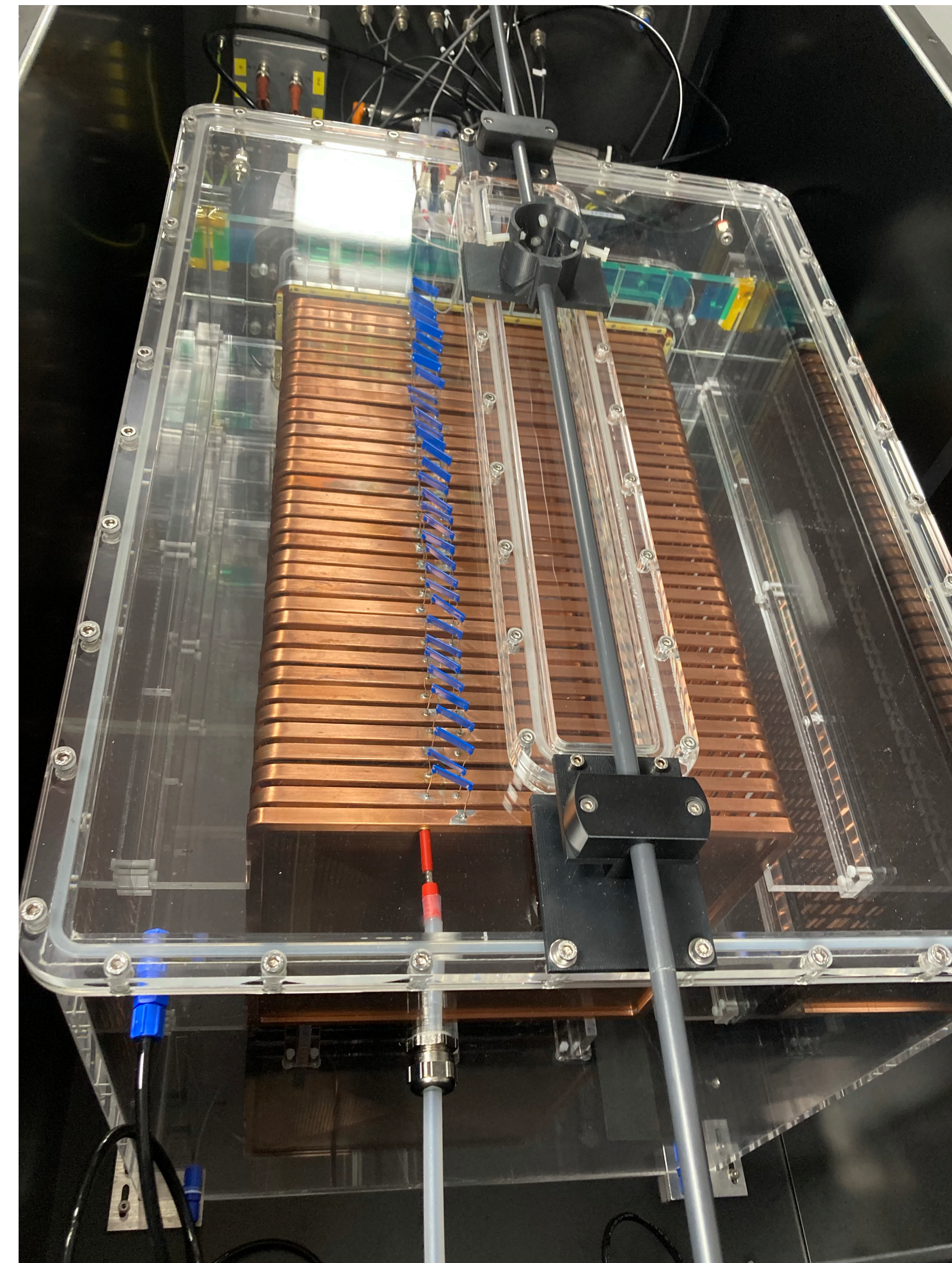


# **RUN5: status**

**Stefano Piacentini**

**General Meeting**

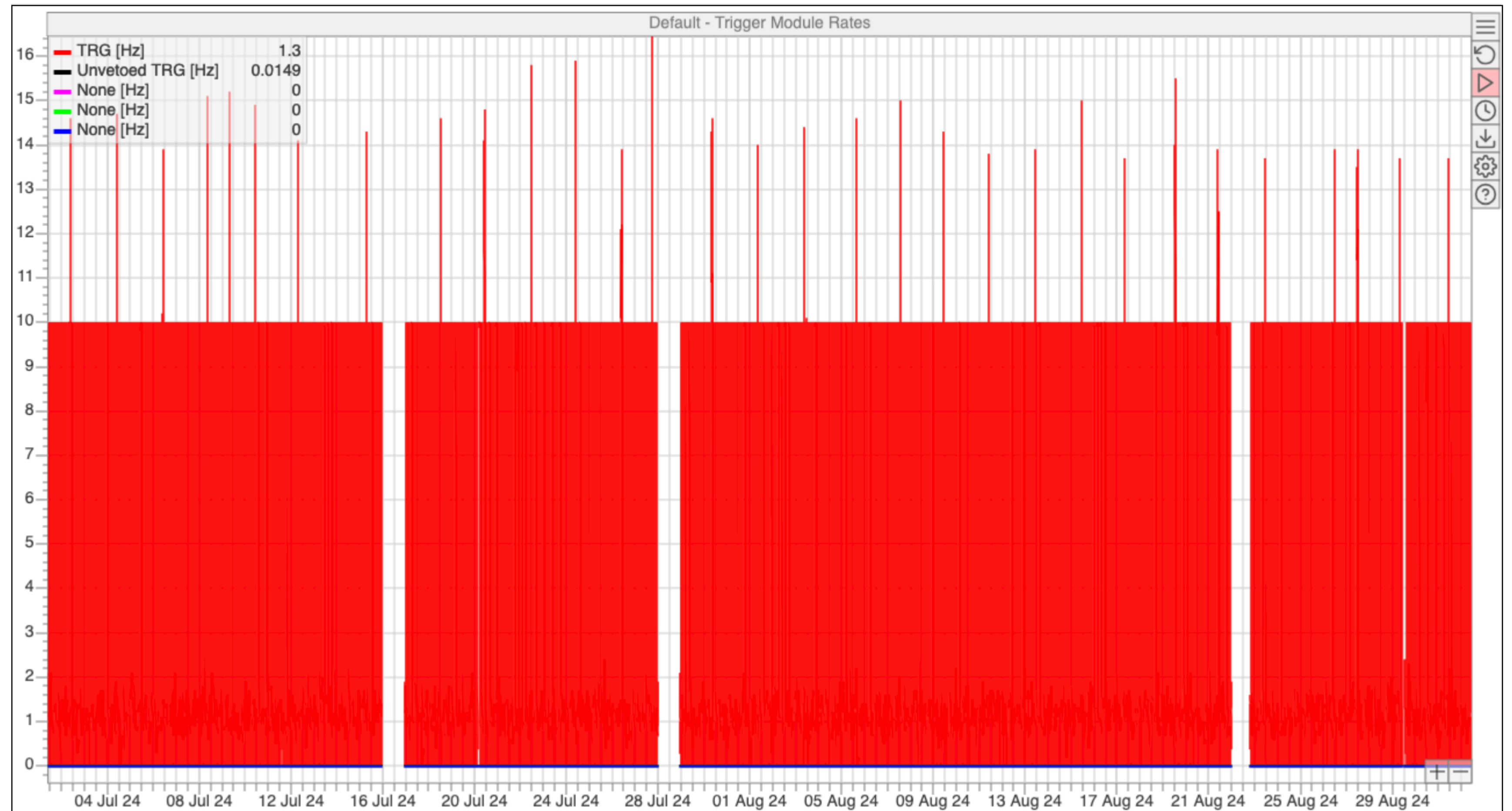
**12/09/2024**





# LIME data taking in July and August

- Continuous data taking **without interruptions**
- **August went fine** without any issue from the point of view of the detector



just Midas not finding the history file to do the plot

# A huge thank to the shifters

- This was possible thanks to the shifters that reacted always very promptly to any alarm raised in this period
- They guaranteed a stable rate of daily calibrations throughout the entire month
- Very few step motor faults

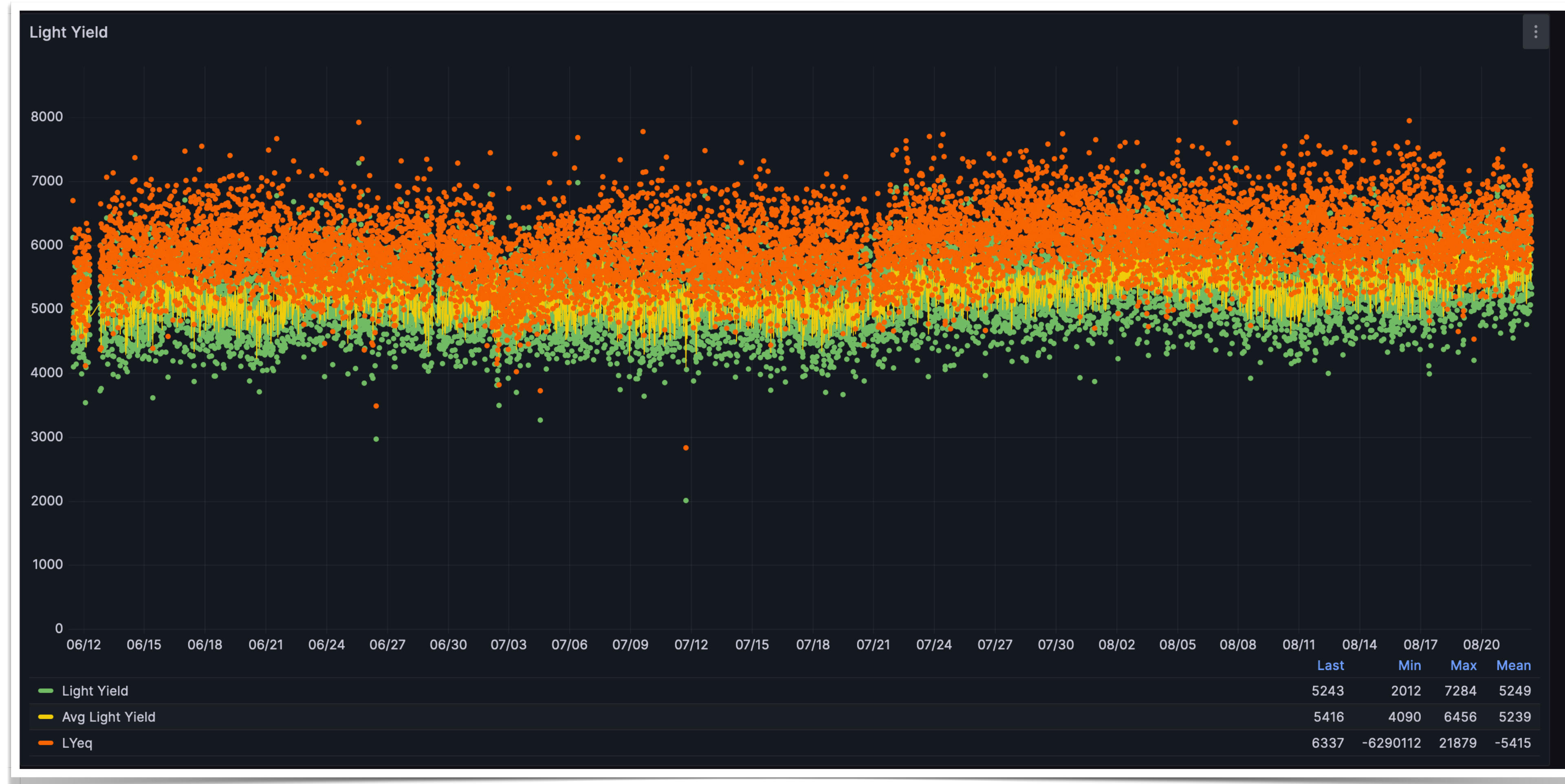
A	D	E	F
Day	8:00 - 15:00 Shift 1	15:00 - 22:00 Shift 2	Daily Calibration
01/08/2024	S. Piacentini;	J. Venâncio;	S. Piacentini;
02/08/2024	D. Fiorina;	J. Venâncio;	Not needed
03/08/2024	R. Antonietti;		R. Antonietti;
04/08/2024	R. Antonietti;		Not needed
05/08/2024	D. Marques;	J. Venâncio;	D. Marques;
06/08/2024	D. Fiorina;	E. Kemp;	Not needed
07/08/2024	R. Antonietti;	J. Venâncio;	R. Antonietti;
08/08/2024	Z. Islam;	J. Venâncio;	Not needed
09/08/2024	R. Antonietti;	J. Venâncio;	R. Antonietti;
10/08/2024	D. Mano;	Z. Islam;	Not needed
11/08/2024	D. Mano;	M. D'Astolfo;	D. Mano;
12/08/2024	Z. Islam;	J. Venâncio;	Not needed
13/08/2024	R. Antonietti;	J. Venâncio;	R. Antonietti;
14/08/2024	Z. Islam;	J. Venâncio;	Not needed

A	D	E	F
Day	8:00 - 15:00 Shift 1	15:00 - 22:00 Shift 2	Daily Calibration
15/08/2024	P. Meloni;	J. Venâncio;	P. Meloni;
16/08/2024	P. Silva;	J. Venâncio;	Not needed
17/08/2024	P. Silva;	R. Roque;	P. Silva;
18/08/2024	Z. Islam;	H. Lima;	Not needed
19/08/2024	R. Antonietti;	H. Lima;	R. Antonietti;
20/08/2024	R. Antonietti;	J. Venâncio;	Not needed
21/08/2024		J. Venâncio;	S. Piacentini;
22/08/2024	Z. Islam;	J. Venâncio;	Not needed
23/08/2024	H. Lima;	J. Venâncio;	H. Lima;
24/08/2024	Z. Islam;	R. Roque;	Not needed
25/08/2024			
26/08/2024		J. Venâncio;	S. Piacentini;
27/08/2024	Z. Islam;	J. Venâncio;	Z. Islam;
28/08/2024	M. D'Astolfo;	J. Venâncio;	Not needed
29/08/2024	Z. Islam;	J. Venâncio;	Z. Islam;

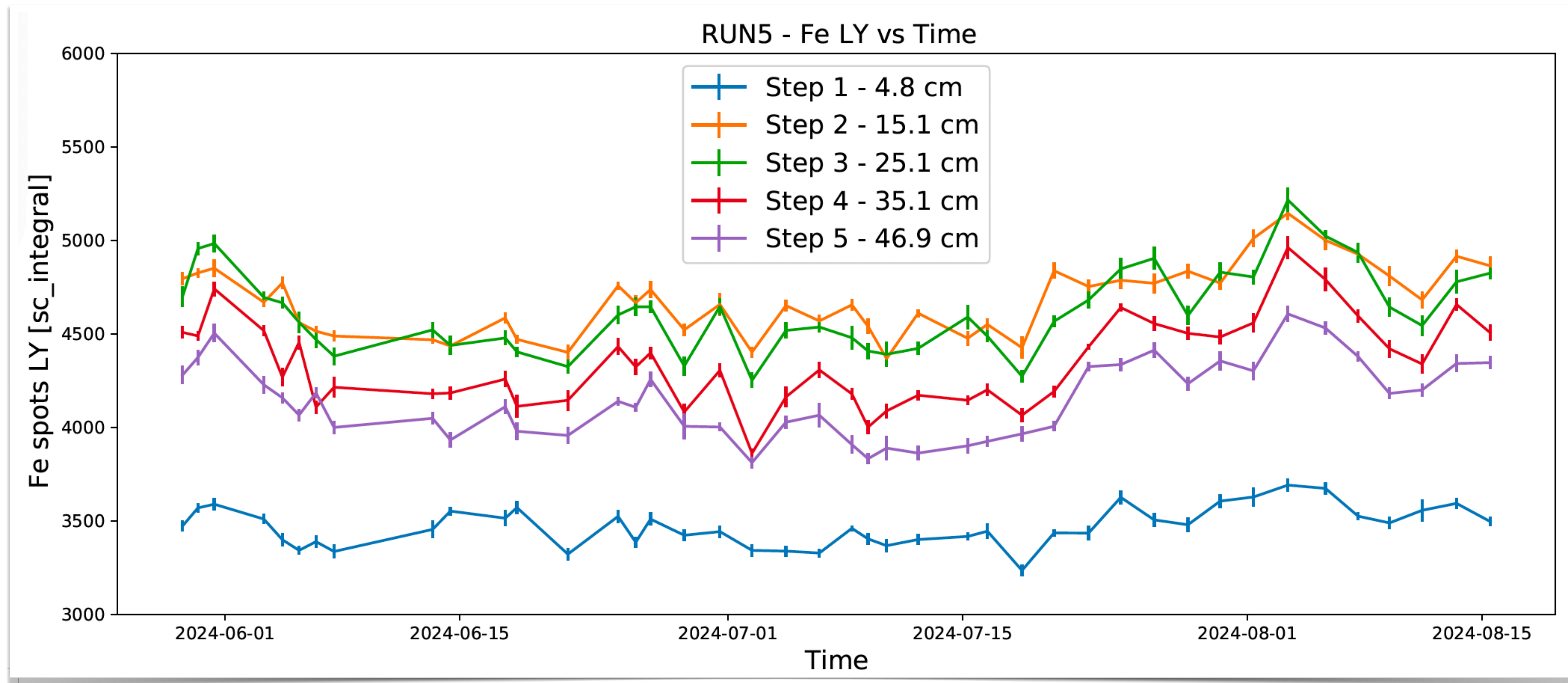


# Light yield vs time [LY30]



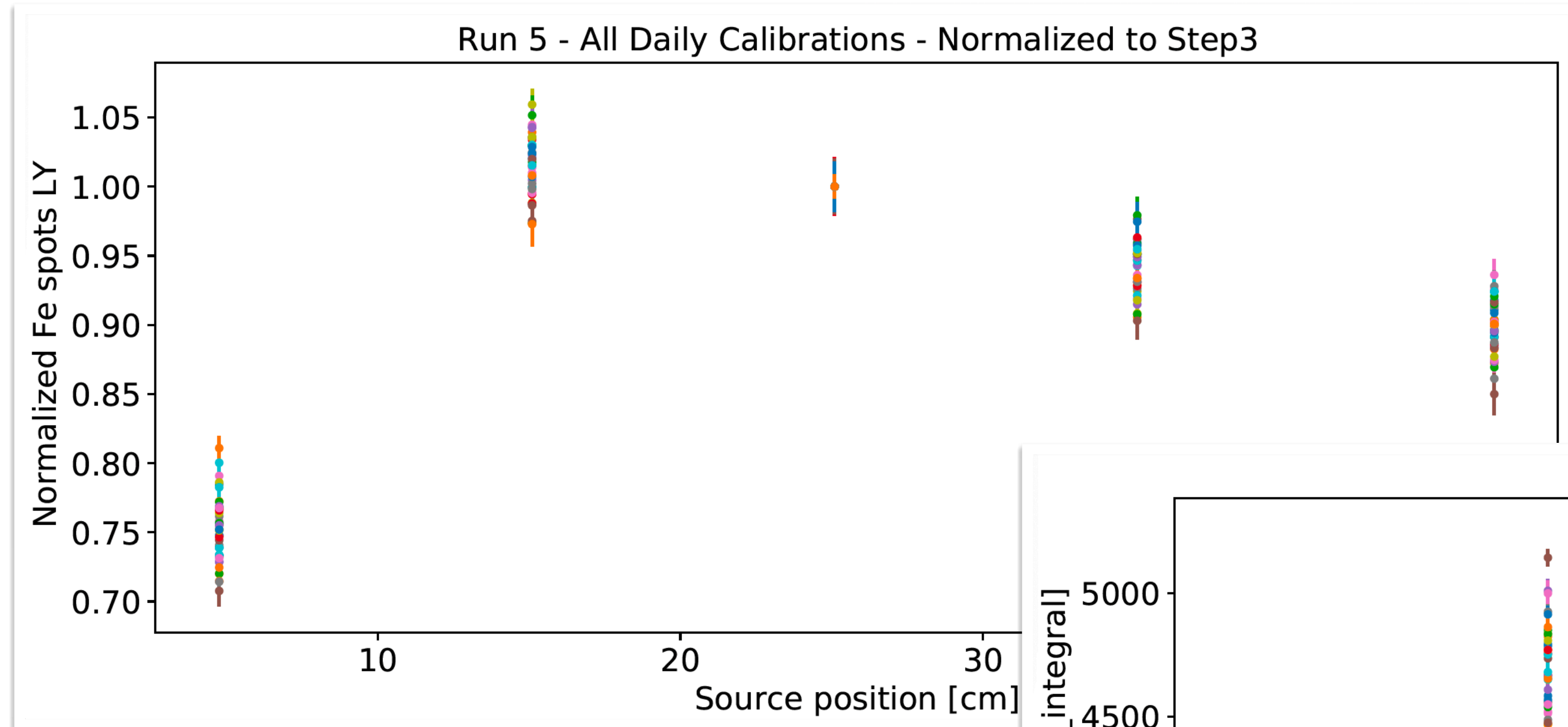


# Light yield vs time [Daily Calibrations]



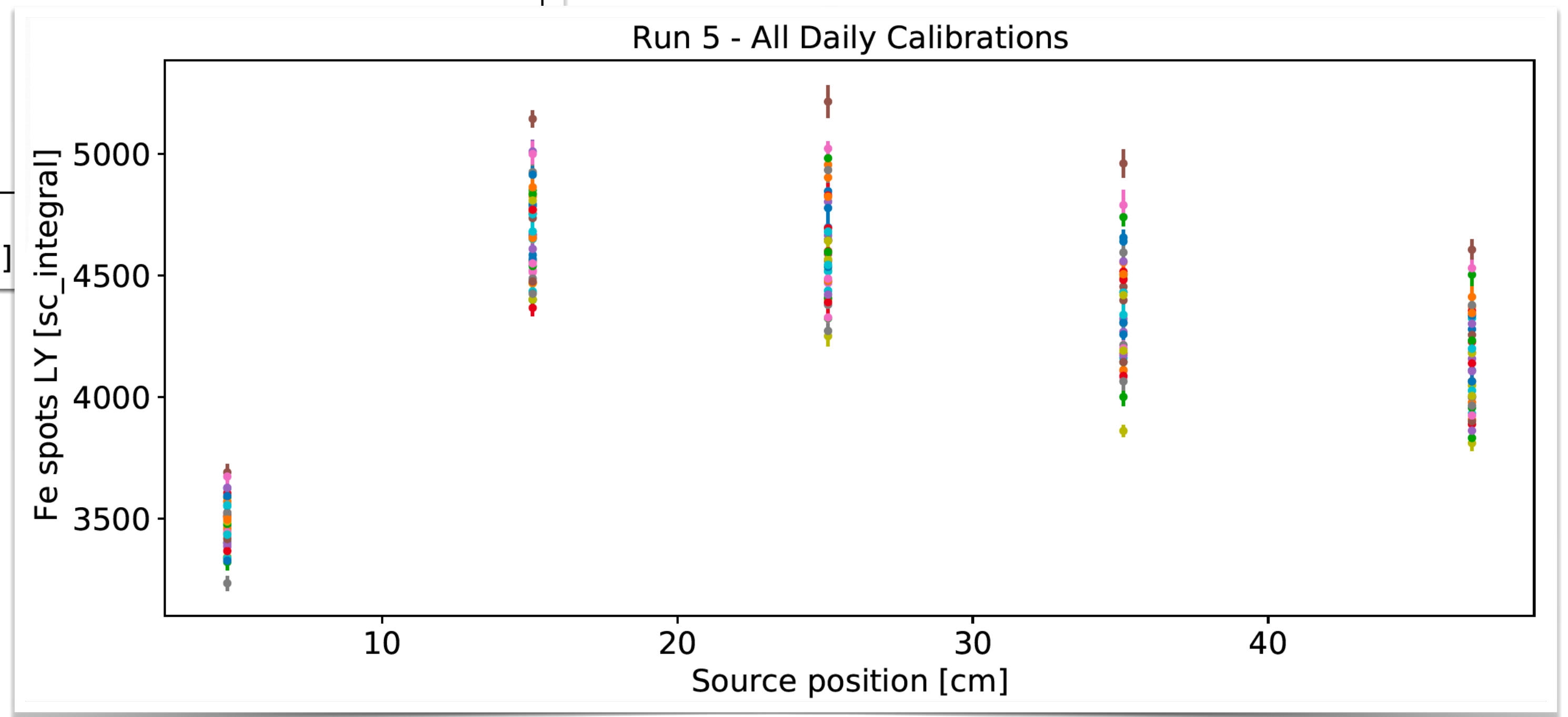


# Light yield vs z [Daily Calibrations]



- Low gain  $\rightarrow$  step 2,3 and 4 at almost constant LY
- Step 1 ( $z = 5\text{cm}$ ) still saturated as expected

- Rather small relative variation of the LY and the detector response in z: **stable run**
- The small variations in the detector response are not just a normalization

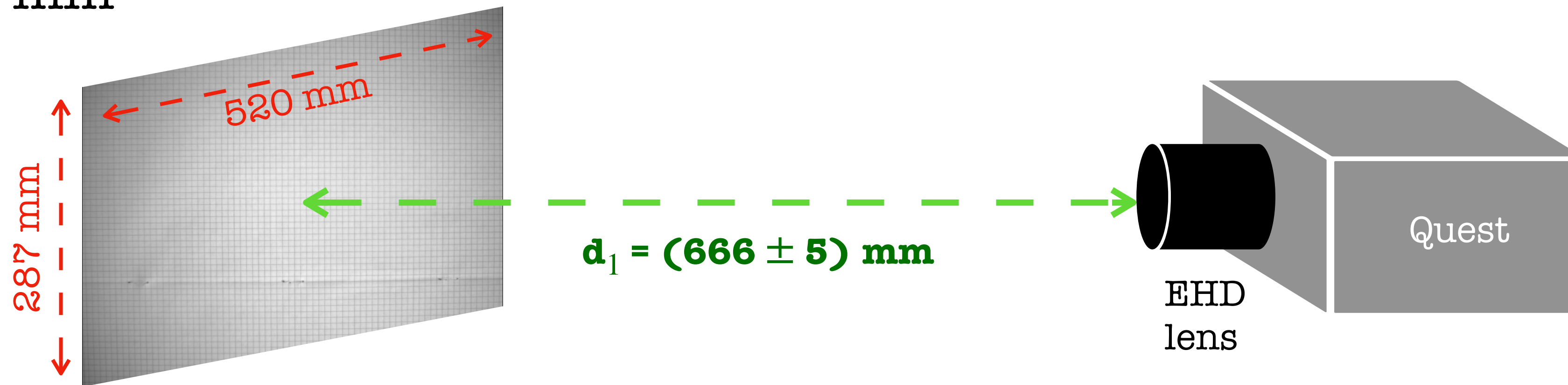




# News on the EHD lens

CAMERA-LENS	Distance from lens edge (mm)	Distance form camera core (mm)	Distance from sensor(mm)	Focus
QUEST - Schneider	657	707	725	0.6
QUEST - EHD	666	747.5	765	0.6

- We tested the new EHD lens (aperture  $a = 0.85$ ) on a Quest camera
- Distance between the 52 cm x 28.7 cm area and the outer surface of the lens is  $(667 \pm 5)$  mm



- This is the same  $d_1$  as for the Schneider lens: this means that with the new lens the camera, to image the same area, must to be kept  $\sim 4$  cm farther from the GEM plane

