

DY 2018 Weekly report



Weekly report for period
2018-10-19 – 2018-10-26
by Robert Kurjata

DY 2018 Weekly report



Day by day reports

Friday 19th – Saturday 20th



- After CO₂ problems recovery of the detectors took long time, MW1 was tripping until ~1am, later on some noisy channels persisted recovering with time, MWPC Station 10 was revived by Bogdan 20th at ~9:00am
- No beam periods:
 - 0:30am → 3:30am – safety issue at PS: (*YEPZ02.SWY=351 door between LINAC3 and SwitchYard was 'forced'. At the end, Piquet RP called us to inform that after checking the video camera, 5 people at 00:30 (right after the EIS-a forced) came out of the Linac3.*)
 - 30 min. in the morning due to POPS trip

Friday 19th – Saturday 20th

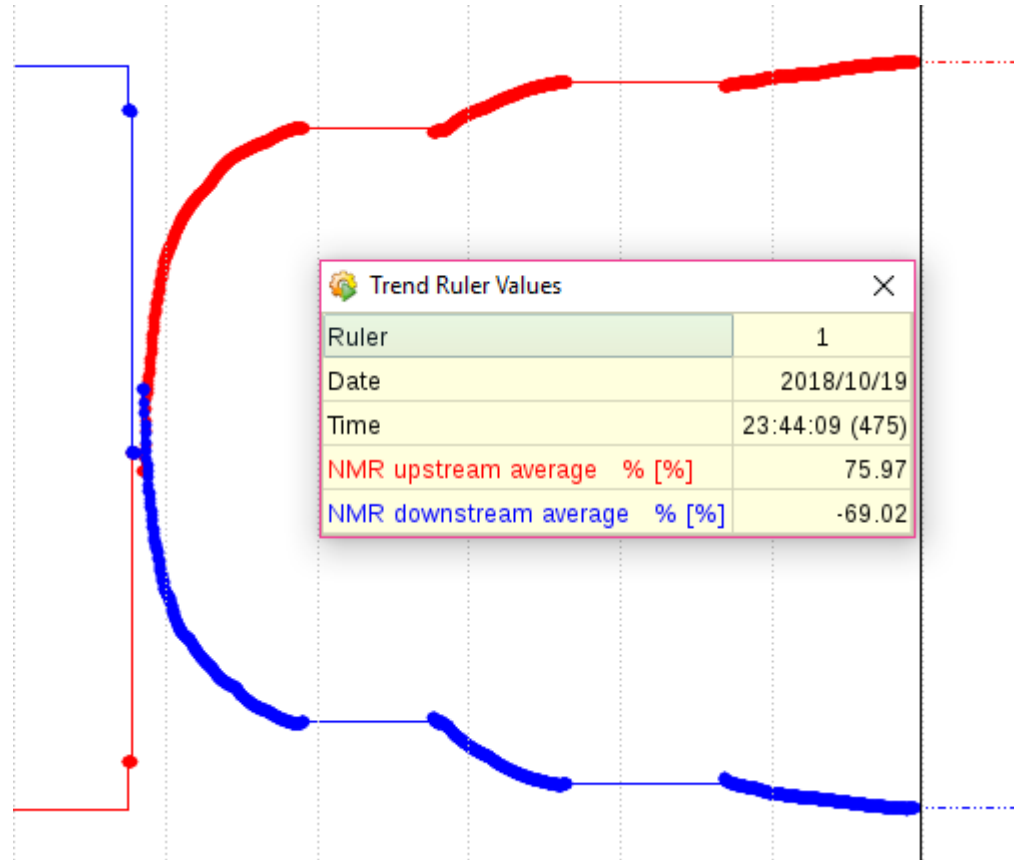


- Fri – 16 -beam was back on 12:30, unstable with short breaks at start, later on stabilized until 0:30am
 - during this time → low intensity beam and more CEDAR tests, important detectors still flushing after CO₂ problem,
- After beam back at 3:30 DY
- Statistics:
 - DY=1740, Detector-Test=543, Trigger Test=437

Friday 19th – Saturday 20th



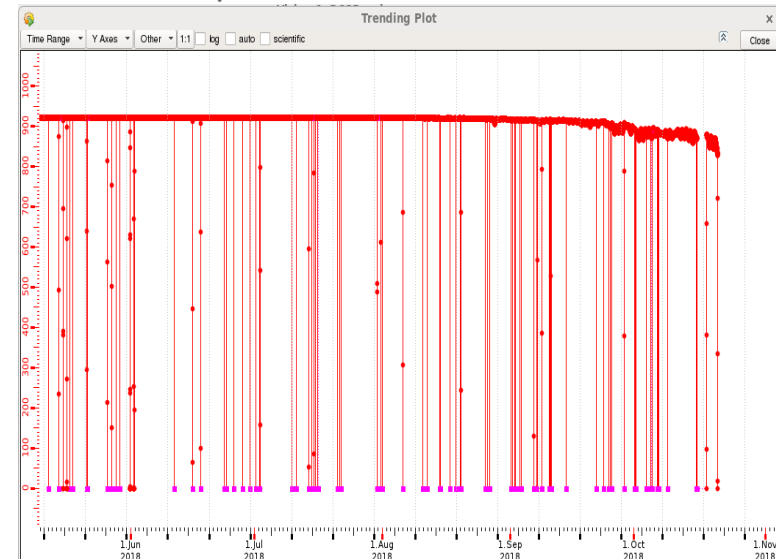
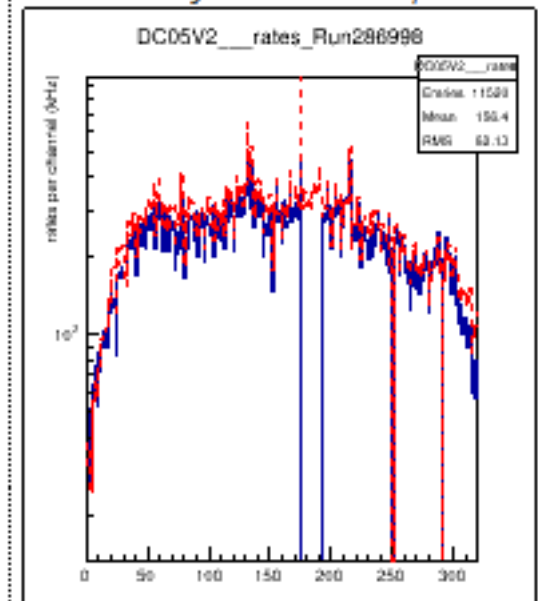
- Given a plenty of time available we achieved a good polarity of $\sim +76\%$ upstream, -69% downstream



Saturday 20th – Sunday 21st



- 1 FEM=16ch of DC05V2 is not responding, LOADING does not help – probably LV problem or FEM broken
- Problems with reloading PMM – after reboot of pccofe15 LOAD -A was giving MySQL errors – some glitch cause expert could reload remotely
- Problems with MW2 - X1, port no. 4, needs access, but not critical
- Undervoltage Mapmt_Sb_083 – was decreasing for longer time, and now is around alarm level
- W45 flows at maximum levels
- DIP7 Alarm – timestamps + CEDARS unresponsive -CCC called (twice)

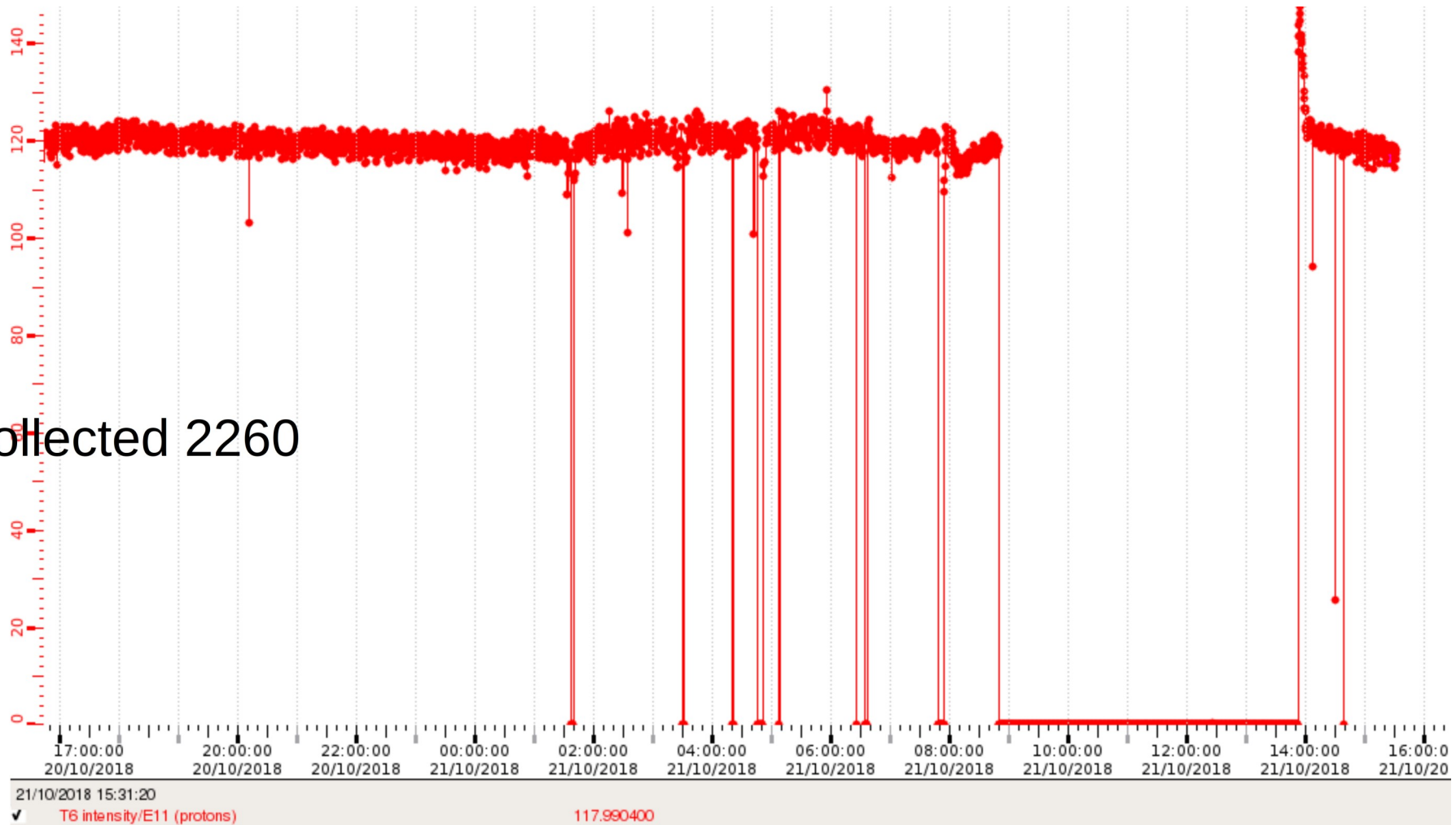


Saturday 20th – Sunday 21st



Beam pretty stable to 2:00am, later on with minor breaks, long break ~5h due to PS magnet problem

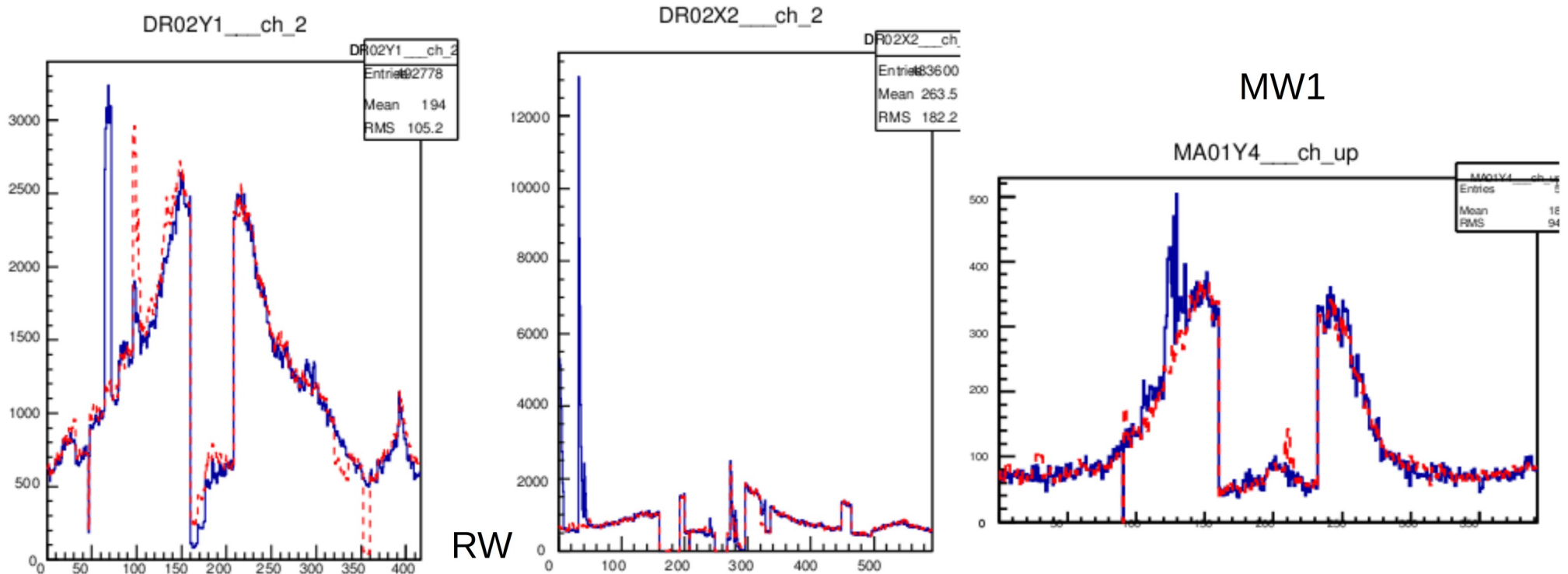
Spills collected 2260



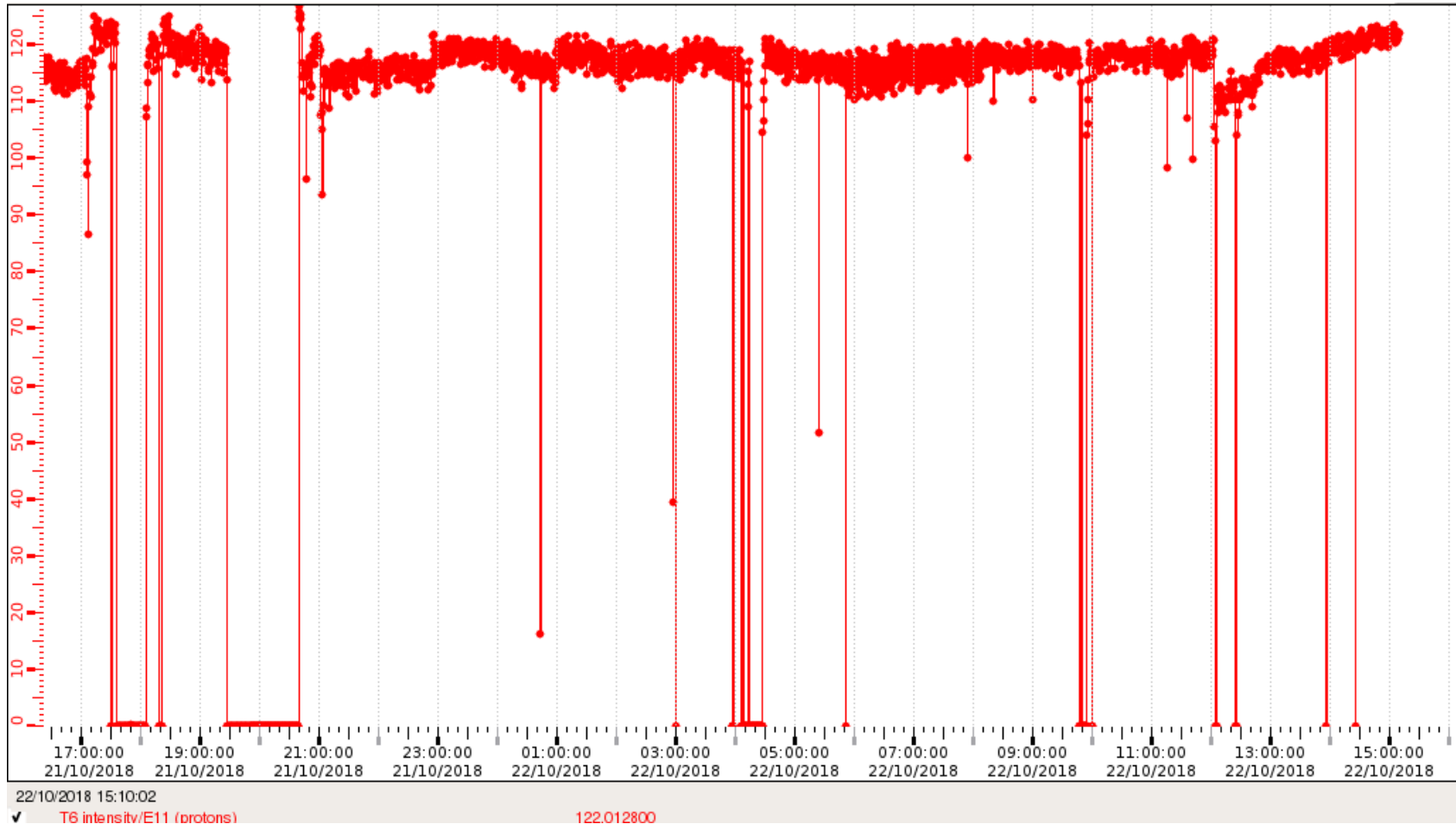
Sunday 21st – Monday 22nd



- MW2 port 4 on srcID 416 excluded as it was affecting other ports
- All pccores rebooted – pccore12 was causing DAQ crash
- pccofe20 – crate rebooted – error on DCS, DC thresholds
- 15:00-15:30 Access to powercycle of SrcID=960 Gandalf, tried to recover MW2 at the same time , but no success



Sunday 21st – Monday 22nd



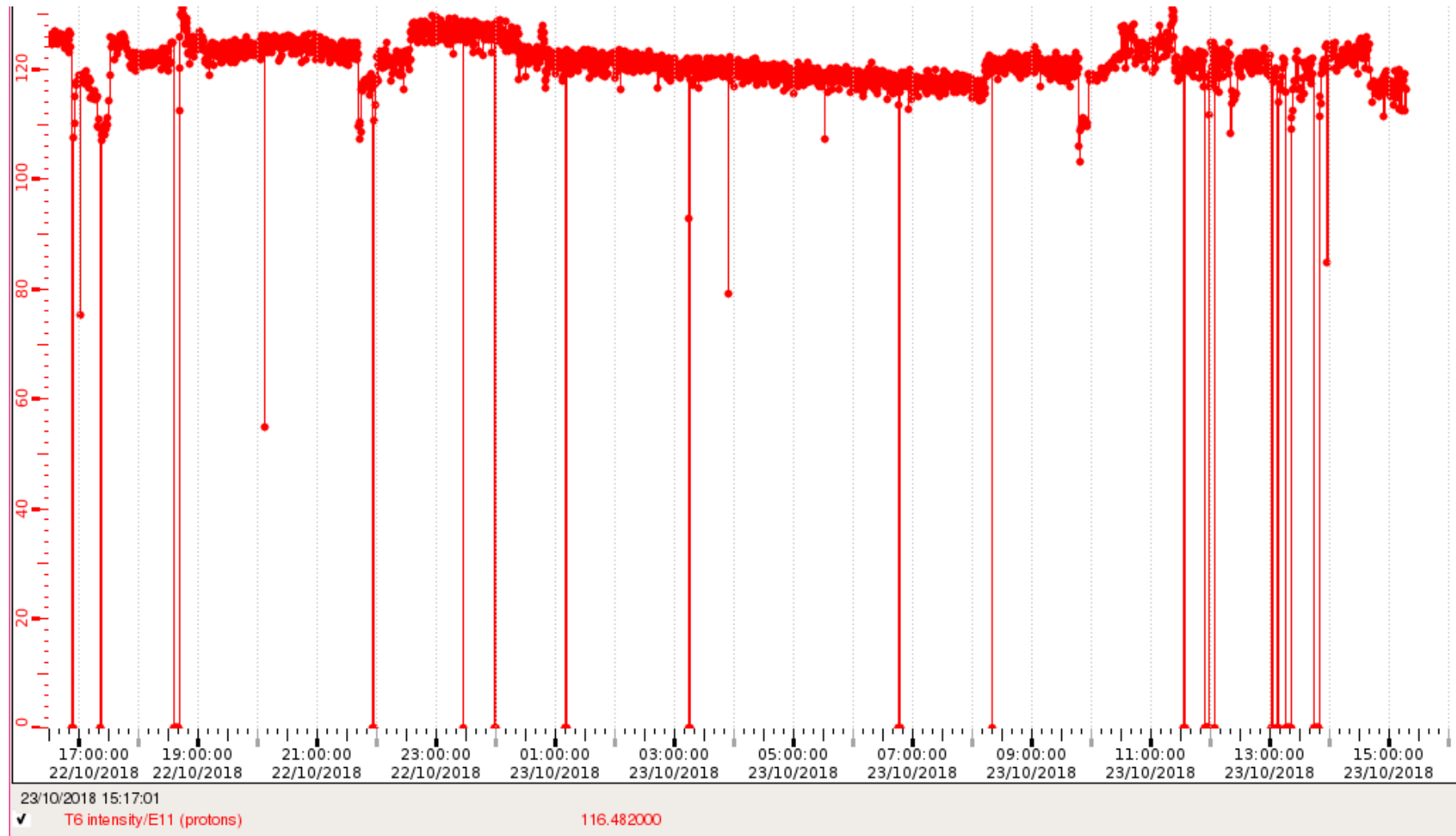
2 longer breaks: 17:45 – 18:22 (~37min) & 19:28 – 20:42 (1h 15min)
+ 30 min for access today
Spills collected: 2549

Monday 22nd – Tuesday 23rd



- PMMs → reboot pccofe15
- 100% errors on SrcID 380. LOADING did not work → rebooted pccofe15, pccofe06, powercycled LV (Vladimir) - cured also previous port 4 issue on MW2
- MW2 – reload + reboot of pccofe06 (second time during 2 shifts)
- Unstable beam for some time with either too low intensity or strong 50Hz component → called CCC
- 100% Errors on Scaler (SrcID 26), Scifi-G source ID 149, DC source 258 fixed by standard reload
- LN2 trap nitrogen level (LN2L) ...

Monday 22nd – Tuesday 23rd



Spills collected: 2868

Monday 22nd – Tuesday 23rd



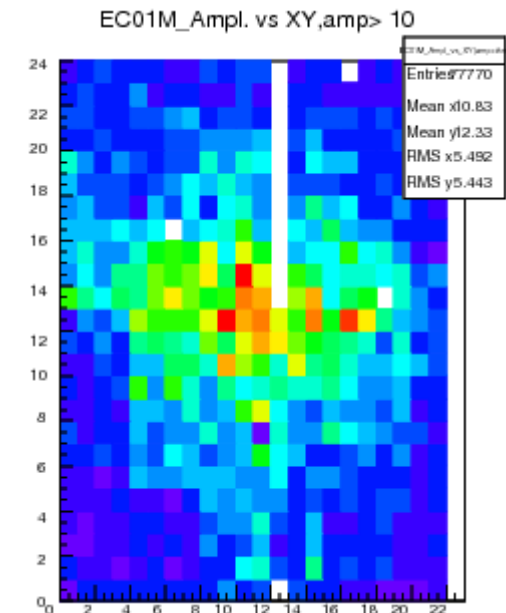
PLANS FOR MD

- CEDARs inspection
 - DC5 faulty FEM
 - Target topping up polarization
 - MW1 – inspection of gas exhaust
-
- Starting new period after that

Tuesday 23rd -Wednesday 24th



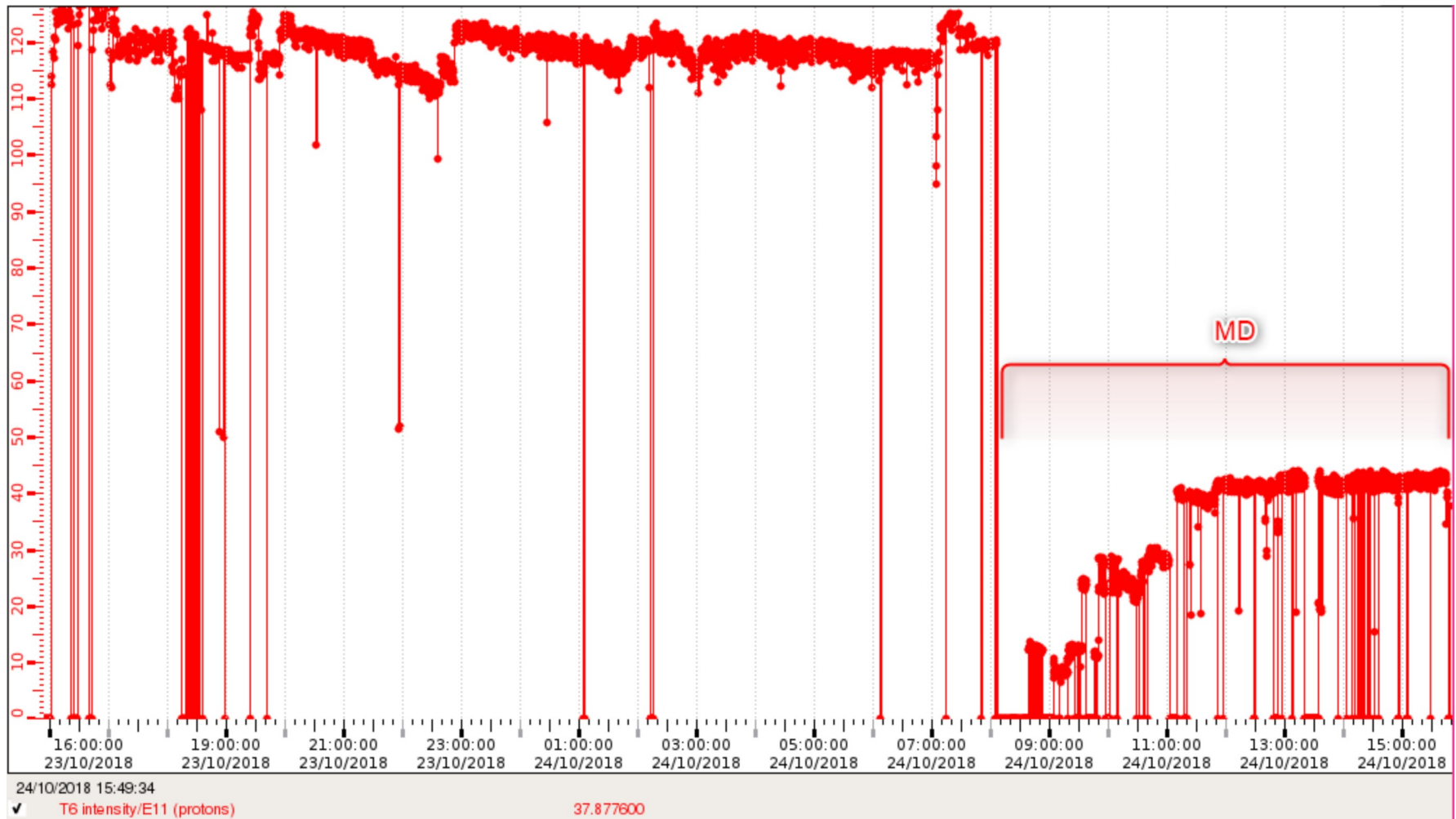
- MW1 → MA02Y4_up out of reference → fixed during this MD – gas flow
- PMM ID=380 → powercycle pccofe15 fixes done twice – once per shift
- ECAL1 → missing strip
- MD Activities
 - na58pi006 SD-card exchanged
 - the field rotation started at 8:40 and the polarization were +70.0% in the upstream and -61.4% in the downstream cell,
 - DC05 port 6 srcID 889 operational again
 - MW1 gas flow restored



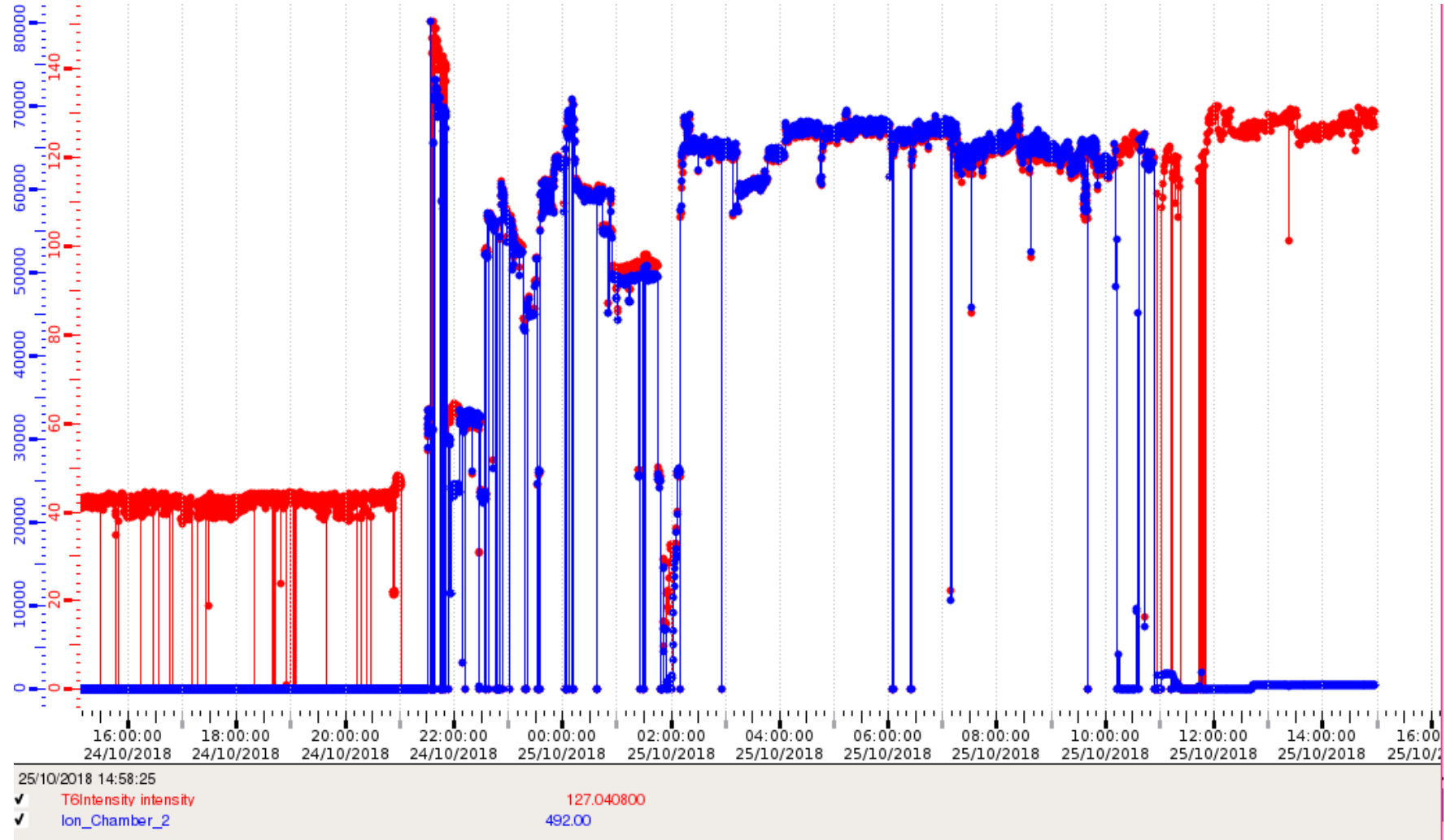
Tuesday 23rd -Wednesday 24th



- Spills collected: 2030
- Beam is expected ~21:00



Wednesday 24th – Thursday 25th



Spills collected: 1315
After MD beam was very bad until 2am

Wednesday 24th – Thursday 25th

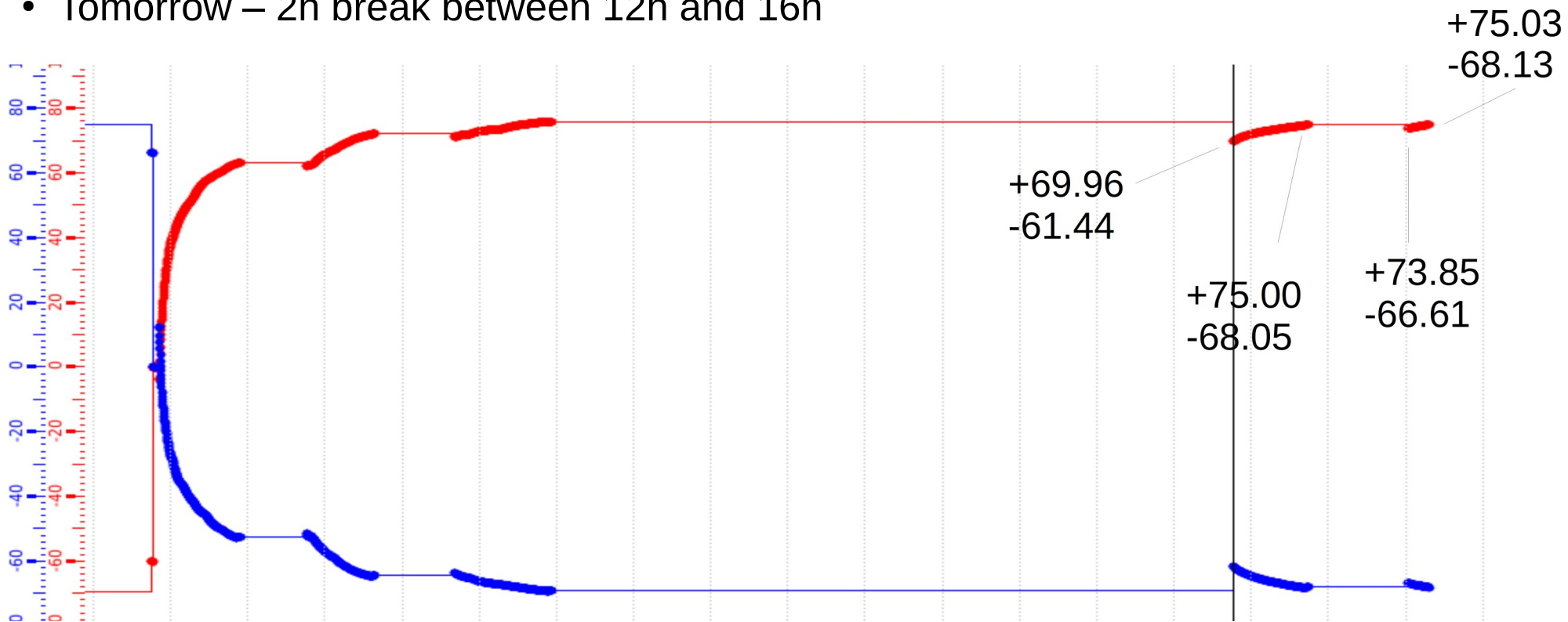


- CEDARs – after very strange beam with high intensity and strange structure there was a radiation related problem with TDC → fixed in the morning by reloading firmware (this can be done remotely without access, access from today was to clarify a cabling for programmers)
- CAEN 1 has unknown state (Daq_Vme_RWall) → problem with network switch after power cycling most errors gone, but communication to crate from DCS crate needed powercycle (done in the morning by Christophe)
- PMM & DC SrcID 256 reload

Wednesday 24th – Thursday 25th



- Today:
 - Pressure scans for CEDARs at low intensity
 - Diaphragm scan at low and later at high intensity
 - Alignment run
 - LHC Filling up to ~23:00pm
- Tomorrow – 2h break between 12h and 16h

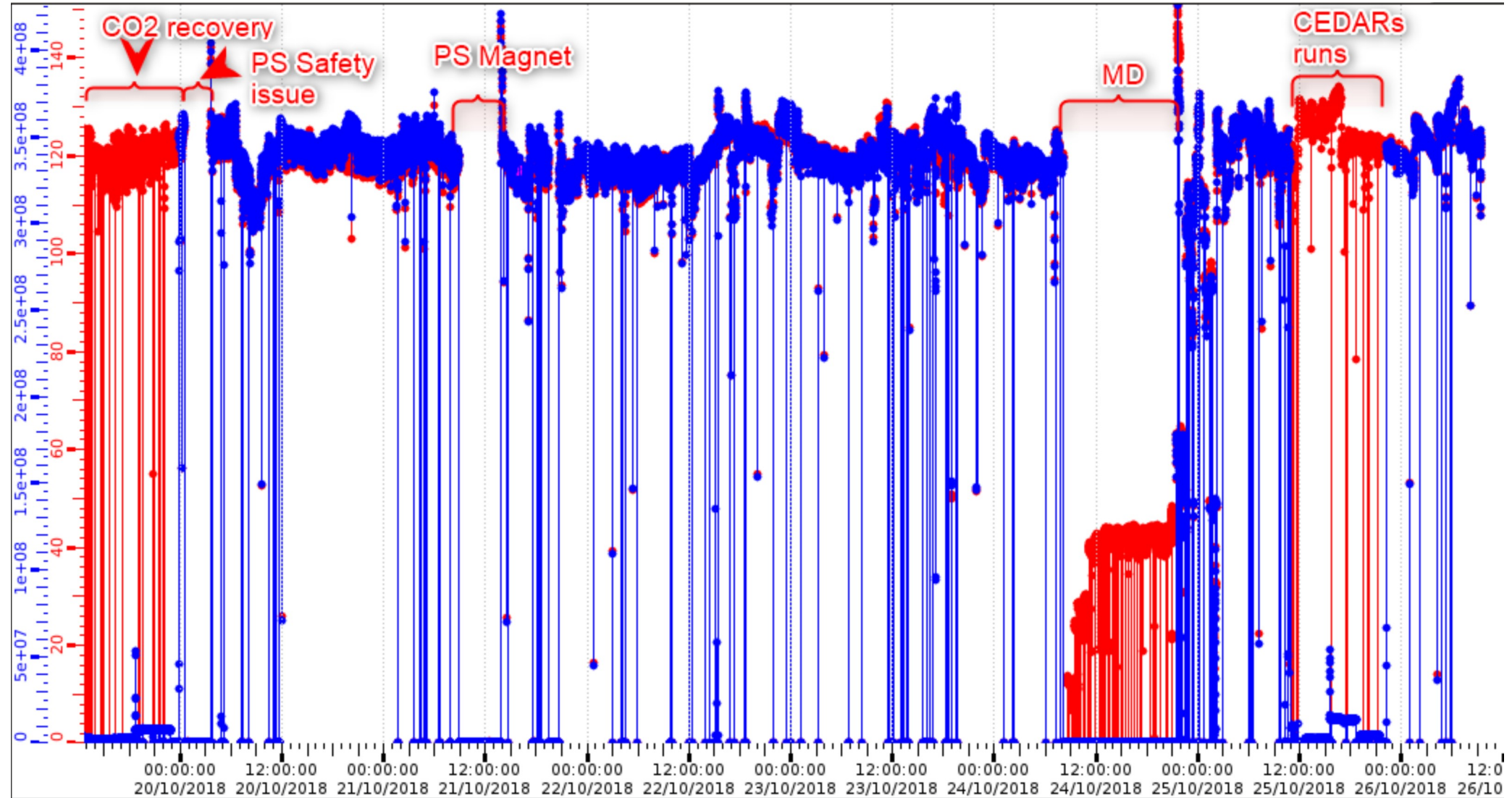


Thursday 25th – Friday 26th



- CEDAR low intensity scans taken with two beam configurations (one with TAX based low intensity, second with collimators based)
- Alignment runs
- Problems with triggers (started with HALO, running overnight without MT) – not yet fixed (or fix not confirmed yet due to no beam)
- Polarization during CEDARs & Alignment topped up: +76.3% upstream and -68.7% downstream
- PMMs – reload as usual

Week summary



26/10/2018 09:25:44

▼ T6Intensity intensity

116.146800

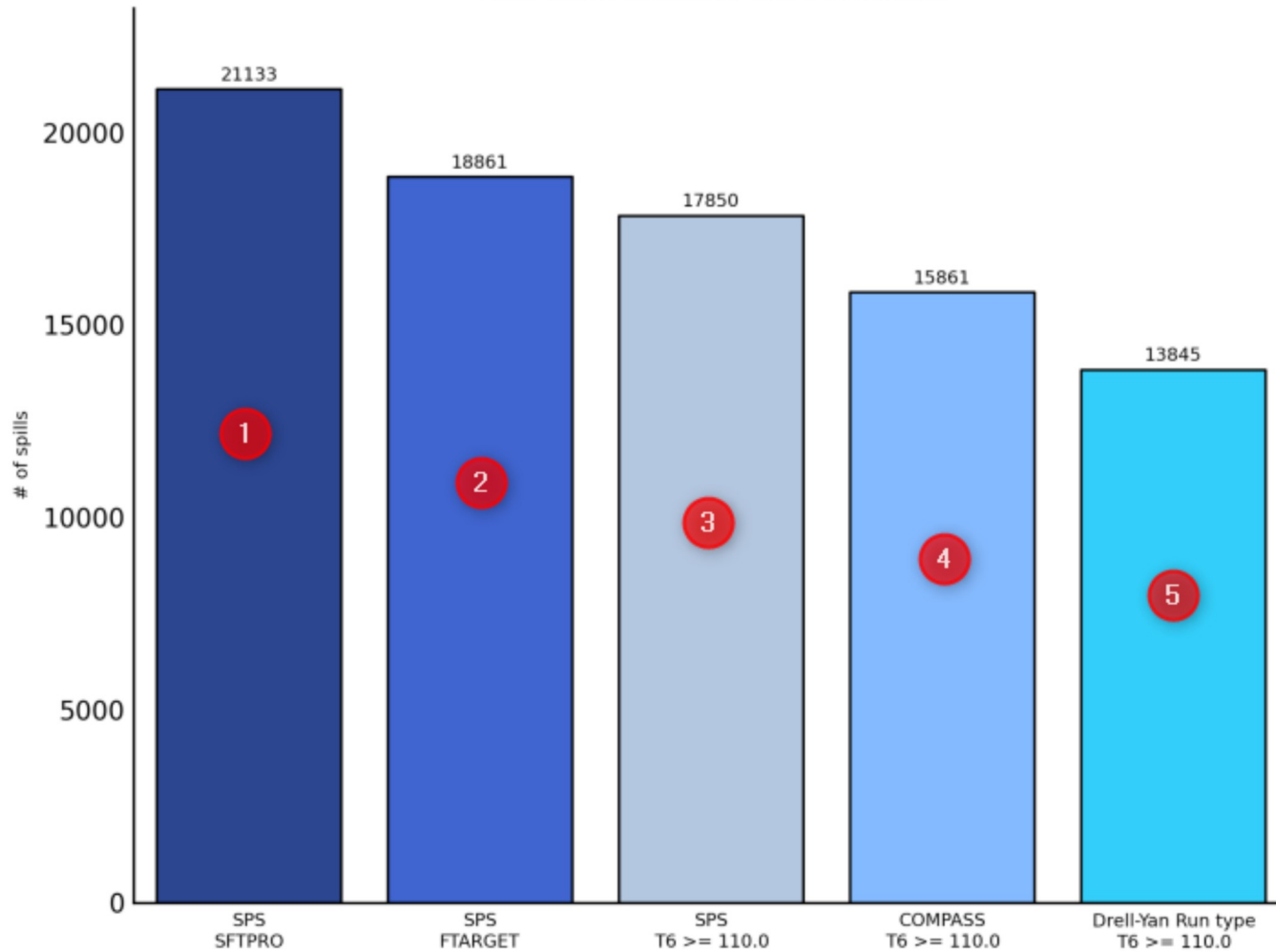
▼ Ion_Chamber_2_withCalib

329909100.00

Week summary



Period: 2018-10-19 10:59:59 - 2018-10-26 11:00:00



Ratios:

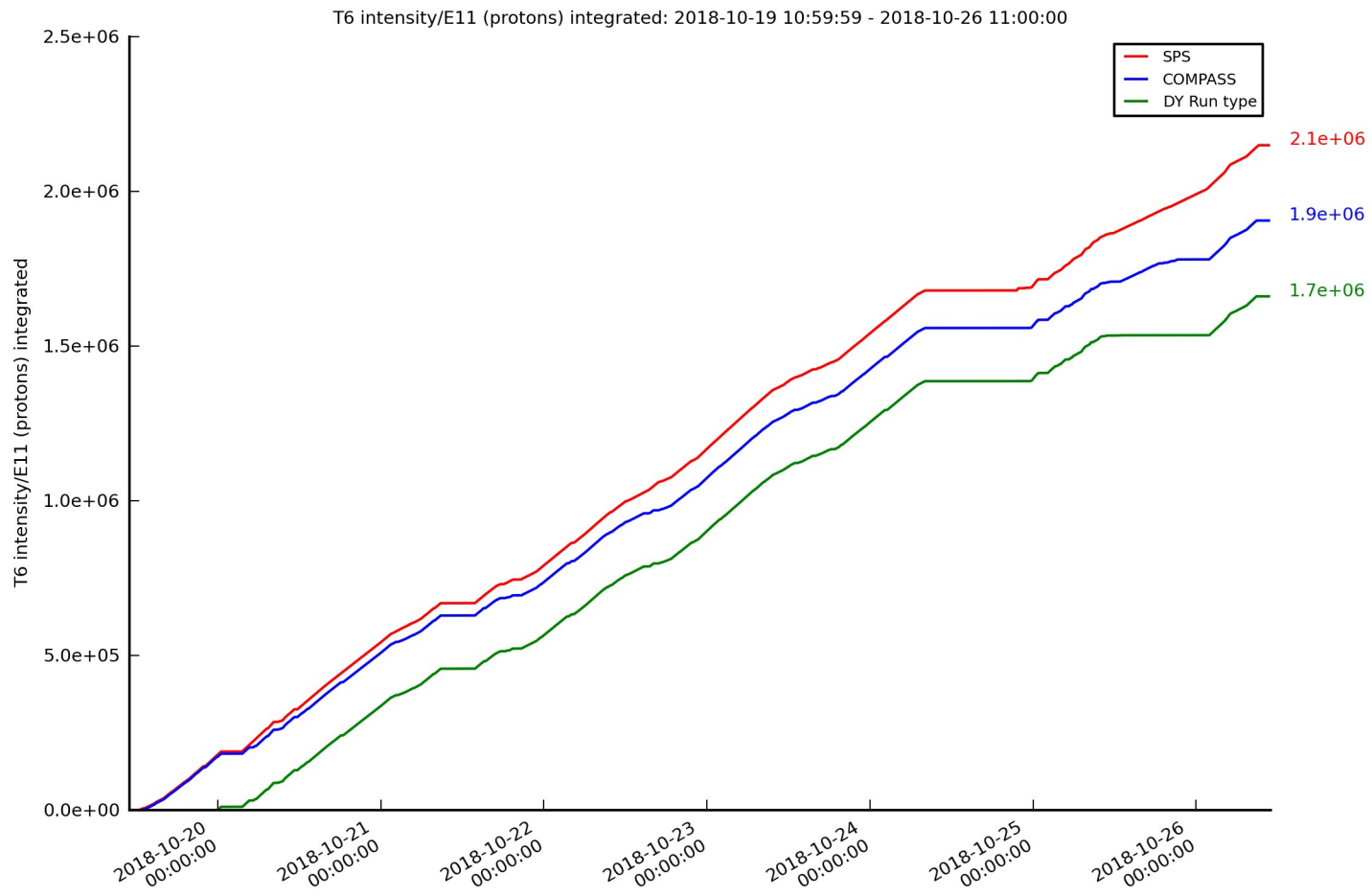
$$\#2 / \#1 = 0.89$$

$$\#3 / \#2 = 0.95$$

$$\#4 / \#3 = 0.89$$

$$\#5 / \#3 = \mathbf{0.78}$$

Week summary



Week summary



Detector problems summary:

- PMMs – require frequent (usually once per shift reloading, sometimes at the level of pccofe15)
- DC05 - 1 FEM Card, 889 port 6
- MW2 - X1 ID=416, port 4
- CAEN Rich Crate (not affecting data taking)
- Trigger problem – last night

Week summary



Thanks to all shifters for their work.
And good luck to the next coordinator!