

Weeks 32-33 10/08 - 17/08

Oleg Gavrishchuk



17/08/2018

Oleg Gavrishchuk, JINR, Dubna

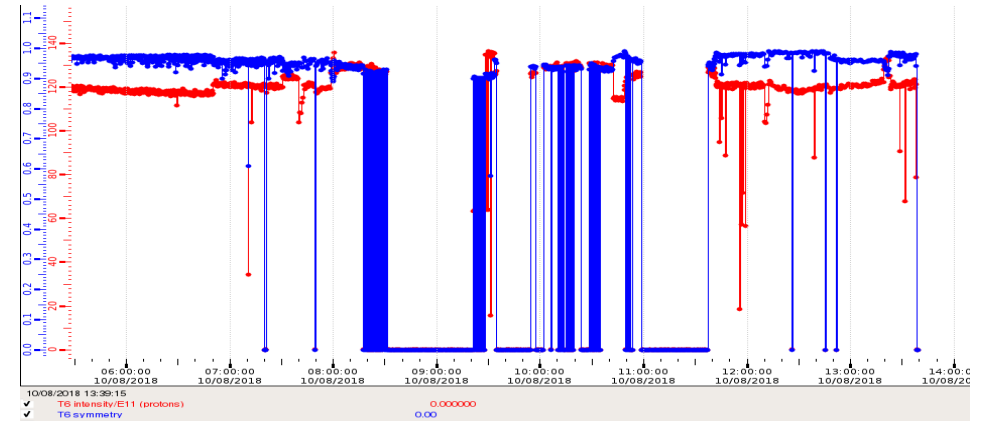
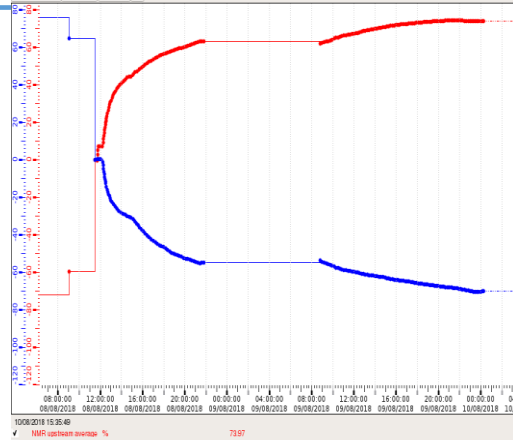
1

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Fri 10 August 2018, 08:00

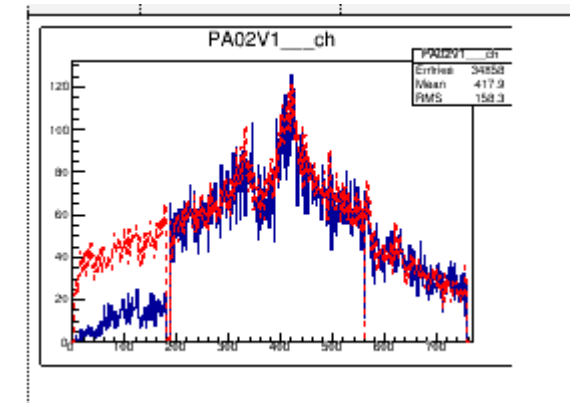
Program:

1. **DY, π^- -190 GeV beam**
2. T6 target 500 mm Be
3. **Good spills: 3360**



Problems:

1. **16:33– 16:38 SPS North Aria cooling problems – was alarm:**
Magnets status
2. **Beam intensity increasing on short time after no beam**
3. **Intensity fluctuation from LINAC – Saturday morning**
4. **MWPC src. id 452 port 4 is giving errors**

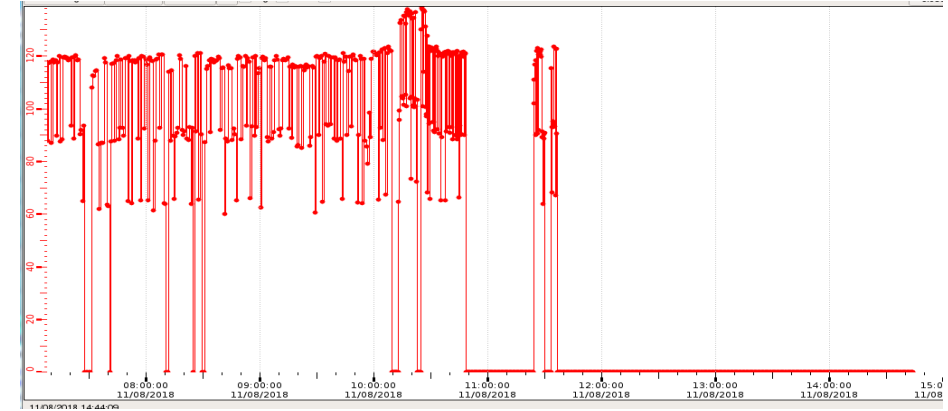
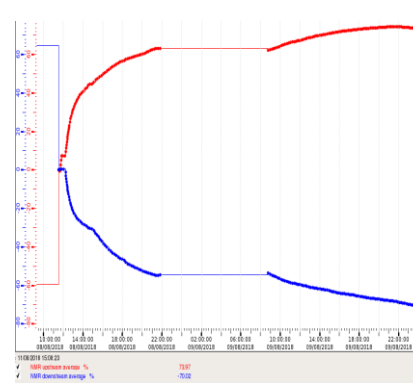


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Sat 11 August 2018, 00:00

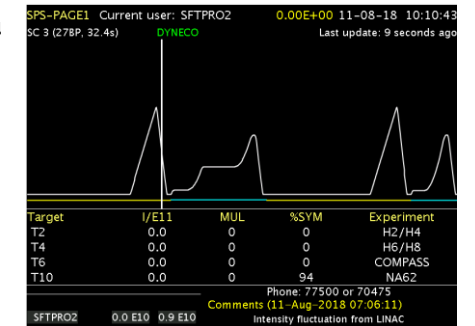
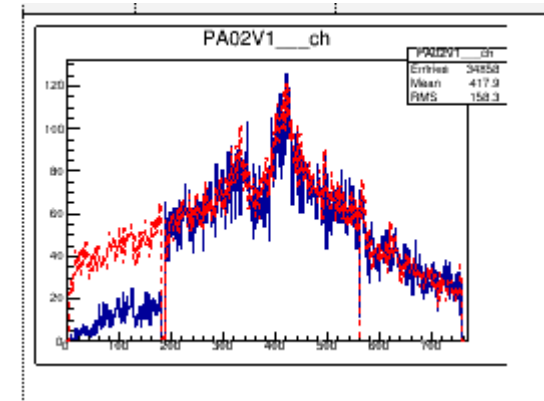
Program:

1. **DY**, π^- -190 GeV beam
2. T6 target 500 mm Be
3. **Good spills: 1193**
4. **Beam was back at 20:30 in degrade mode)**
5. **Target polarization +73.5% up. Str. , 68.9% d.str.**



Problems:

1. **Intensity fluctuation** from LINAC – Saturday morning
2. MWPC src. id 452 port 4 is giving errors – solved by LOAD –A 452
3. **No beam from Linac starting fro 11:00**
4. **DAQMUX12** got stuck (22:49) – short access to properly reboot **pccocofe52** than Load **pccotg03** , LOAD –F 971



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Sun 12 August 2018

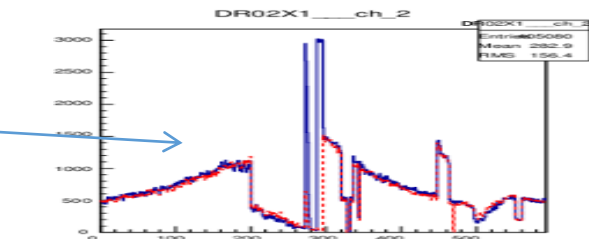
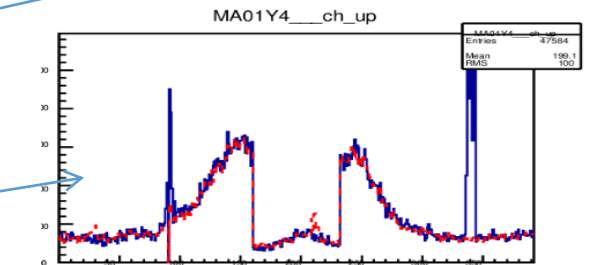
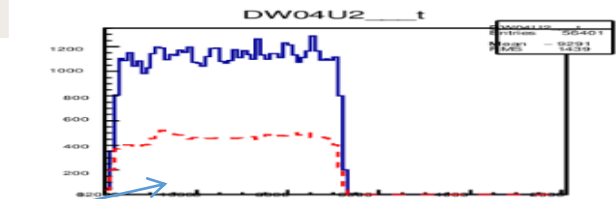
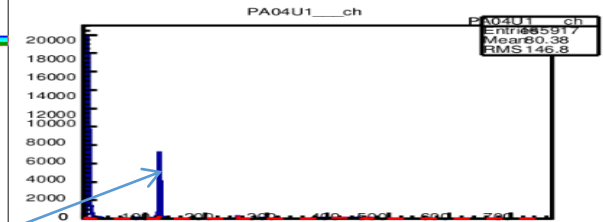
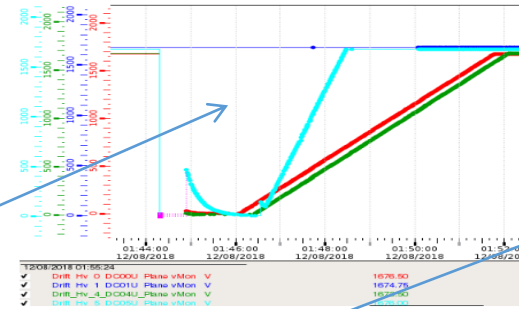
Program:

1. **DY**, π^- -190 GeV beam
2. T6 target 500 mm Be
3. Good spills: 4145

Problems:

1. DC 0,4,5 - went suddenly Off . Restored switch. HV Back
2. **DC - Load 258 259**
3. MWPC PA04U1 , PA01X1 Noise
4. W45 DW04U2 Noise
5. MW1 MA01Y4 (up< down) Noisy channel
6. **RW DR 02X1** – new **noise Load 432** - Gesica
7. MM MP02V1 noise (fixed by help LOAD)
8. ECAL2 – short LV trip – fixed on 30 min.
9. **PMM LOAD –A 380 382** - 10 times

and we lost communication with the CAEN crate for 20 s. Then it restored and we

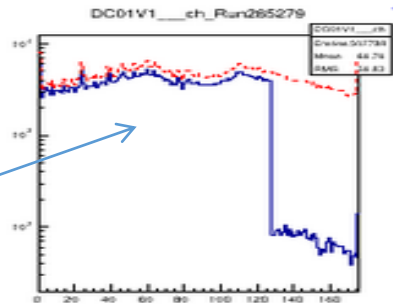
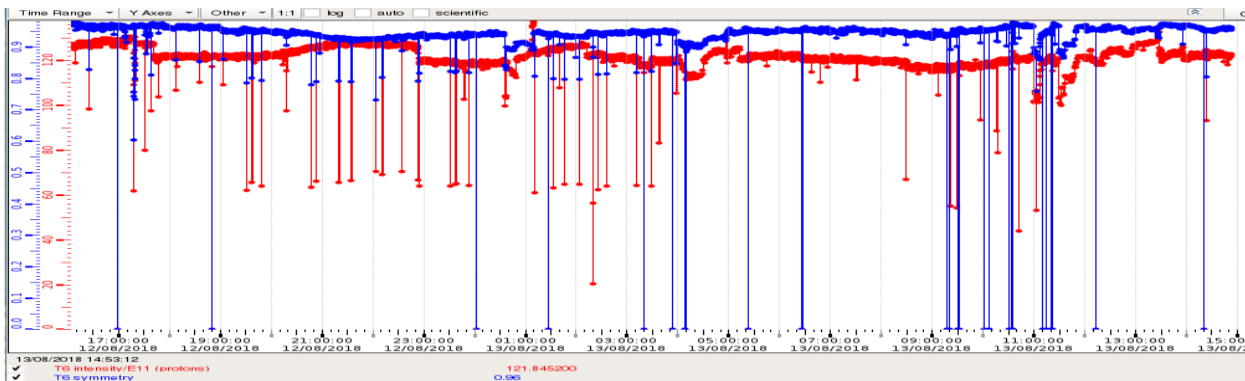


Program:

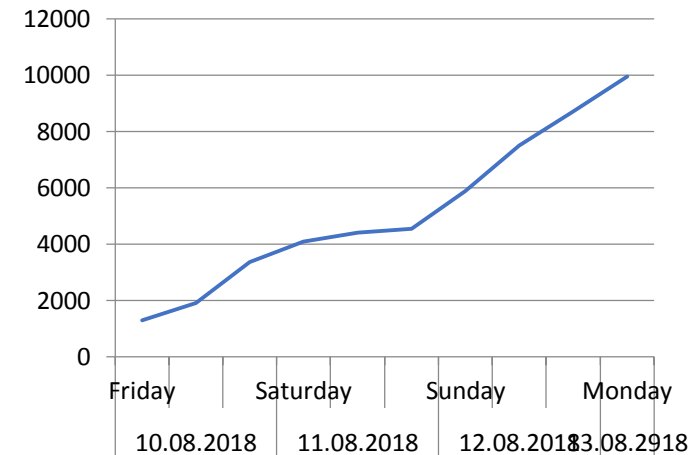
- 1. **DY**, π^- -190 GeV beam
- 2. T6 target 500 mm Be
- 3. **Good spills: 3651**

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Mon 13 August 2018

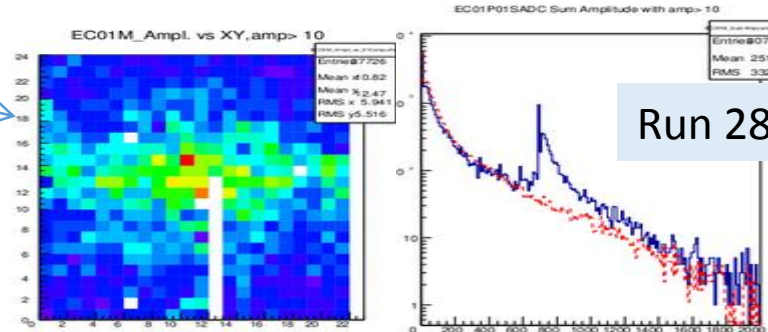
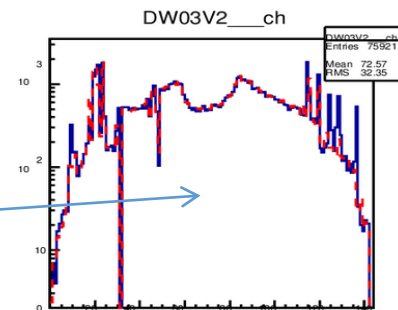


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Problems:

- 1. DC missing port 11 DC01V1
- 2. RW module port6 – excluded – access necessary
- 3. W45 noised channels -----
- 4. ECAL1 missing channels – fixed after Run 285286
- 5. DAQ crashed (10:30) several times

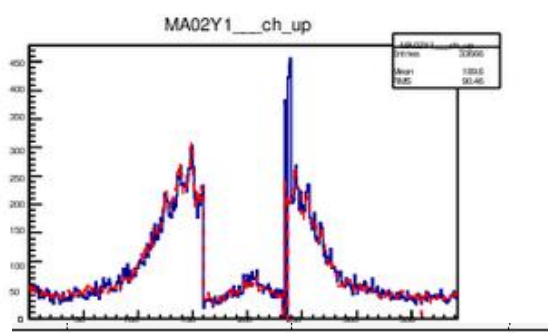
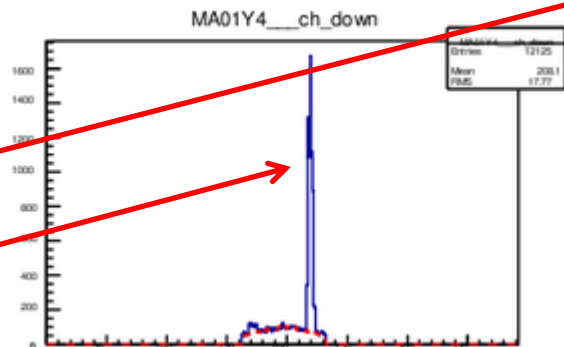
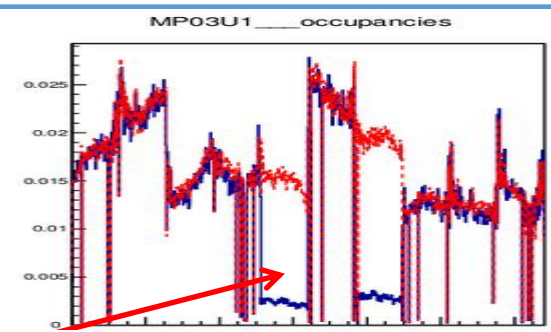
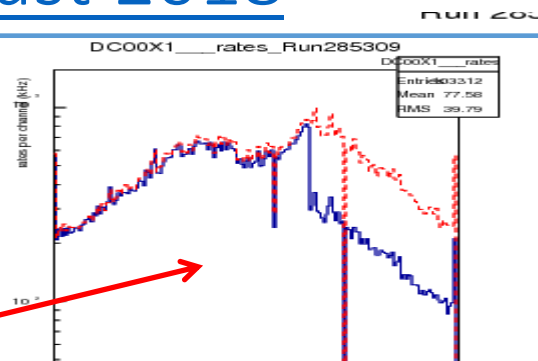
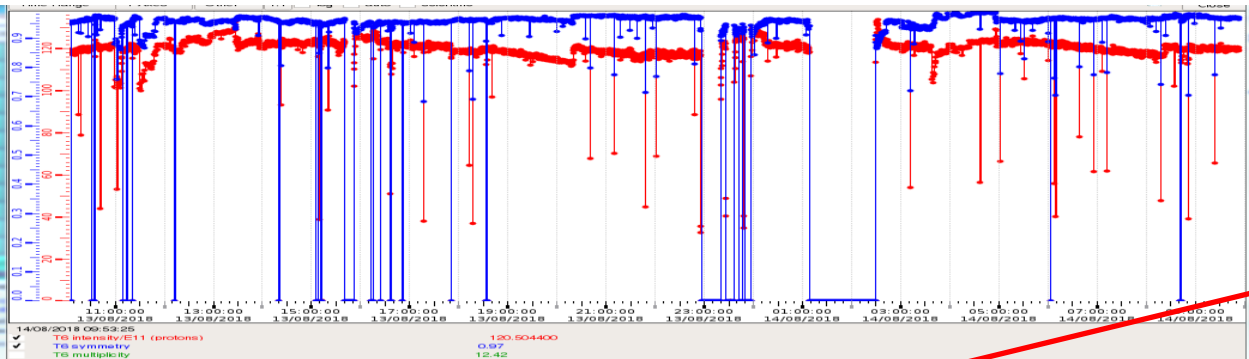


Program:

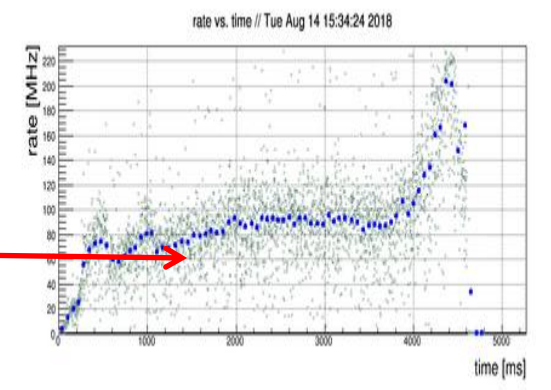
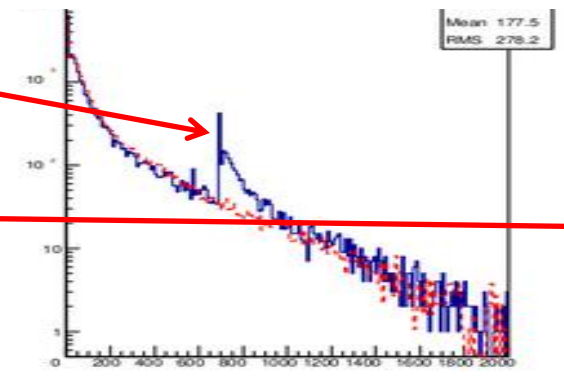
- 1. **DY**, π^- -190 GeV beam
- 2. T6 target 500 mm Be
- 3. Good spills: 4242

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Tue 14 August 2018



- Problems:**
- 1. DC 04X1 , fixes at 10:30 by LOAD 257 258
 - 2. (DC02V1 - ID 256 was back)
 - 3. PMM MP03U1 low occupancies
 - 4. MV1 – noised channels: MA02Y1,MA01Y4
 - 5. ECAL1 missing channels – need to LOAD 626,7,8
 - 6. DAQ: pccofo13 does not response – decide do nothing to avoid the problems with any frontend
 - 7. BEAM non uniform in time of super cycle changed
 - 8. RW one port missing



1. **MD** – from 8h00 to 18h00 – No beam for North Area
2. **Key** Access for PPE211, **Free** Access ~10h30
3. **PT** - preparing for topping up the polarization -> change to Solenoid Field:
 1. The target polarizations were measured as **+68.2 % and -61.7%**.
 2. **LN2** filling for trap buffer Dewar and for material storage were done (by Christophe and Nori)
4. **DC** – in Garage position (DC04/GEM01) – Vincent :
 1. Changed DC04X2,X3,X4 cards (F1) and the cable of DC04U3
 2. No errors on DC04V4 (without beam)
 3. DC04 chamber put to "beam position" at 17h55
 4. DC05 output bubbler was bubbling again – 8h30 – flow meter was adjusted.
5. **RW** - changed the FE card corresponding to port 6 - 2006 S15
6. **MW1** – was done some improvements : grounding on MA1Y4 and MA02Y1
7. **ECAL1** - EC01P01 SADC Sum Amplitude fixed
8. **PMM** – **00:51** After reload pccofe15, there shows 3 errors from srcID 380, 381, 382
Then we follow the procedure to power cycle LV of PMM, and the reload working after that.
No more error from PMM on MurphyTV.
9. **DAQ** – some work was performed with multiplexors Cards, but nothing to changed
10. **MWPC** - PA04U Srcld453 - ports 9, 11 - giving errors. Solved by the usual procedure.

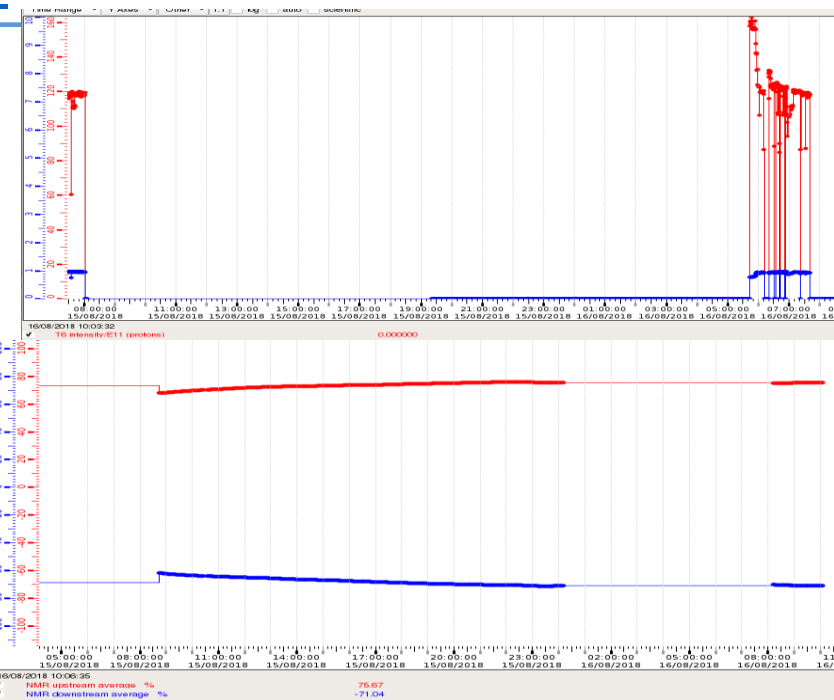
Program:

1. **DY**, π^- -190 GeV beam
2. T6 target 500 mm Be
3. **Data taking 211 spills**

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Thu 16 August 2018

1. **No Beam** from PS - planned intervention on PS till at least 10h30
2. **Key** Access till 10h30
3. **PT** - target polarizations were measured as **+76.6 % and -72.43%**.
4. **No Errors** on MurphyTV
5. **Beam** was back at 5h40 – 7h40
6. **LOAD** was done for DC and RW – ready to taken data
7. **No beam** again - 7h40
8. **News from SPS: 10h10 No** Beam before 15h00
9. **14h23 – SPS** Comment: water leak in PS – no beam before 17h00
10. **15h56 – SPS** Comment: water leak in PS – no beam before 18h00
11. **16h02** Linac Booster and PS down – no time estimation
12. Period W10 closed and data files are moved to castor successfully



```
SPS-PAGE1 Current user: LHC1 0.00E+00 16-08-18 18:58:23
SC 76 (318P, 37.2s) FULLECO Last update: 10 seconds ago

Target I/E11 MUL %SYM Experiment
T2 0.0 0 0 H2/H4
T4 0.0 0 0 HS/H8
T6 0.0 0 0 COMPASS
T10 0.0 0 100 NAG2

Phone: 77500 or 70475
Comments (16-Aug-2018 18:16:02)
Meyrin Electrical Network Problem
Linac, Booster and PS down
No time estimation
More news ASAP

MD1 0.5 E10 -0.9 E10
```

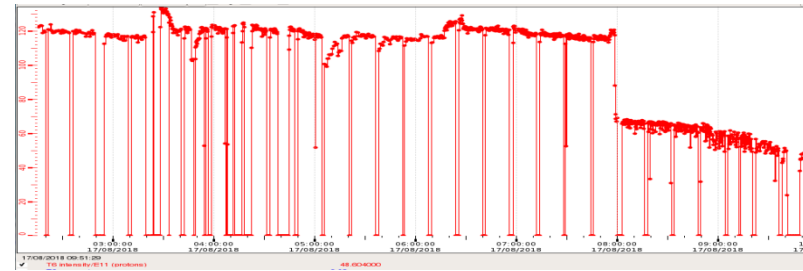

Program:

1. **DY**, π^- -190 GeV beam
2. T6 target 500 mm Be
3. **Data taking 738 spills**

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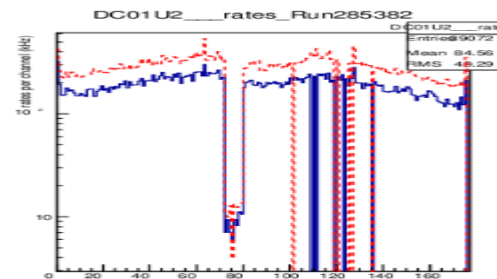
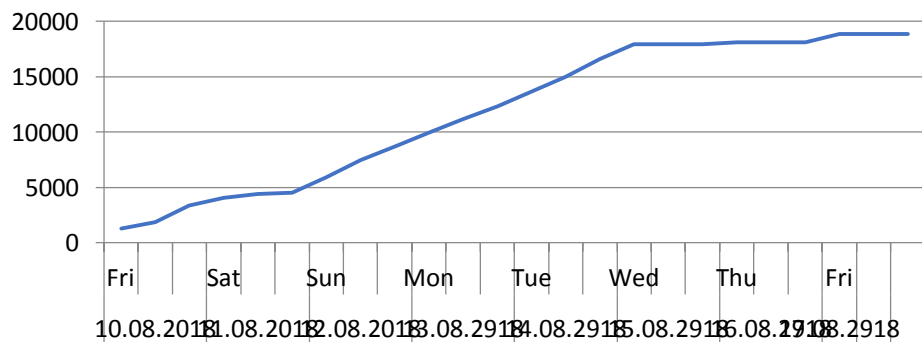
Fri 17 August 2018

1. **No Beam** from PS - planned intervention on PS till at least 10h30
2. **Beam back 2h06**
3. **PT** - target polarizations (Dipole mode) **+76.3 % and -72.5%**.
4. **Beam intensity reduced at 8h00**
5. **No detector Errors in MurphyTV (except CEDAR ~28%)**
6. **DC01U2** - some discrepancies with refreezes where in start of shift
7. **Data taking was smoothly good before Wednesday MD**
8. **Data taking continue at low intensity**



SPILL#	TYPE	START-SPILL	STOP-SPILL	PROB	PROB-ERR	PROB-ERR	PROB-ERR	PROB-ERR	PROB-ERR	PROB-ERR
235	CLEAR	28.84	0.50	20.66	0.29	0.29	4282	14	36	
2	WATER-2	0.24	8.00	82.02	0.01	0.02	0	13	36	
628	SCIP1-150	0.24	24.00	13.02	0.00	0.02	0	1	33	
628	SCIP1	0.24	0.00	20.44	0.00	0.02	0	1	5	
628	SCIP1	0.24	0.00	25.24	0.00	0.02	0	1	14	
889	DOSE	0.24	0.00	88.69	0.00	0.02	0	0	0	
888	DOSE	0.24	0.00	61.78	0.00	0.02	0	0	0	
887	DOSE	0.24	0.00	59.33	0.00	0.02	0	0	0	
886	DOSE	0.24	0.00	65.54	0.00	0.02	0	0	0	
885	DOSE	0.24	0.00	48.78	0.00	0.02	0	0	0	
884	DOSE	0.24	0.00	57.11	0.00	0.02	0	0	0	
883	DOSE	0.24	0.00	62.22	0.00	0.02	0	0	0	
882	DOSE	0.24	0.00	53.74	0.00	0.02	0	0	0	
870	WATERF115	0.24	6.00	102.02	0.00	0.02	0	0	0	
863	WATER	0.24	8.00	82.24	0.00	0.02	0	0	0	

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**End of report
Thanks everybody**