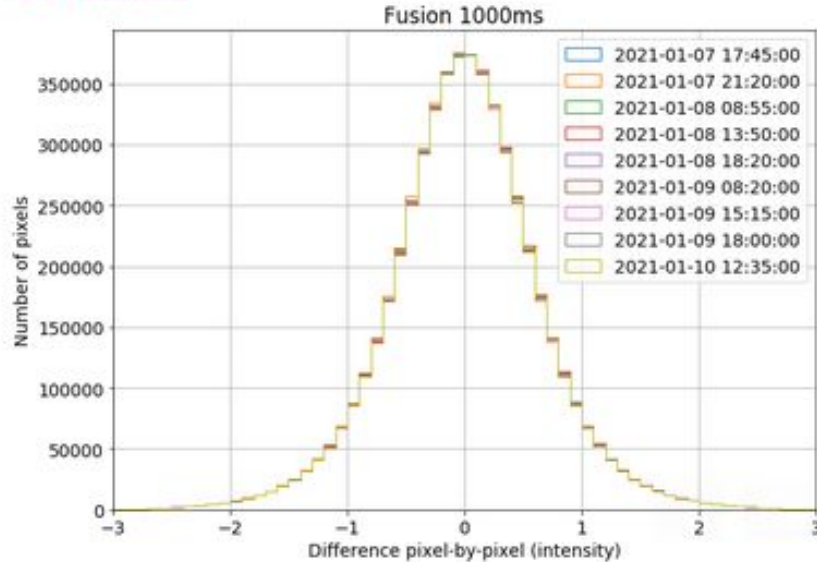
FOR THE STD



Subtracting from the first run (for 1000 ms)

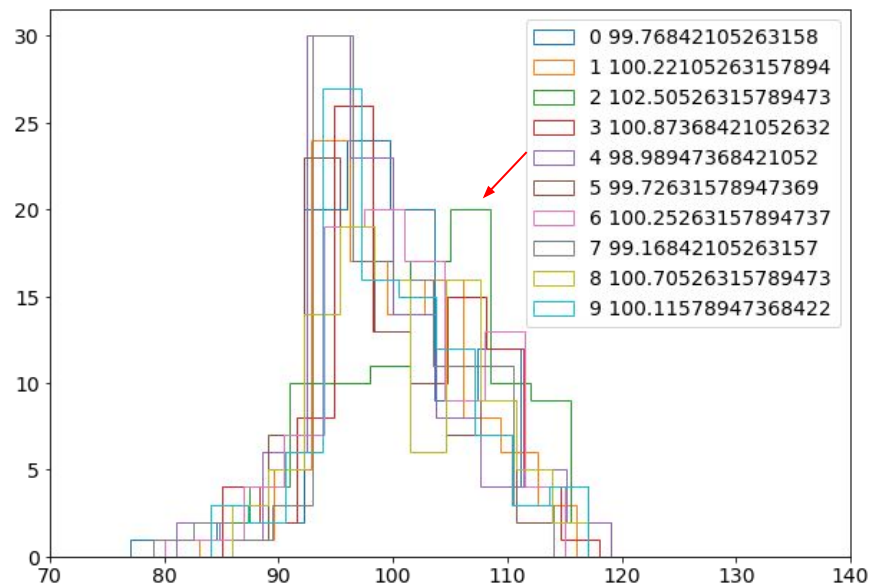
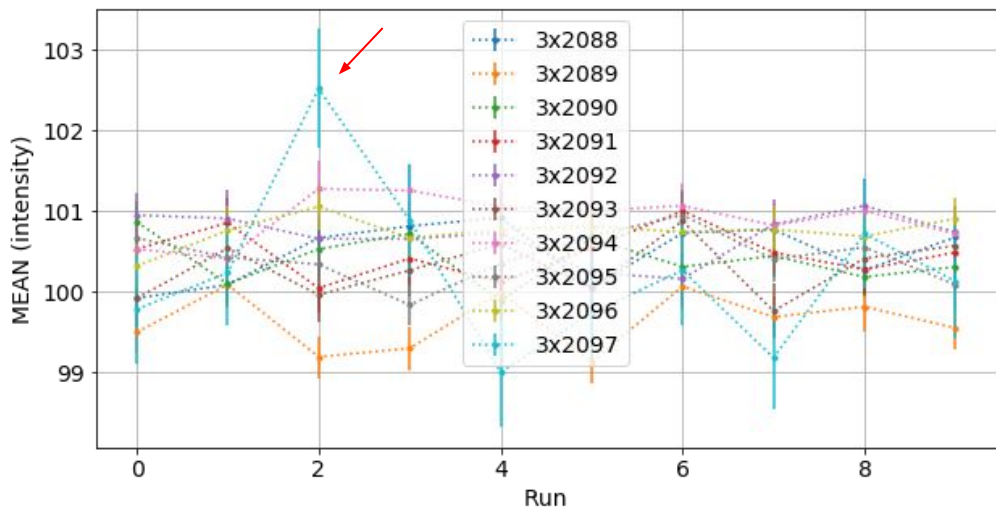
The STD of each pixel is subtracted from the its STD value found in the first run...

FOR THE STD



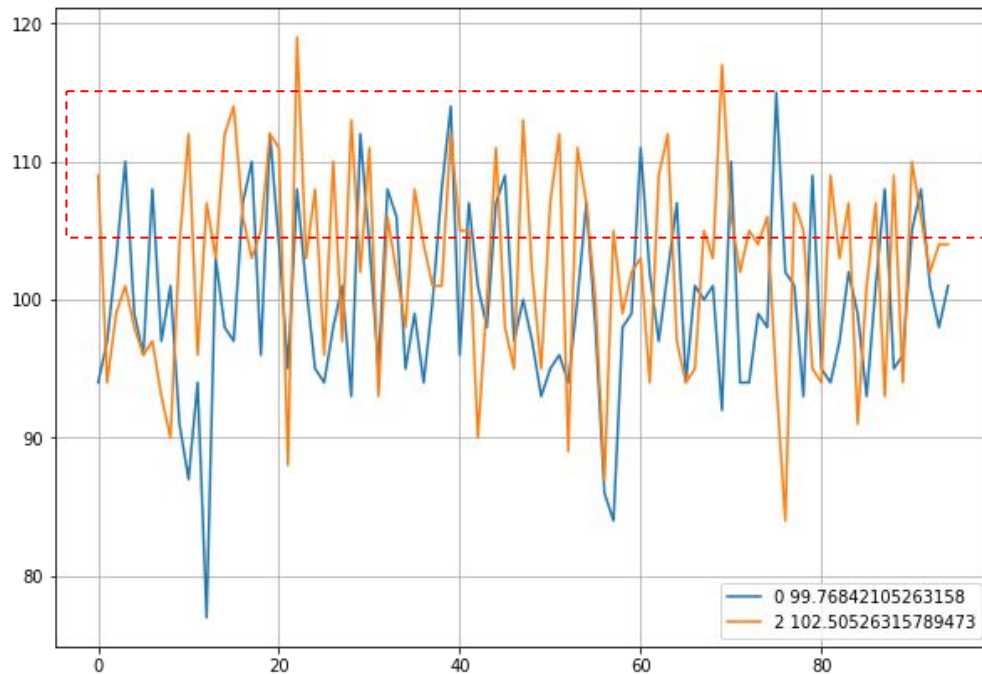
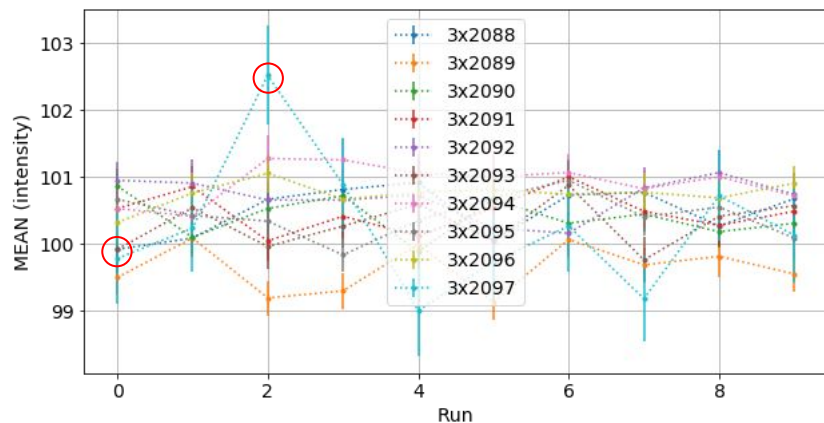
Looking at few pixels... (Flash)

Pixel 3x2097 has an outlier in the run 2...



Looking at few pixels... (Flash)

might be “normal” fluctuation...

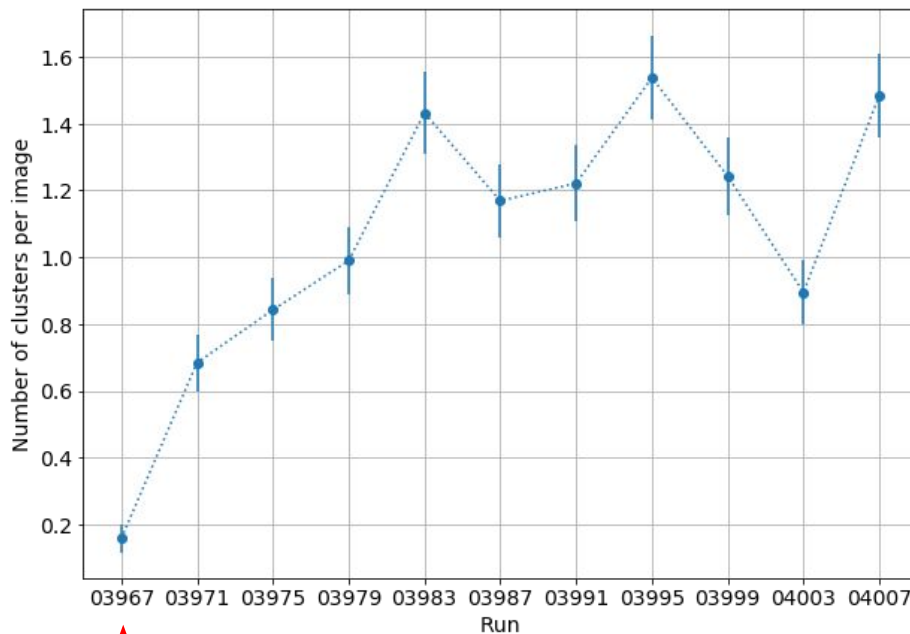


Counting the number of clusters per image (Flash)

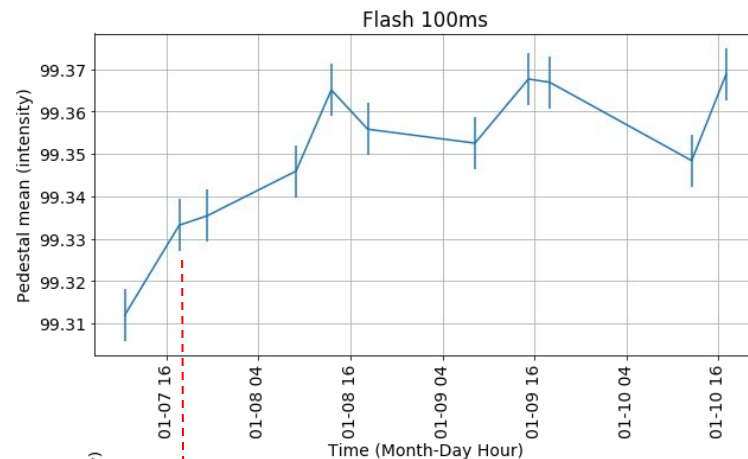
```
"TMath::Hypot(cl_xmean-1024,(cl_ymean-1024)*1.2)<400 && cl_iteration==2 && cl_nhits>30"
```

Setting i2DBSCAN parameters

```
'iterative'      : 4,  
'tip'           : '3D',  
'vector_eps'    : [1, 2.5, 5.8, 4],  
'vector_min_samples' : [1, 420, 30, 20],  
'cuts'          : [700, 100],
```



pedestal

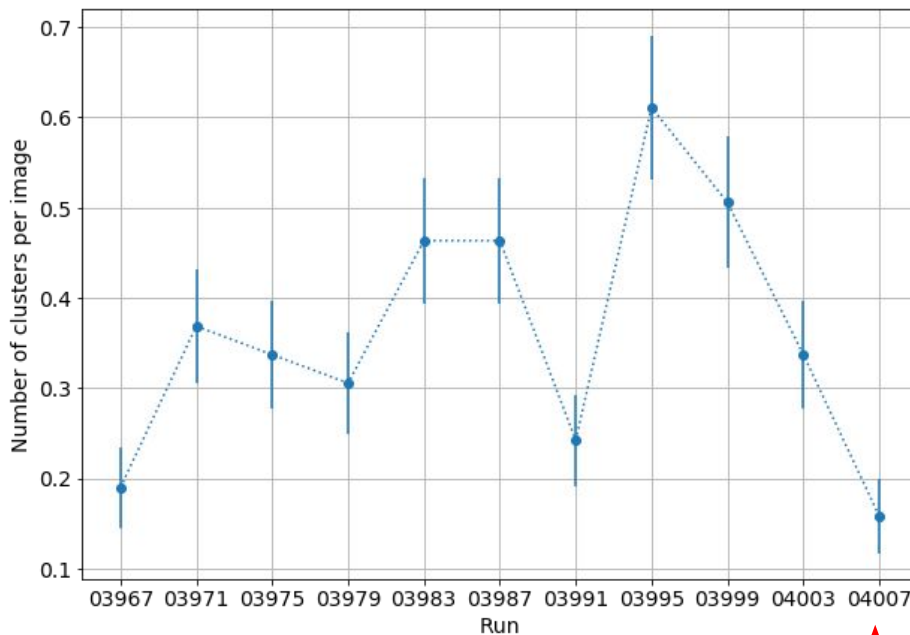


Counting the number of clusters per image (Flash)

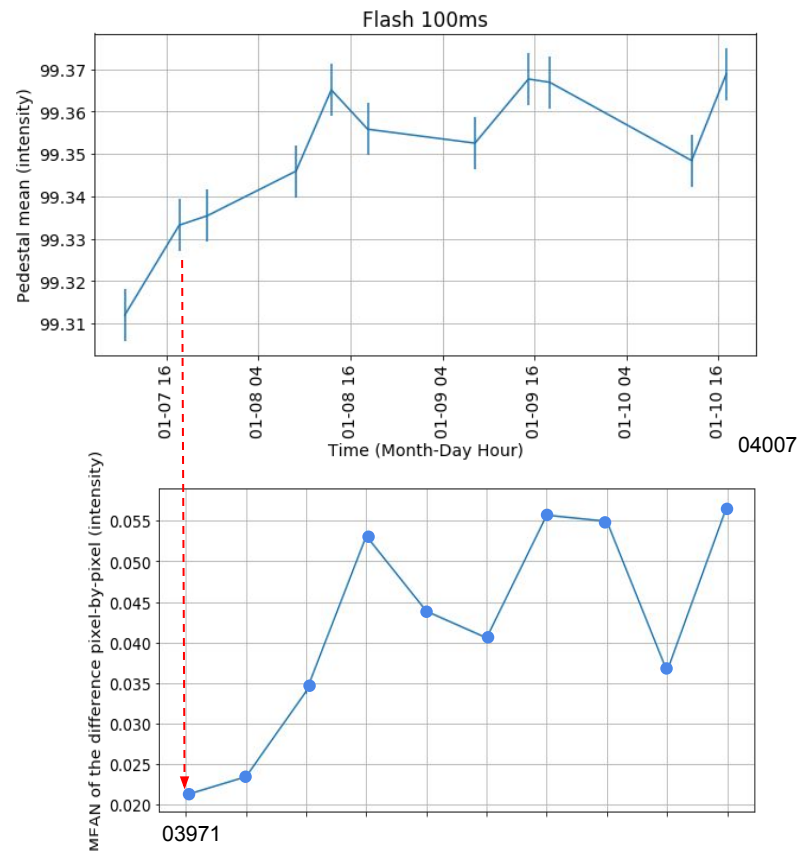
```
"TMath::Hypot(cl_xmean-1024,(cl_ymean-1024)*1.2)<400 && cl_iteration==2 && cl_nhits>30"
```

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'vector_min_samples' : [1, 420, 30, 20],  
'cuts'          : [700, 100],
```

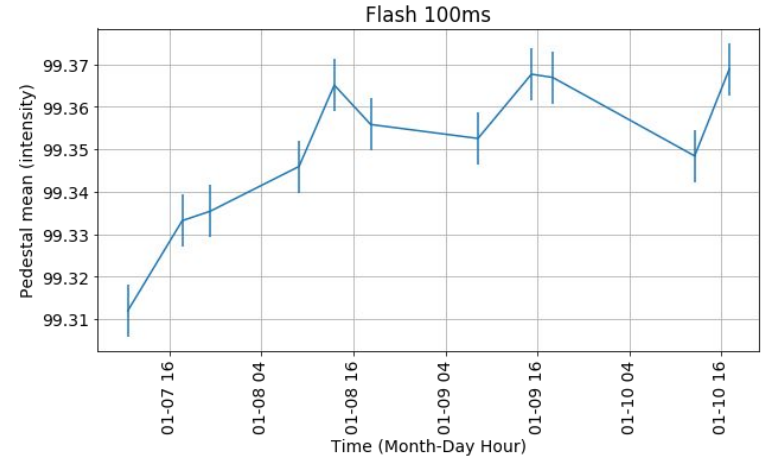
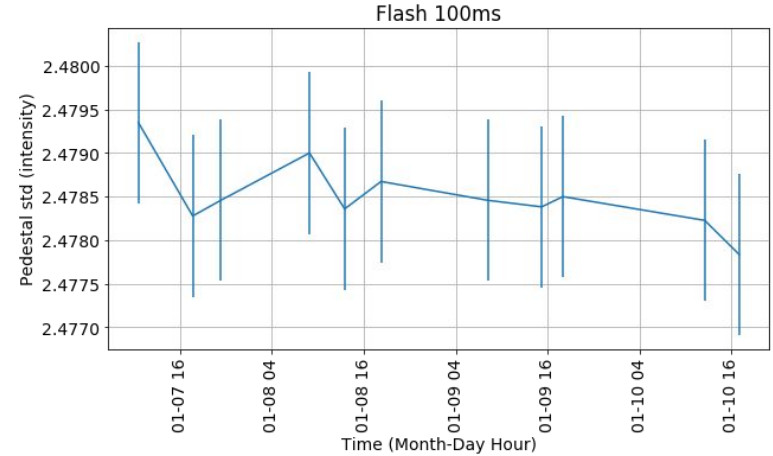


pedestal



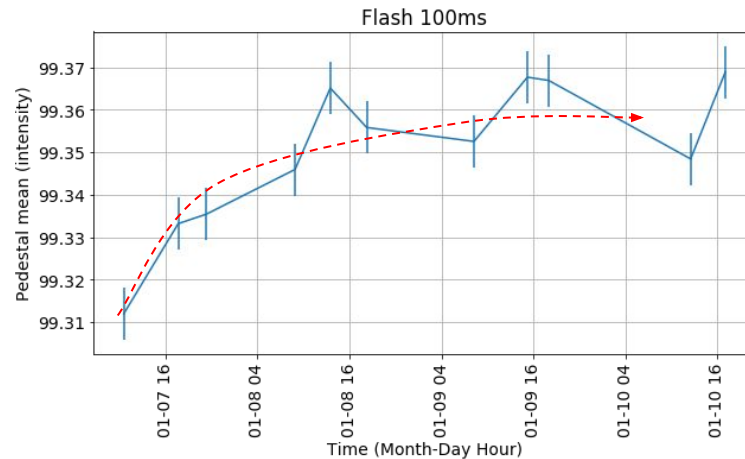
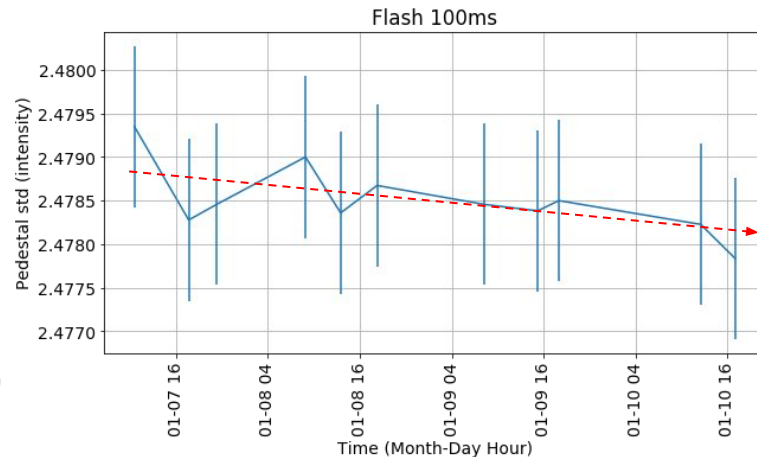
Preliminary conclusions

- **MEAN** can vary from run to run
- **STD** within the error bars



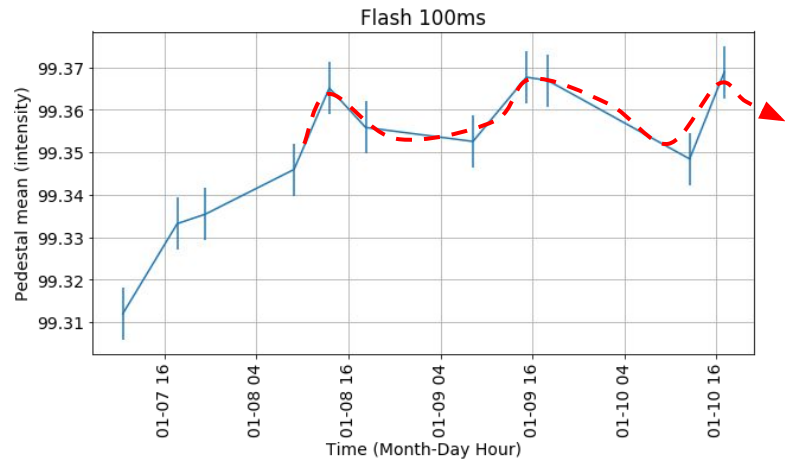
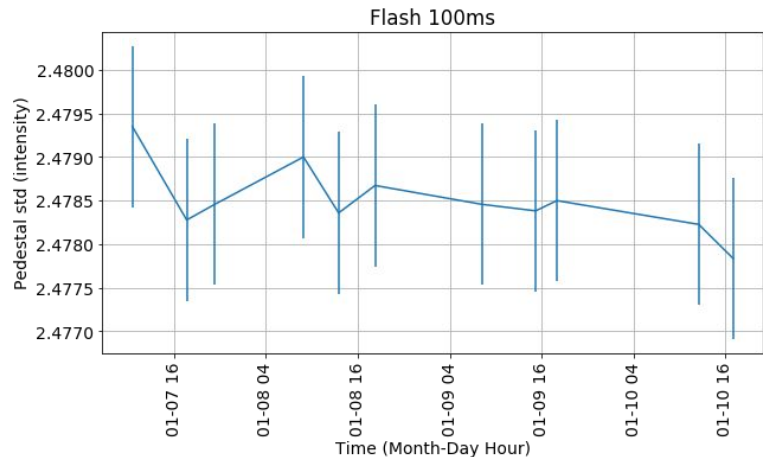
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Preliminary conclusions

- MEAN can vary from run to run
- STD within the error bars
 - We do not have enough statistics to be certain, but it might have a stabilization curve
 - Maybe also an oscillation...
- **MEAN variation seems to impact on the number of fake clusters**

