

New laser room pilot run

ECAL OM meeting, 21st June 2023

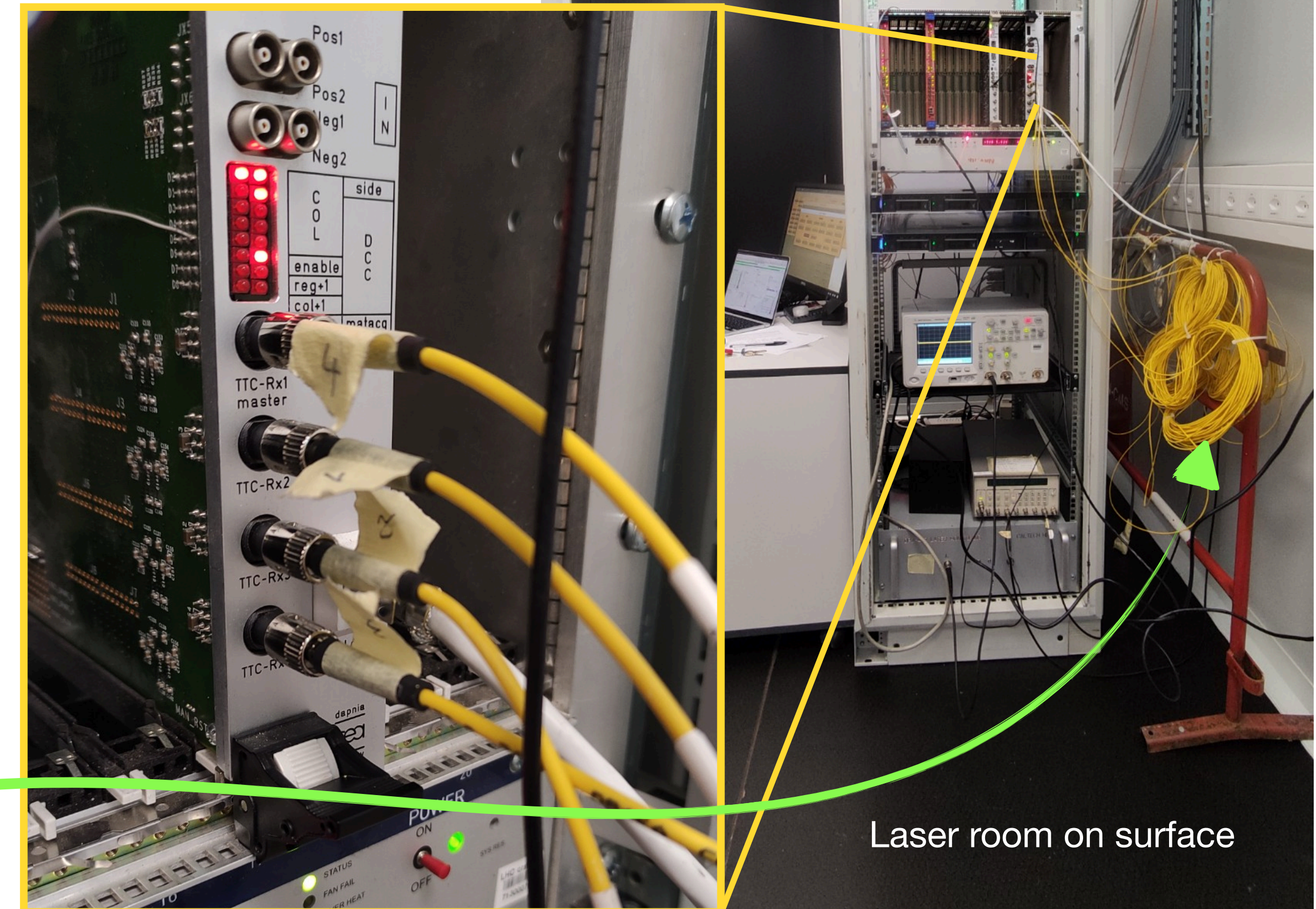
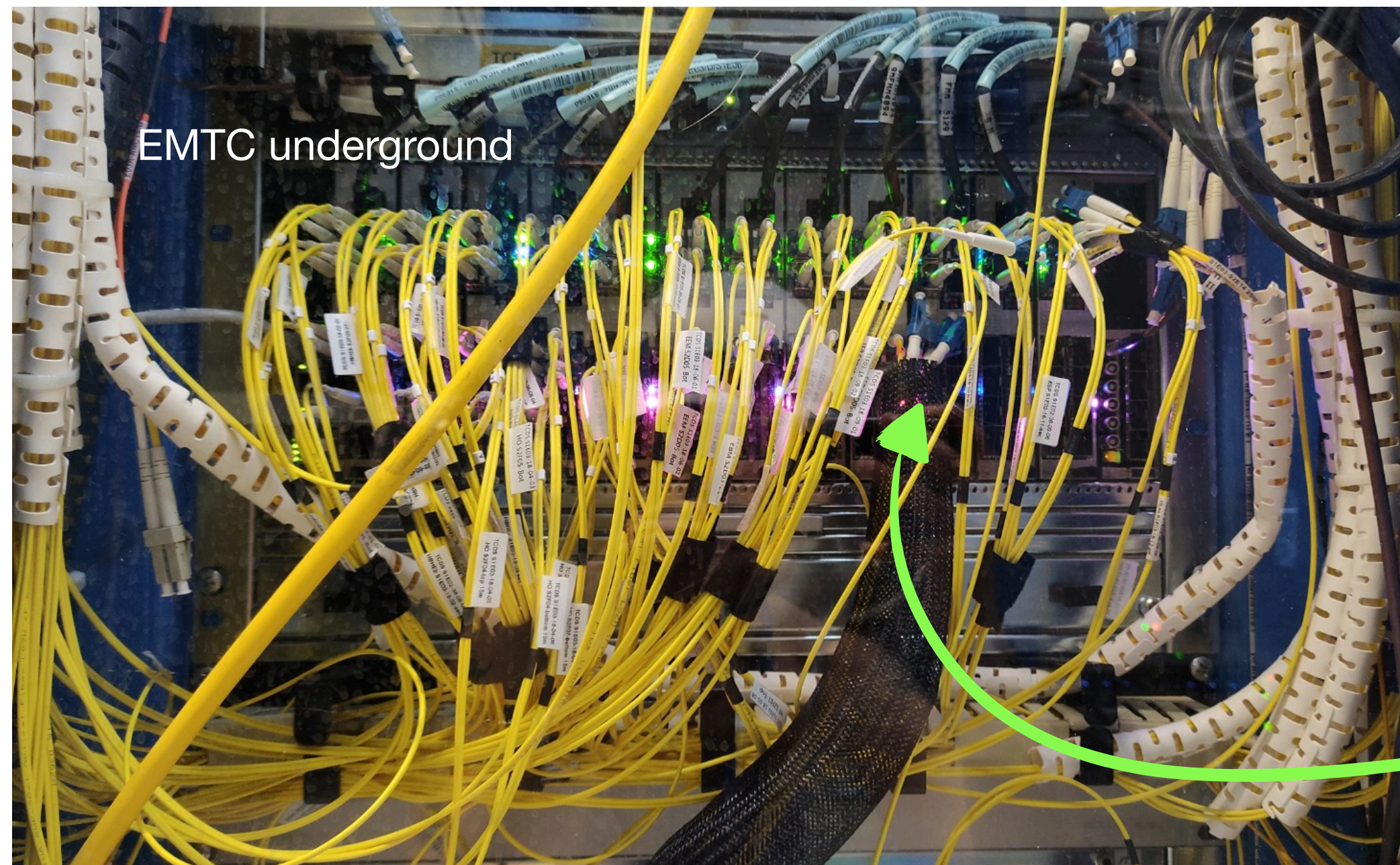
Marta Tornago on behalf of the Laser team

Activities

Set up of the system during MD1, starting from Wednesday 14th June:

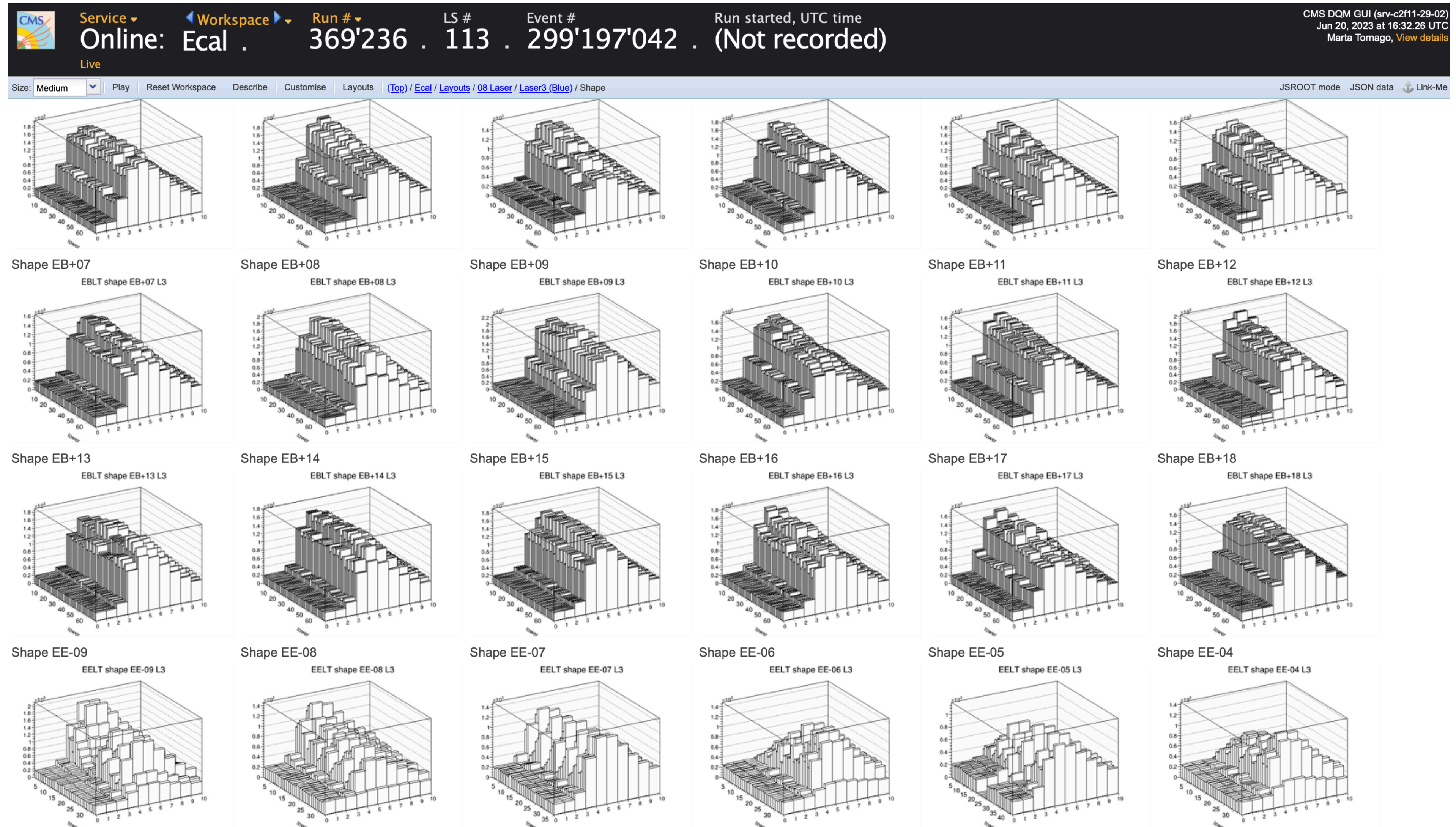
- Set up of the fibers to provide blue laser and LED trigger from the new laser room
- All fibers validated
- Definition of all parameters related to laser delay and amplitude
- New dedicated script to add delay variations for each LM region with the EMTC on surface
- Long runs in miniDAQ during the weekend to check the configuration
- Data are correctly uploaded to the farm and available for analysis

Data taking in global during TS1 from Monday 19th June



Results

Laser and LED pulses can be nicely seen in DQM (LED issues not related to the new laser room configuration)



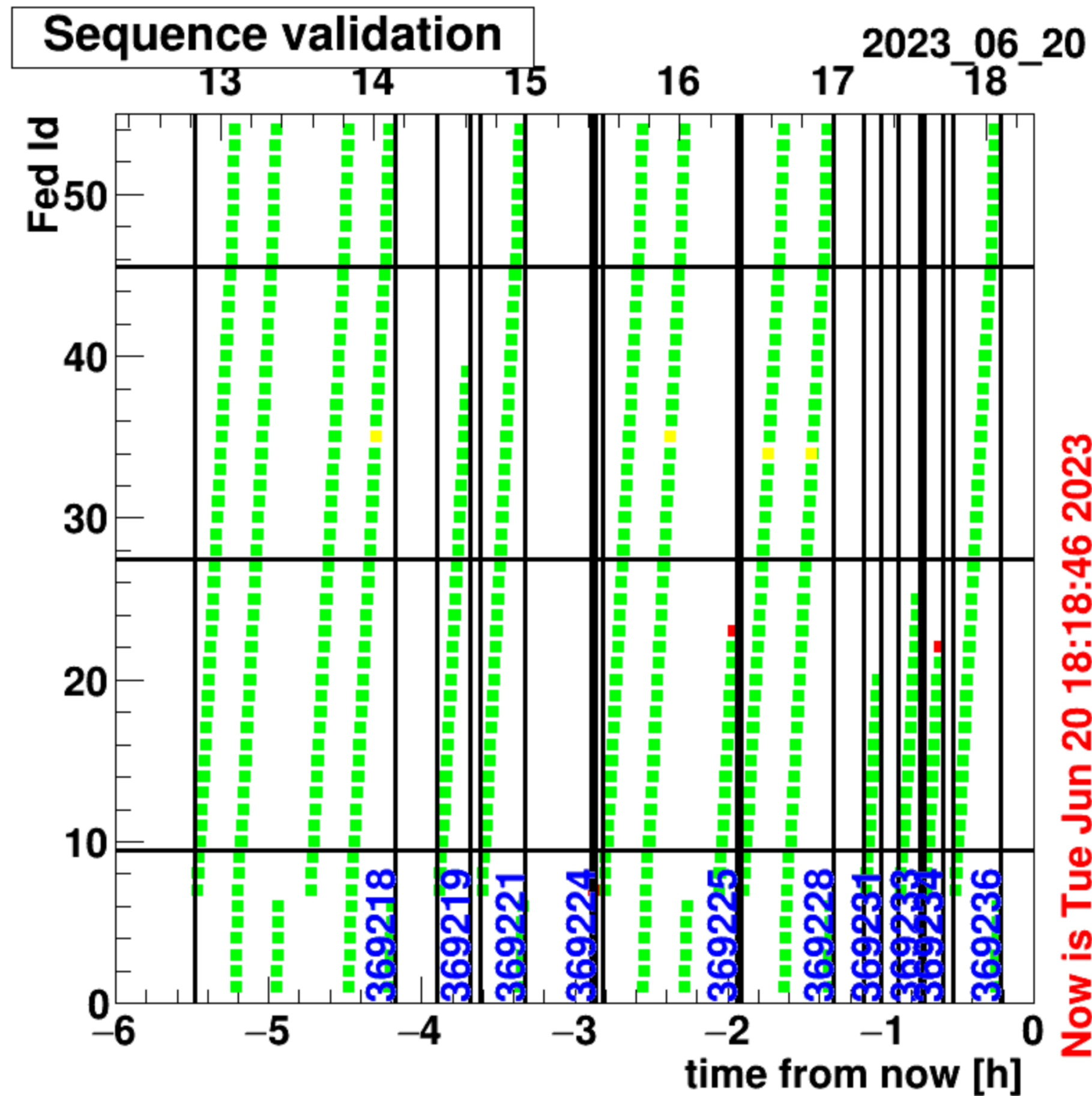
Results

Calibration sequence performed correctly

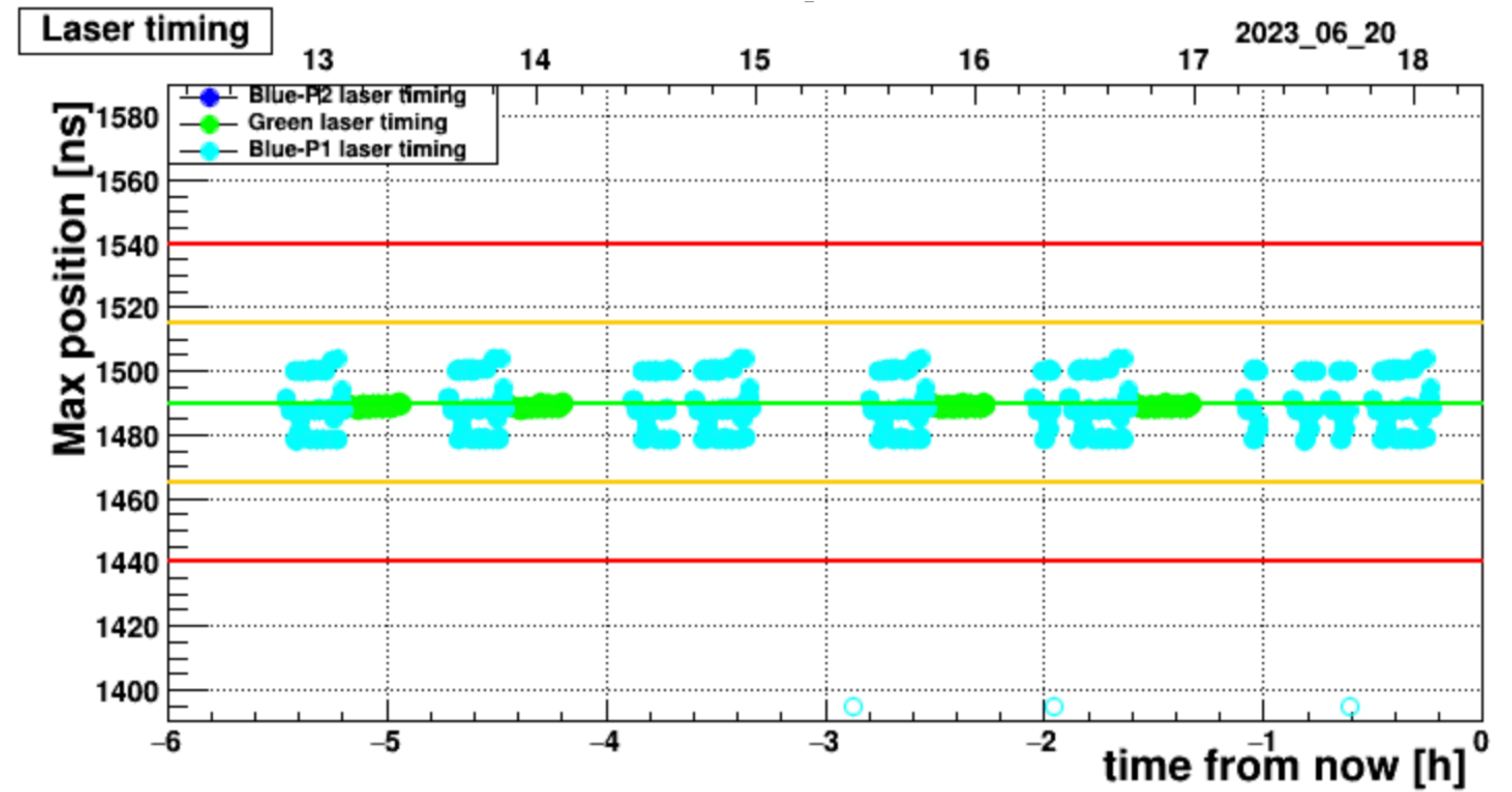
RMS of the blue laser <2% after playing a bit with the laser board and getting a more stable laser temperature

Timing of blue laser falls within the acceptance window

Corrections uploaded on the DB for global runs



Now is Tue Jun 20 18:18:46 2023



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What's next

Roll back to the legacy laser system on Friday 23rd June:

- Set back the trigger fibers to the configuration of the legacy laser system
- Load the standard key configuration for global and miniDAQ

Analysis of these weeks data to calculate ad hoc delays and amplitude parameters for the next runs with the laser room on surface