

Weekly report for W35-W36 2018

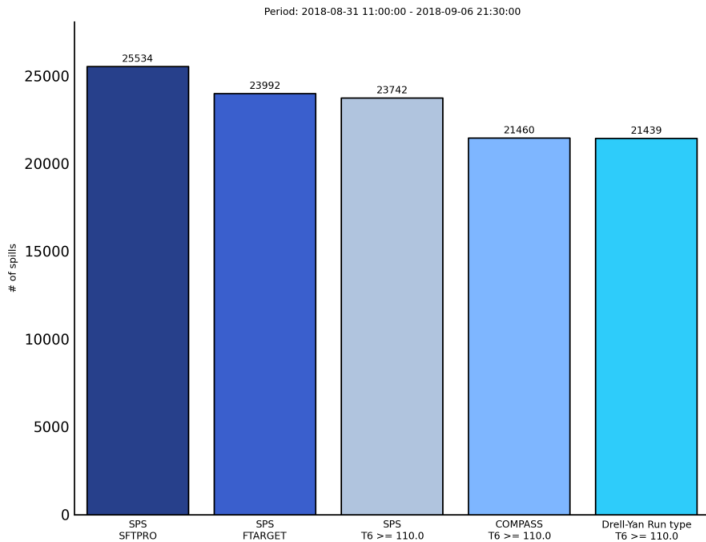
Johannes Giarra



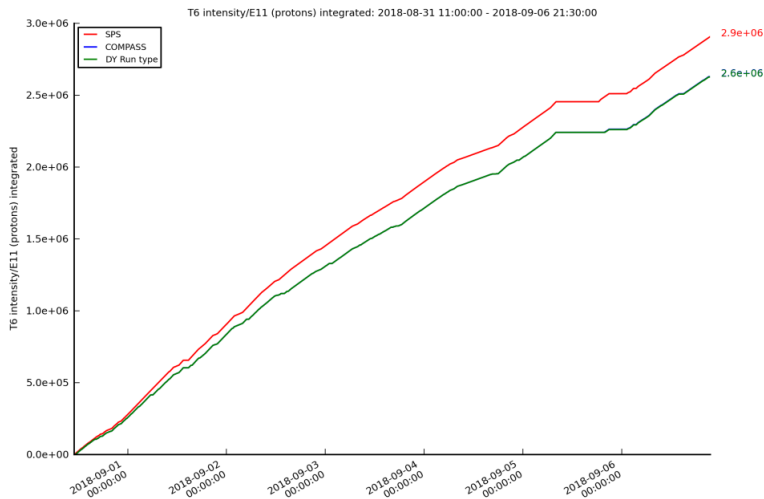
07.09.2018

Overview

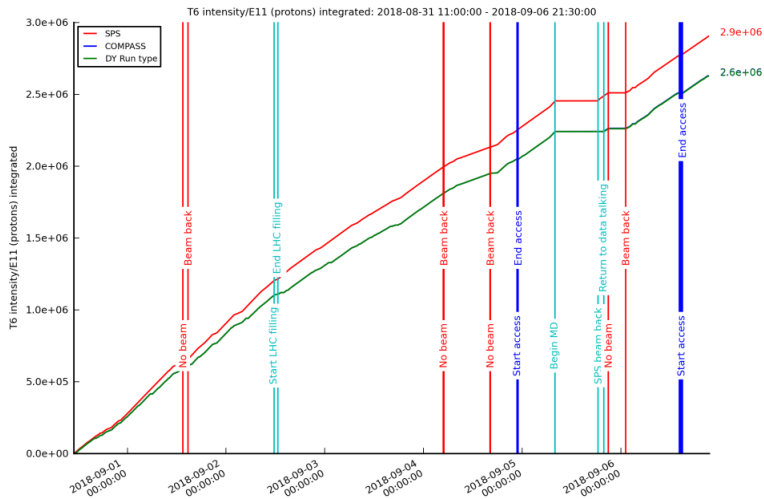
Spill statistics



Integrated T6 intensity

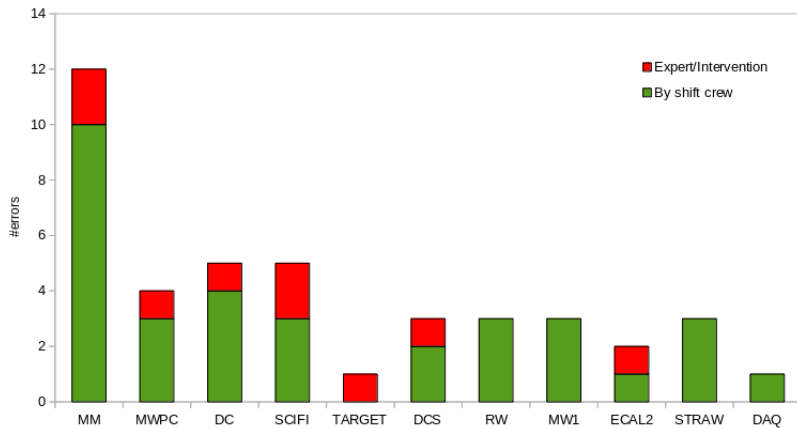


Integrated T6 intensity

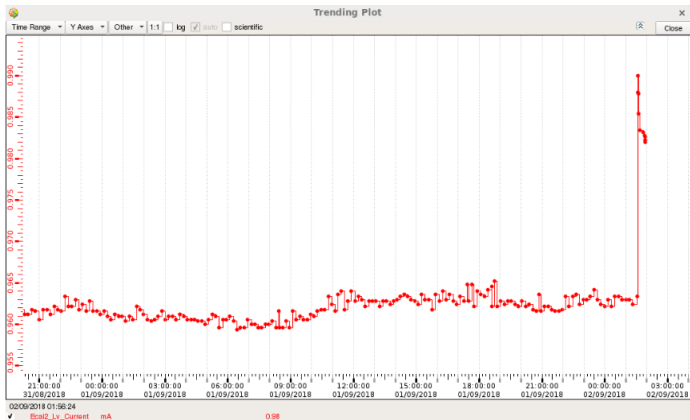


Detector Problems

Detector errors



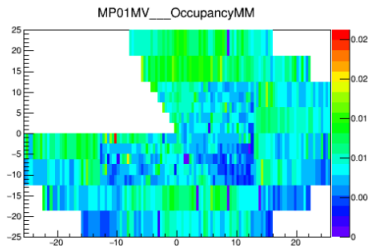
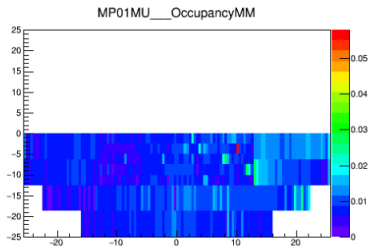
LV current higher than usual
→ stabilized by expert



Sunday 14:00

100% errors SrcID 380, part of MP01MU/MV parts missing

→ Could not be fixed by reloading (error)



→ fixed during MD

DC

Monday 02:10

DC04 and DC05 HV suddenly off (tripp?)

→ Switched back on but further investigation during MD

DCS

Monday 16:54

DCS lost communication to several detector systems

→ Powercycle of several switches necessary (SM1/2 switch, Gallery switch,...)

Target

DCS warning concerning problem with He4 pumping

→ Pump ok, problem with signal

MWPC

Regularly appearing errors:

- SrcID 453 port 8 (PA03)
- SrcID 460 port 7 (PS01)

→ Both fixed during MD

SciFi

SrcID 960 (FI15U) could not be reloaded (tiger not reacable)

→ Access needed to power cycle the crate and unplug+replug the Gandalf

Activities

Activities for/during MD

- Investigation of problem with SrcID 380 (**PM01**)
 - Firmware problem, reload needed
- HV board of **DC04** was checked
 - everything is looking normal
- **MWPC**
 - PA4U board was found to be off
 - Bad contact to LV
 - PS01 → Replaced boards and cables
- **Target**
 - LN2 refilling of trap an material
 - NMR cooling water check
 - Polarization (-68.14% upstream, 72% downstream)
- **Trigger**
 - Measurement of veto deadtime of trigger
 - Trigger timing corrected for LASLAS (1ns)
- **STRAW** (ST03Y1) threshold scan and adjustment
- Start **new period** (2018W14) with run 285850
- Added a undervoltage check to all drift HV channels in **DCS**
- Investigation of **CEDAR**

Thanks to all the shifters, experts, ... !!

Daily slides

Friday 31.08. to Saturday 01.09.

- Access to check for He4 gas leak, found ice around on safty valve
→ Safty valve slithly open
- Cool: Missing part on MP03U → Solved (simple reload or restart of pccofe15 + reload)
- DCS alarm for problem He4 pump → False alarm (signal problem)
- DCS lost communication with several detector systems → solved by restarting several switches
- Errors on SrcID 380, 381 (PMM) → Solved by simple reload

Saturday 01.09. to Sunday 02.09.

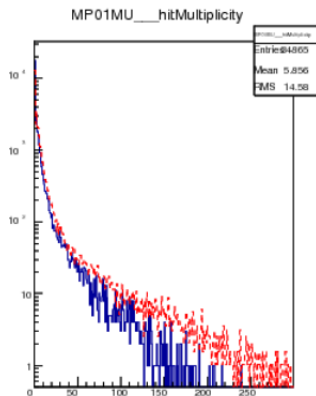
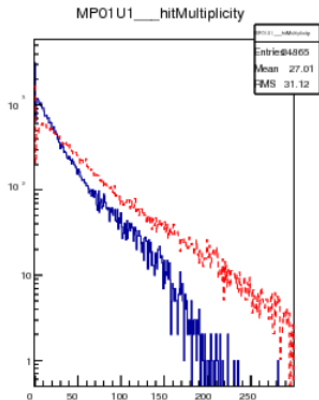
Detector Problems:

- PMM errors in SrcID 380
 - usually simple reload or reboot pccofe15 and reload solves problem
 - Error SRCID 380 PMM reload nor powercycle of LV and pccofe15 helped → under investigation
- ECAL02 LED plots part missing
- ECAL02 LV the current suddenly higher then usual → Expert was called stabelized it
- MWPC noise / problem in port8 → powercycle LV station4 PA04U1 + reload solved

Stable beam condition except of LHC filling around noon for 1h

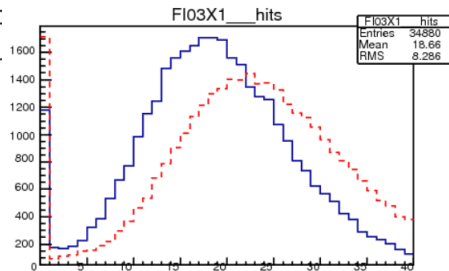
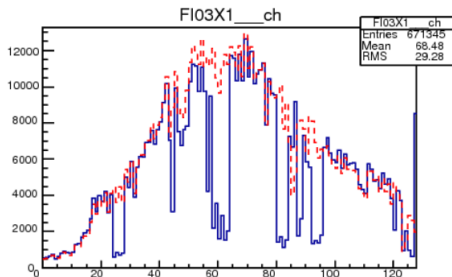
SUNDAY 02.09. till MONDAY 03.09. 16:00

Still problem with port 0 SrcID 380 (MP01U MP01U1)



⇒ further investigation during MD

FI03X1 out of ref.



- try reload → config server was unreachable
- reboot pccofe15 + reload → not solved the problem

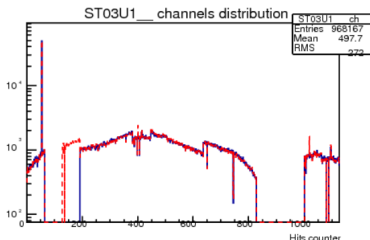
DC05 U and V noisy channels

- Reload + powercycle LV → not solved but loading process slow and with error
- Expert called → load remotely back to working status
Strongly suggested call expert before powercycling DC LV
- Trip of HV of some planes DC4 and DC5 → switched back on

Beam: Stable conditions but long SC 50.4s at the moment

MONDAY 03.09. till TUESDAY 04.09. 16:00

- Missing part in ST03U1 → Reload did not solve
- Communication lost to several detectors (DCS)
→ powercycle several switches (SM1/SM2, gallery switch ...)
- SrcID 453 100% errors (MWPC)
→ Powercycle LV + reload



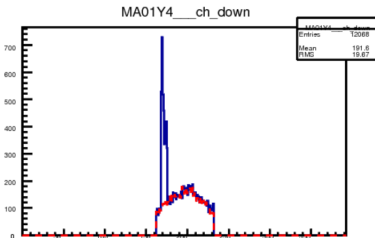
Beam: stable (10 min break during night), during day long SC 44.4s and 1 spill

Plans for tomorrow (MD)

- End period, top-up target
- MWPC cable check/replace
- HV crate check of DC
- RICH wall investigation ??
- Further investigation of PMM (MP01U MP01U1) problem (SrcID 380 port 0)

TUESDAY 04.09. till WEDNESDAY 05.09. 16:00

- New Period (18W14) started at ap. 11 am
- Measuring the Veto deadtime for all trigger
- DCS undervoltage check added to all DC HV channels (Christophe)
- FI15U 100% errors, could not be loaded because pccotg05 not reachable
→ short access to powercycle crate + un-/replug Gandalf
- Noise on MA01Y4 (appeared yesterday but usually comes and goes but is still present)



Actions during MD

■ Target

- Top up in progress
- LN2 refilled
- check of NMR cooling water

■ **MWPC** → intervention successful replaced board, cable ... and back in position

■ Further investigation of **PMM (MP01U MP01U1)** problem (SrcID 380 port 0) → successful appeared to be firmware problem (Vincent)

■ **DC** investigation → status?

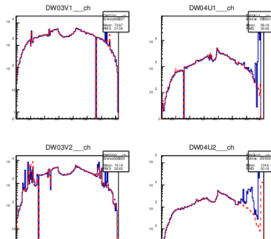
■ **RICH wall** investigation → status?

■ **CEDAR** intervention/investigation in progress

Please put comments on your actions

WEDNESDAY 05.09. till Thursday 06.09. 16:00

- SPS side beam back at 18:30
- Target polarisation until 18:50 (-68% upstream and 72.88% downstream)
→ switched to dipole
- Beam back in hall at 19:30 performed trigger test runs → Trigger timing of LASLAS corrected (shift of 1ns)
- Straw thr. changed (Riccardo)
- Since 19:50 back to data taking
- 20:55 no beam due to Compensator problem (BEQ3 tripped) → Investigation by expert beam back at 01:12 am
- Error on SrcID 258 (DC00) → solved by reload
- DAQ crash → restart
- Noise on DW03/04 U/V planes



- Errors on SrcID 320, 380 (MM) and 432 (MW) → reload SrcID 380 with error but MurphyTV errors gone (under investigation by Vincent)
- 100% errors on FI15U (SrcID 852) Reload could not solve

61765	J. Giarra, V. Andrieux	Thu 06 September 2018, 14:59	SCI-FI Japan	FI15U got stuck
1/ Power cycle of the VXS 2/UNPLUG gandalf 3/Replug gandalf				
reload LOAD -A 960				
Working again				