#### Report



## COMPASS Week 44/45 Coordination November 2-9, 2018 Jan Friedrich

### Friday 2.11.2018



02

General M. Pesek

62545

November 2018,

Taking data with random trigger

13:26

50 minutes of beam wasted! Please pay more attention to the trigger setting prior to starting a run!





unplugging the unused TDC cards reduced the power consumption of the crate from 55A to



V. Frolov, J. 62546 DC Friedrich, V. Andrieux

November 2018, 19:14

Fan failure for pccofe20 VME crate

It took some times to identify a spare fan tray but in the end it has been exchange with the fan tray from SciFi Warsaw crate. That crate is not used this year and its power-supply was already taken in the beginning of the year to supply pccofe13.

For information, pccofe20 is used to supply DC04 threshold card.

solved also the recurrent issues

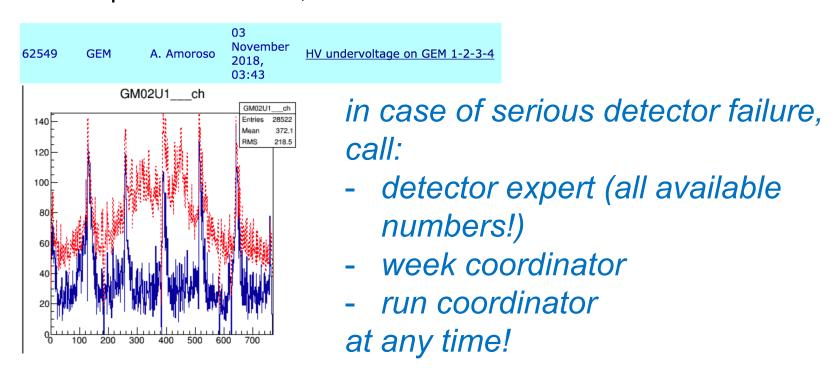
with pccofe20?

good spills taken 13:30-18:00 and 19:00-24:00: 1165

## Saturday 3.11.2018



smooth data taking until 3:07, then HV drop for GEM01-04, failure of CAEN module



left unattended until about 12:00 (9h of beam time wasted) 2h more needed to fix problem

## Saturday 3.11.2018



62550 GEM

C. Pires, J. Friedrich, V. Andrieux

03 November 2018,

GEM 1, 2, 3 and 4 HV board replaced

15:03

Board 00 from GEM\_CCR1 on the gallery was replaced by another HV board from GEM 11 and now HV channels for GEM 1, 2, 3 and 4 are working again.





another smaller problem with GM04U solved by reloading (16:35-16:50)

good spills taken 16:50-24:00: 795

## Sunday 4.11.2018



#### some smaller problems

- PMM reloading 5:54-6:02 (MP02X,Y,U,V, each half is low)
- decoding errors due to MM errors
- Straw HV's tripped 20:06

good spills taken 0-24: 2928

### Monday 5.11.2018



#### some smaller problems

- IN2 trap nitrogen warnings
- beam: QUAD35 has +129A instead of -129A
  13:40-14:40, intervention by piquet
  (160 good spills)
  heavy effect on trigger and veto rates
- 21:00 PMM SID381 gets stuck (pccofe15)

"good spills" taken 0-24: ~3200

### Tuesday 6.11.2018



#### some smaller problems

- RICH HV lost, some channels lost
- disk alarm pccore14

data taking in parallel to LHC filling

good spills taken 0-21:00:

~2100

#### 21:00 General AUL power cut in 888

(alarme d'urgence locale)

## Tuesday 6.11.2018



origin of the problem: a forced AUL





it took the piquet about 1h to understand the origin of the power cut



original situation: a metal piece leaning against the AUL

21:10 - 22:10

## Tuesday 6.11.2018

COMPASS

affected equipment:

PLC3 gas supply for W45, MM, DC, MW1, MW2, RICHWALL

STRAW cooling water circuit: automatic refilling and interlock PLC dead (24V?)

BMS LV now off (?), CEDAR HV crate plugged to another socket

in parallel: no beam 23:00-3:30



## Wednesday 7.11.2018



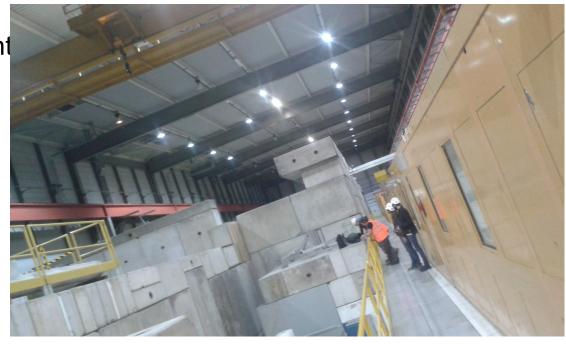
no beam 23:00-3:30

3:00 decision to start target polarity inversion

6:00 alignment data with magnet on/off

8:00 machine development

14:00 COMPASS high-resolution picture



## Thursday 8.11.2018



#### polarization ongoing, trigger studies

05:30 - 9:00 no beam

07:30 Target: He3 pump failure – restart polarisation

14:30 DAQ crash

15:15 Access for GEM LV crate DCS communication problem

16:00 – 19:30 MWPC new readout tests

19:45 - alignment

no good DY spills

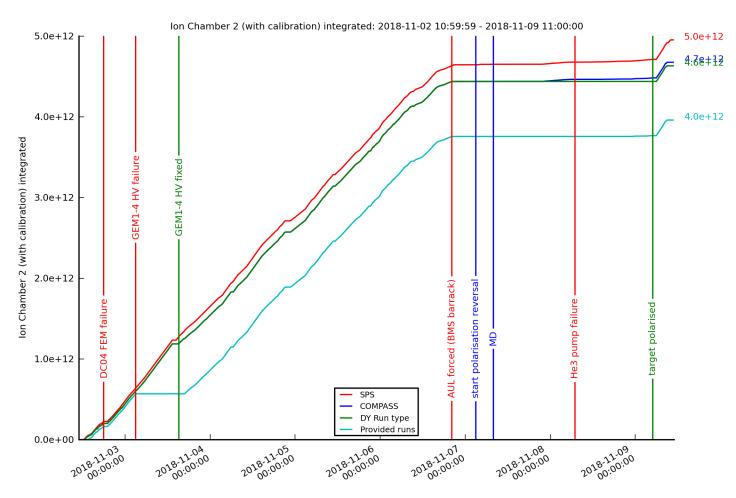
# Friday 9.11.2018



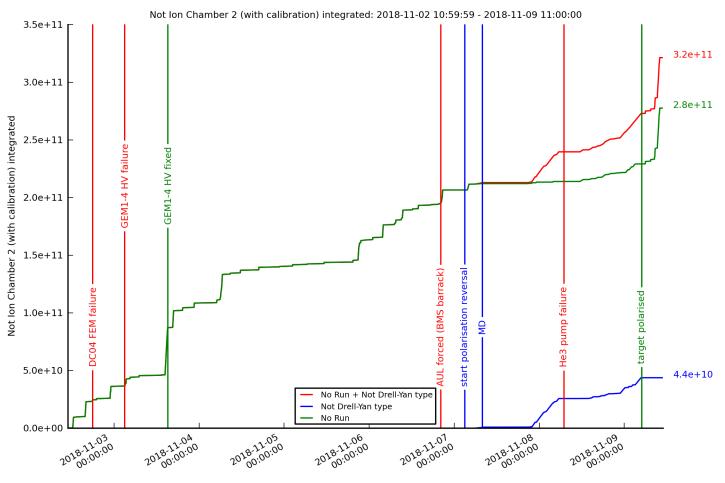
05:00 polarisation reached: +72%, -64.6%

05:00 back to DY data taking

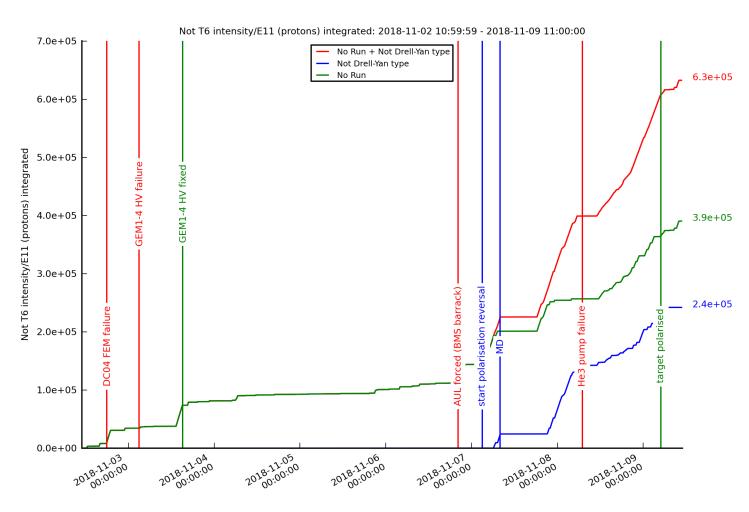






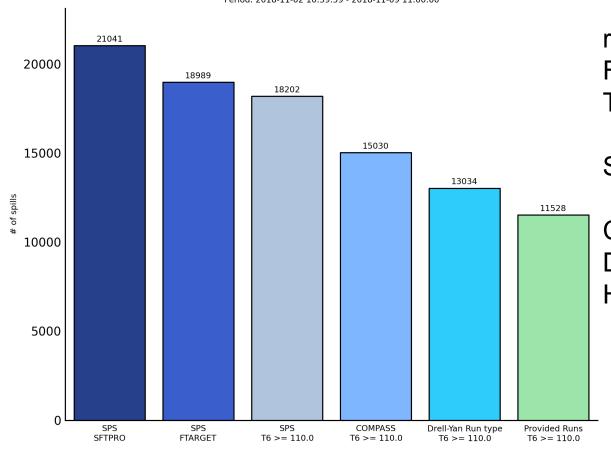












#### ratios:

FTGT/PRO=90% T6/FTGT=96%

SPS eff=86.4%

COMPASS/SPS=83% DY/SPS=72% HV-DY/SPS=63%



Many thanks to all who pushed for a successful running this week

let's go for 3 more days! Good luck to Genki