COMPASS Week 44/45 Coordination
November 2-9, 2018
Jan Friedrich
unplugging the unused TDC cards reduced the power consumption of the crate from 55A to

solved also the recurrent issues with pccoe20?

good spills taken 13:30-18:00 and 19:00-24:00: 1165
smooth data taking until 3:07, then
HV drop for GEM01-04, failure of CAEN module

in case of serious detector failure, call:
- detector expert (all available numbers!)
- week coordinator
- run coordinator
at any time!

left unattended until about 12:00 (9h of beam time wasted)
2h more needed to fix problem
### Saturday 3.11.2018

<table>
<thead>
<tr>
<th>62550</th>
<th>GEM</th>
<th>C. Pires, J. Friedrich, V. Andrieux</th>
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<tbody>
<tr>
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<td>03 November 2018, 15:03</td>
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<td>GEM 1, 2, 3 and 4 HV board replaced</td>
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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
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
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
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)
origin of the problem: a forced AUL

original situation: a metal piece leaning against the AUL

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

21:10 – 22:10
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
05:00 polarisation reached: +72%, -64.6%

05:00 back to DY data taking
Summary Week 45

Ion Chamber 2 (with calibration) integrated: 2018-11-02 10:59:59 - 2018-11-09 11:00:00

DC04 FEM failure
GEM1-4 HV failure
GEM1-4 HV fixed

SPS
COMPASS
DY Run type
Provided runs

08.11.18
Jan Friedrich
Summary Week 45

Not T6 intensity/E11 (protons) integrated: 2018-11-02 10:59:59 - 2018-11-09 11:00:00

- Red: No Run + Not Drell-Yan type
- Blue: Not Drell-Yan type
- Green: No Run

Key Events:
- DCO4 FEM failure
- GEM3-4 HV failure
- GEM1-4 HV fixed
- AUL forced (BMS barrack)
- Start polarisation reversal
- MD
- He3 pump failure
- Target polarised
Summary Week 45

ratios:
FTGT/PRO=90%
T6/FTGT=96%
SPS eff=86.4%
COMPASS/SPS=83%
DY/SPS=72%
HV-DY/SPS=63%
Summary Week 45

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

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