

Technical control: timeBOX

08/12/2014 - 09/12/2014 AiryLab (Greoux-les-Bains, France)

Test #1

Software: Genika Astro.

Camera: Raptor Photonics EMCCD Kite at 300 fps (Camera Link).

Computer: Lenovo ThinkPad (Intel core i7).

Time Synchronization: timeBOX, Computer time (mode) and continuous PC time synchronization.

Properties: Synchronize every 30 seconds, Tolerance 4 STD (2.5 milliseconds) and Corrected after 5 values above tolerance.

Description: The PC time was continuously synchronized (UTC time) as described. Genika astro dated each frame on free run mode (19691 images, 66.67 seconds). The difference between the PC-time and the PPS LED firing was measured (n=66, milliseconds) and the results analyzed using R Statistical Software.

Results:

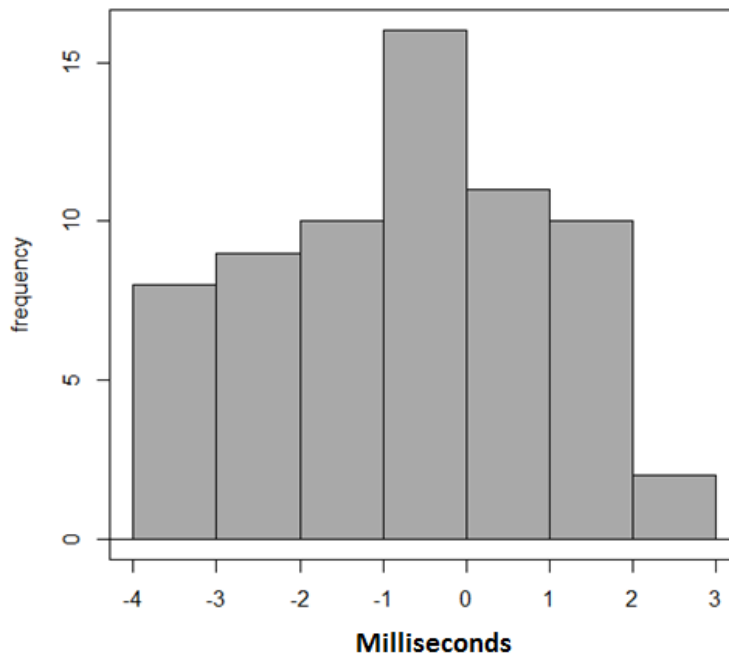
Mean	STD	IQR	0%	25%	50%	75%	100%	n
-0.2575758	1.739236	2.75	-4	-1.75	0	1	3	66

Min = -4; Max = 3

One Sample t-Test

t = -1.2031, df = 65, p-value = 0.2333

95 percent confidence interval: $-0.6851333 \geq -0.2575758 \leq 0.1699818$



Values inside 95% Interval of Confidence (2xSTD): $-3.7360478 \geq -0.2575758 \leq 3.2208962$

Camera Jitter at 300 fps = 3.33 milliseconds