SDEU Baseline

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IIHE-ULB

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- ▶ Baseline stability for pre-production batch of UUBs together with SPMT and SSD in the field.
- ▶ Data from CDAS: from 01/12/2020 to 21/01/2021

0871 1224

0868 0804 1225

0859 0864 1220 1218

+0863 0866 +1222 +1219 +1211

+1740 +1743 +1221 +1223 +1217

=1747 =1741 =1745 =1818 =1851

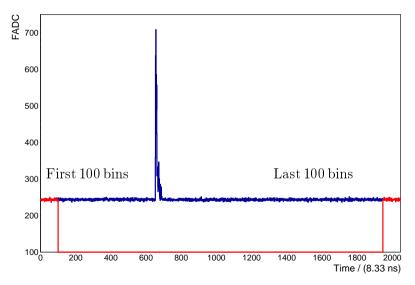
=1729 =1735 =1746 =1819 =1791

The stations installed are:

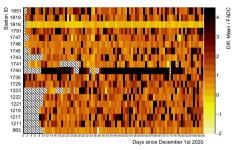
Dec. 07-11: "+" until Dec. 04: "="

The others which are not marked, still need to installed.

Distribution of the difference of the mean for the station 1818's PMT1 HG

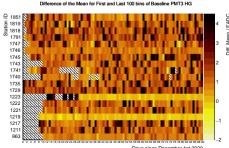


Difference of the Mean for First and Last 100 bins of Baseline PMT1 HG

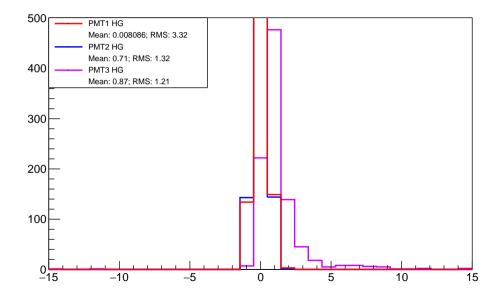




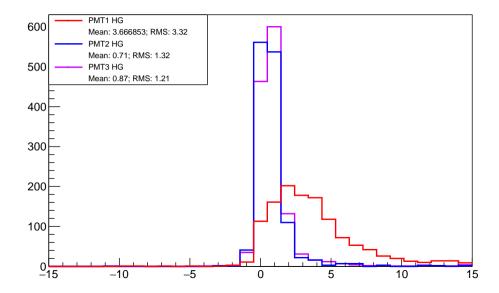
Difference of the Mean for First and Last 100 bins of Baseline PMT2 HG 1818



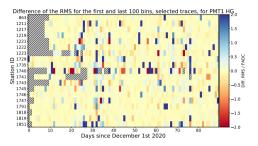
Distribution of the difference of the mean for the station 1818's PMT1 HG

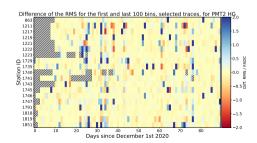


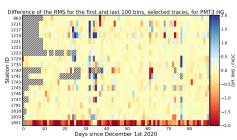
Distribution of the difference of the mean for the station 1740's PMT1 HG



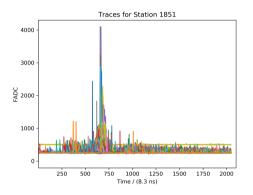
RMS difference for traces that agree with: $|\operatorname{Mean}_f - \operatorname{Mean}_I| < (2 * \operatorname{RMS}_f)$

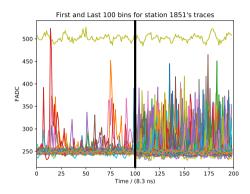




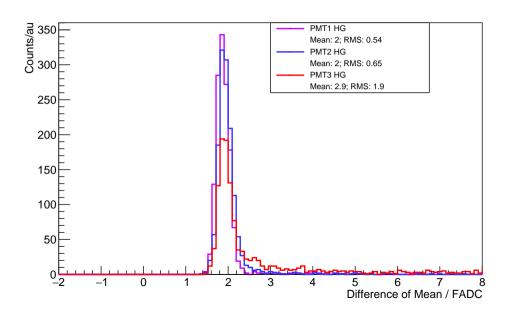


1851 station's PMT3 HG





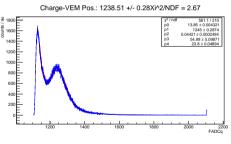
Distrubition of RMS for the last 100 bins of station 1851



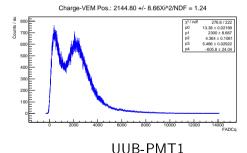
Fitting Histograms to:

$$e^{\left(a_0-\frac{1}{x\tau}\right)}+\frac{1}{x}e^{-\left(\frac{\left(\ln x-\ln \mu\right)^2}{2\sigma^2}\right)}$$

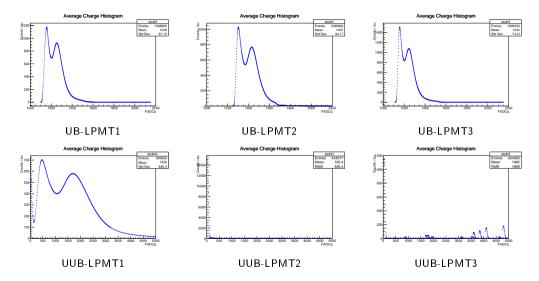
Charge histogram for Station 1223



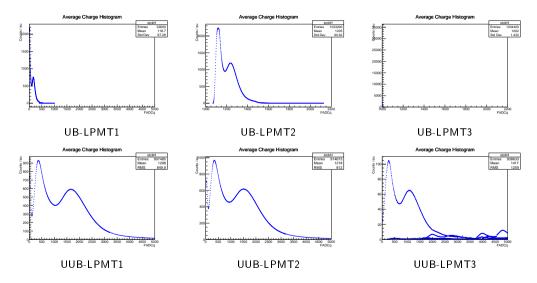
UB-PMT1



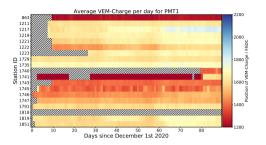
Averages histograms for Station 1223:

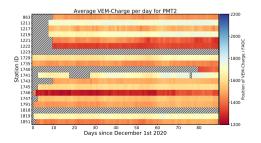


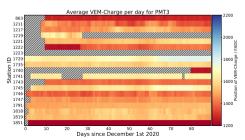
Averages histograms for Station 1851:



Position of VEM-Charge, average per day (traces agree with: $|{ m M_f-M_I}| < (2*{ m RMS_f})$)

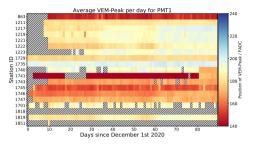


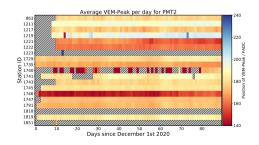


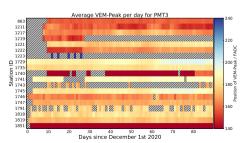




Position of VEM-Peak, average per day (traces agree with: $|{ m M_f-M_I}| < (2*{ m RMS_f}))$

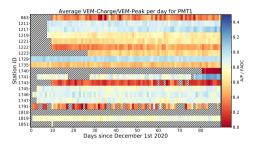


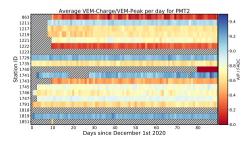


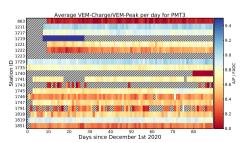




A/P average per day, traces that agree with: $|\operatorname{Mean}_f - \operatorname{Mean}_f| < (2 * \operatorname{RMS}_f)$

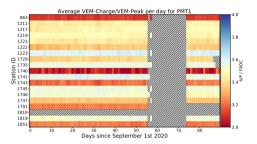


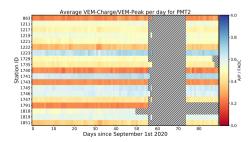


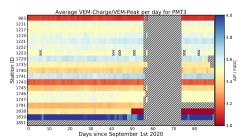




UB: A/P average per day, traces that agree with: $|\operatorname{Mean}_f - \operatorname{Mean}_I| < (2 * \operatorname{RMS}_f)$









Thanks