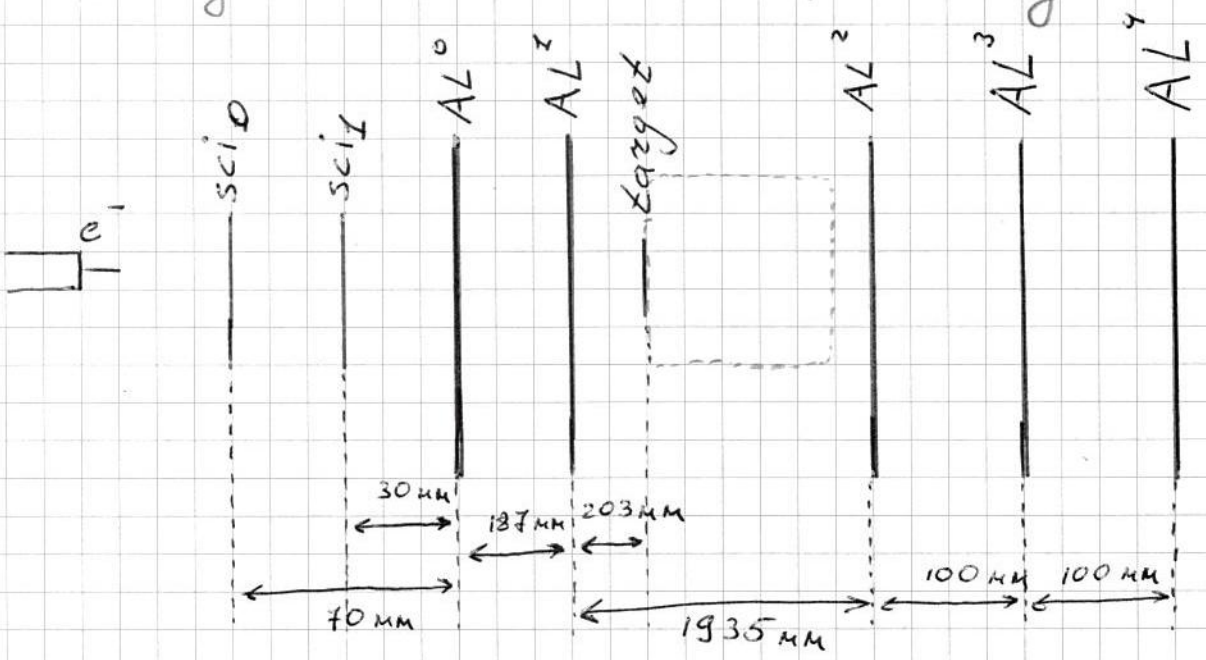
12.11.2019

Performing RUN for telescopes only



AL^0 ≡ alpide 50

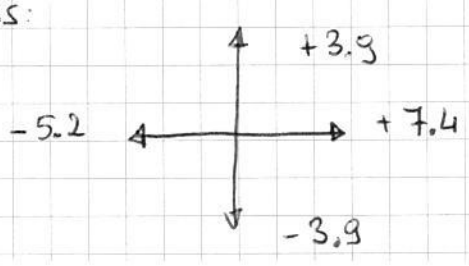
AL^1 ≡ alpide 51

AL^2 ≡ alpide 52

AL^3 ≡ alpide 53

AL^4 ≡ alpide 54

COLIMATOR SETTINGS:



ALPIDE POSITION

↕ +289.0

↔ +~~0~~127.5

12.11.2019

14:24 Telescope Run 2736 557439 events.

14:25 Telescope Run 2737 514348

close collimators to (Y) $\sum_{-1.1}^{+1.3}$ try to check the effect on Beam stability

Telescope Run 2738 we just use 86320

Tested the upper limit of the magnet. At 600 A the ALPIDE 52 stopped working.

Tested the possibility to run with negative polarity of the beam delivery magnet.

Taking some data with positron beam. (probably for negative pol.)

MAGNET DIPOL OFF

16:51 Run Telescope 2748 positron 5 GeV

~180.000 events

16:54 Run Telescope 2749 positron 5 GeV

~102.000 events

16:57 Run Telescope 2750 positron 5GeV

~ 101.000 events

16:59 RUN TELESCOPE 2751 POSITRONS 5 GeV

~ 101.519 EVENTS

17:02 RUN TELESCOPE 2752 POSITRONS 5 GeV

102.154 EVENTS

17:04 RUN TELESCOPE 2753 POSITRONS 5 GeV

98.687 EVENTS

17:06 RUN TELESCOPE 2754 POSITRONS 5GeV

100.793 EVENTS

17:09 RUN TELESCOPE 2755 POSITRONS 5 GeV

102.354 EVENTS

17:11 RUN TELESCOPE 2756 POSITRONS 5 GeV

101.633 EVENTS

17:13 RUN TELESCOPE 2757 POSITRONS 5 GeV

0 EVENTS, TELESCOPE CRASHED

17:14 RUN TELESCOPE 2758 POSITRONS 5 GeV

102.238 EVENTS

17:16 RUN TELESCOPE 2759 POSITRONS 5 GeV

102.033 EVENTS

17:19 RUN TELESCOPE 2760 POSITRONS 5 GeV

102.109 EVENTS

17:21 RUN TELESCOPE 2761 POSITRONS 5 GeV

100.409 EVENTS

17:23 RUN TELESCOPE 2762 POSITRONS 5 GeV

103.011 EVENTS

17:25 RUN TELESCOPE 2763 POSITRONS 5 GeV

101.796 EVENTS

17:26 RUN TELESCOPE 2764 POSITRONS 5 GeV

101.558 EVENTS

17:30 RUN TELESCOPE 2765 POSITRONS 5 GeV

211.170 EVENTS

17:34 RUN TELESCOPE 2766 POSITRONS 5GeV

102.071 EVENTS

~2.000.000 EVE

17:37 RUN TELESCOPE 2767 POSITRONS 5GeV

0 EVENTS, TELESCOPE CRASH

POSITRONS 5GeV:

TIME	TELESCOPE RUN	EVENTS	COMMENT
17:38	2768	61.996	

17:45
Tungsten target is in the beam (90 mm).

Telescope runs with 5 GeV positrons, dipole off.

17:47 Run 2770 ~325 k events

17:53 Run 2773 ~160 k events.
Online-Monitor showed no data, but EcPAQ showed regular data collection

17:59 Run 2775 ~300 k events.

18:12 Run 2777 ~300 k events.

18:15 Run 2778 ~304 k events

18:20 Run 2779 ~130 k event
Online-Monitoring didn't work. Stopped.

18:24 RUN 2780 — failed
RUN 2781 — failed

18:26 Run 2782 ~302 k events

18:33 Run 2783 ~340 k events

Events rate ~840 Hz (avg.)

18:43 Run 2784 • Magnetic field turning
• Shift the beam on 1-2 cm

18:46 Run 2785 • magnet tuning

18:48 Run 2786 • dipole magnet on 200 A
~ 309k events

18:55 Run 2787 ~ 322k events

19:04 Run 2788 – crashed

19:05 Run 2789 – crashed

19:06 Run 2790 ~ 306k events

19:13 Run 2791 ~ 325 kevents
login to TGC
password: ~~[illegible]2019~~
fcal 2019

19:20 Run 2792 ~ 314 k events

19:26 Run 2793 ~ crashed - no pictures

19:27 Run 2794 ~ 438 k events

19:37 Run 2795 ~ 296 k events

19:40

Starting assembling LumiCal sensors

2019-11-13

tungsten plates order

layer 1	– no sensor			
layer 2	–	sensor 52	V=80v I=120nA	
layer 3		sensor 51	V=80v I=150nA	
layer 4	– #1 planzee 1	sensor 29	V=80v I=160nA	
layer 5	– #4 planzee 4	sensor 58	V=80V I=140nA	
layr 6	– #5 planzee 5	sensor 59	V=80V I=135nA	
layer 7	– #6 MGS1	sensor 10	V=80v I=100nA	
layer 8	– #7 MGS2	sensor 57	V=80v I=170nA	
layer 9	– #10 MGS5	sensor "free"	V=80v I=100nA	– Box improved
layer 10	– #11 MGS6	sensor 53	V=80V I=150nA	
layer 11	– B17	sensor 61	V=80V I=260nA	– REMOVED FROM STACK DUE TO LARGE CURRENT
layer 12	– A2	sensor 60	V=80v I=130nA	
layer 13	– A8	sensor 64	V=80v I=120nA	
layer 13	– B24	sensor 42S	80V 140nA	
layer 14	– B15 A5	OLD sensor C4	80V 500nA	(B15-HAVE TOO THICK PERMA-GLASS FRAME AT THE BOTTOM (BELOW TUNG.) REMOVED DUE TO LARGE CURRENT
layer 14	– B21	OLD sensor C5/23	50v 5.8μA	– REMOVED
layer 14	– B23	OLD sensor T2	80v 180nA	
layer 15	– B12	OLD sensor C3	80v 200nA	
layer 16	– B17	sensor 61	80v 260nA	
layer 17	– A5	OLD sensor C4	80V 400nA	

OLD FANOUTS MEASURMENTS

C3	80V	250nA	(with short cut to BACKSIDE)
T2	80V	180nA	
T1	80V	2.9μA	
C2/6 / mod8	80V	2.8μA → 4.6μA	AFTER 1 minut →
		→ 5.8μA	AFTER 1 MINUTE, was STILL RISING
C5/23	50V	5.8μA	
"fix"	2V!	5.5μA	

- the distance from first tungsten plate to beginning of ~~this~~ „FCAL" BOX = (82-84 mm)

Assembling the electronics:

detectors	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
APV	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	1
FEC	0	0	0	0	0	1	1	1	1	1	2	2	2	2	2	2
FEC entry	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6
HDMI cable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

first card — second card — third card

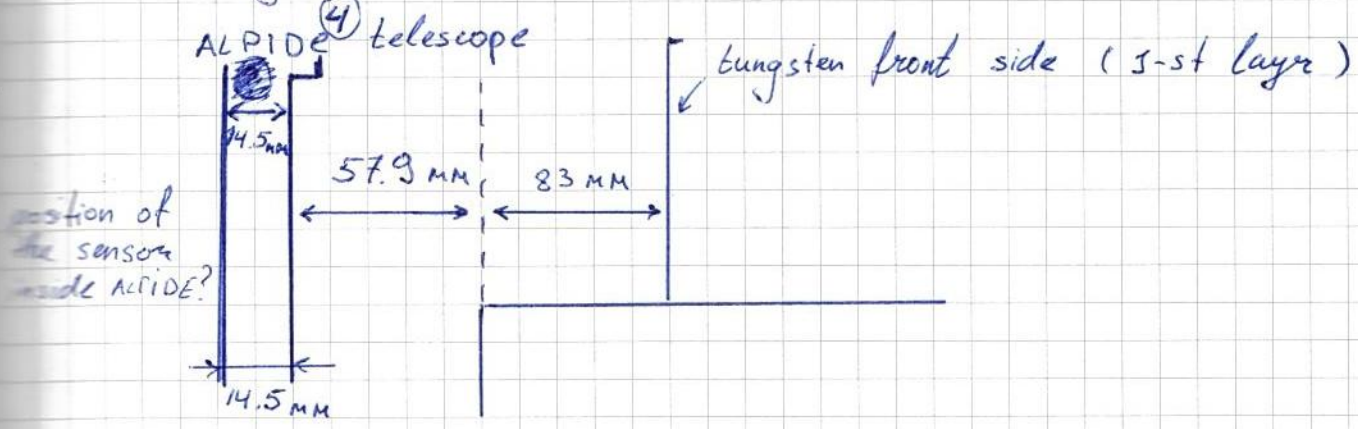
top

bottom

HDMI cabels assembling

4.11.2019

- positioning the FCAL sensors in box:



position of the sensors inside ALPIDE?

Moved the FCAL - a few mm

Start with run 2827 - telescope run

~~→~~ STARTED at 02:50 take physics runs for FEC

FEC 0 - pedestal runs, E = 5 GeV

ped run 11 - pedestal run - 5100 events

- layers 3, 4, 5, 6, 7, 8, 9 - with 2 APV

phys run 14 - 100 k ev ~ 17 Hz

tel run 2837 - 140 k ev. ~ 21 Hz

FCAL position Y: 103.5

X: 83.9

04:30 - 15.11.2019 - E = 5 GeV

ped run 11

phys run 15 - 100 k ev ~ 17 Hz

tel run 2838 - 140 k ev - ~ 21 Hz

06:22 - ped run 16 - 5000 events

06:29 E = 3 GeV

ped run 16

phys run 18 - 62 k events

tel run 2840 - 97 k events

07:49 E = 6 GeV

ped run 16

phys run 20 - 3700 ev

tel run 2841 - 4960 ev

runs 18-21 Could be that they were taken with pedestal configurations

07:50 $E = 4$ GeV

ped run 16

phys run 21 25478

tel run 2842 37994

— " — " — " — " —

8:33 ped. run 22 - 6083 evt

8:34 Beam on

ped run 22

phys run 23 - 50997 evt

tel run 2843 - 68074 evt

Run 23 stopped at 9:27

9:35 Beam on

ped run 22

phys run 24 38244 - evt

tel run 2844 53074 - evt

reduced "busy"

9.49 Beam off

9.57 Beam on

ped run 22

phys run 25 —

tel run 2845 —

"busy" ≈ 1/2

phys run 26 pedestal 6 = 10

— " — 27 6 = 30

nevertheless a lot of events w/ signal.

11:27 Beam off

11:36 Beam on

11:50 off

12:30 Beam on

ped run 22

phys run 32

tel run 2856

12.43 beam off

	SRS 0	SRS 1	SRS 2
	APV 1 APV 2 APV 8	-not conected-	APV 9 APV 10 APV 16
IP:	10.0.0.2	10.0.1.2	10.0.2.2

16:55

- re-connecting APV to SRS

HDMI cable #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
FEC #	2	2	0	0	0	0	0	0	0	0	1	1	1	2	2	2
HDMI input #	0	1	0	1	2	3	4	5	6	7	0	1	2	3	4	5

HDMI input:

0	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0

E = 5 GeV

17:33 Beam is on

			busy	busy	busy
			100	45	30
ped	run	2			
plug	run	3	2431	915	1090
tel	run	2866	2837	924	1032

17:46 beam off

17.51 beam on

2

Busy, generated in NIM modules, is 11 ms.
SRS internal busy (BCLK_FREQ register)
set to 9 ms (0x15F9).
BCLK_TRIGDELAY - 69 (× 25 us)

LUMICAL DAQ configured to run with one single FECO with 8 HDMI connected. This corresponds to layers 3-10 (starting from 1) with double APV readout. (Master + Slave)

19:04 (end time)
Run 7 Pedestal FECO

19:31 Run 8 Physics. (2877 Telescope)
FECO
~50 k events.

20:15 Run 9 Physics (2878 Telescope)
FECO
74.896 events / 75705 SRS events

20:46 Run 10 Physics (2879 Telescope)
FECO
50.702 TRIGGERS / 50.576 telescope events / 51.243 SRS events

- POSITRONS 4 GeV

21:20 Run 11 FEC0 Physics (Telescope 2880)
- FEC1 started for tests during this run
- DATA CORRUPTED DUE TO FEC1 TESTS!

21:20 Run 12 FEC0 Physics - Telescope did not start

21:25 Run 13 FEC0 Physics (Telesope 2882)
Data corrupted by FEC1 test

21:40 Run 14 FEC0 Physics (Telescope 2883)
337+11 triggers / 33682 telesope events / ~~230~~ >30000 SRS events

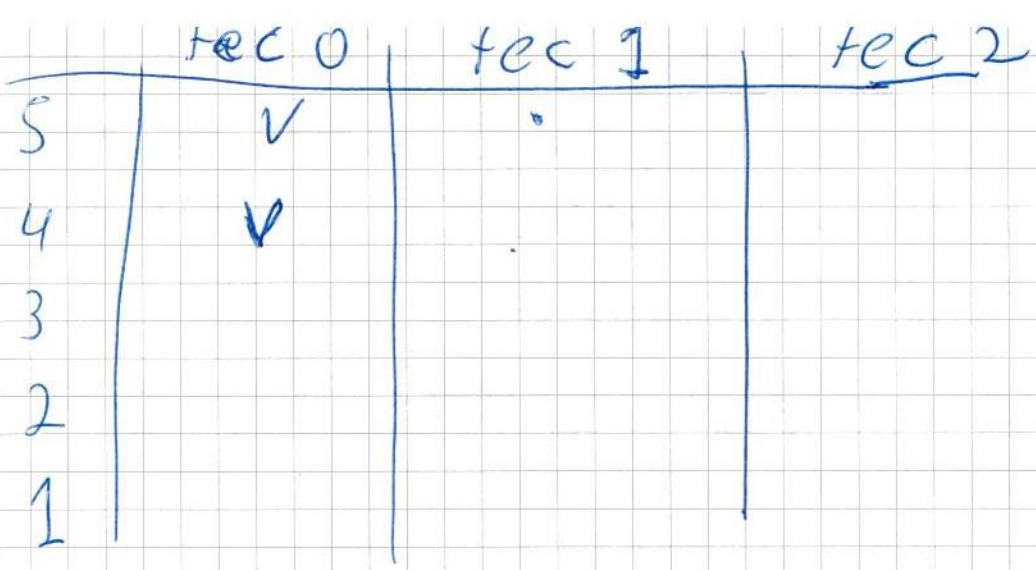
---

FEC1 tests: run together FEC0 and FEC1 - fails, mmDaq ~~receiv~~ assigned to FEC0 receives all the data from both FEC0 and FEC1. (even when FEC0 sends data to 10.0.0.3 and FEC1 to 10.0.1.3). We tried to change the UDP port on FEC1 to 7006 (default one is 6006) but card hangs up after the command. We found that mmDaq binds to UDp socket on "localhost" instead of addres given in config file. Therefore one mmDaq instance receives all data packages incoming to port 6006, regardless the IP address.

Run 15 FEC0 Physics (Telesope 2886)
Data corrupted by FEC1

00:15 Run 16 FEC0 (Telescope 2887)
Events (trig) = 51893
Event (telescope) = 50267
Event SRS = 52394

- For next runs: layer 3, 4, 5, 6, 7, 8, 9, 10 → to the FECO



~ 3×50k

RUN 17 pedestal FEC Ø 0:33

N_{event} = 5759

RUN18 FEC Ø (Telescope 2888) Physics 4 GeV

Events (trig) = 50238 - alda_tlg

Events (telescope) = 50161 - Data Collector

Events (SRS) = 50771 1:02

RUN3 FEC1 Pedestal

Nevent = 5531 - NO WORKS

1:33 RUN3 FEC1 Pedestal

Nevent = 5083 - works

1:55 RUN4 FEC1 physics for 5 GeV

(Telescope 2889)

Events (trig) = 50161

Events (telescope) = 50134

Events (SRS) = 50158

2:16 RUN5 FEC1 physics 5 GeV (2890 tele super)

Events (trig) = 50065 telescope = 50060 SRS = 50130

2:51 RUN 19 FECØ 4 GeV (2891 - Run telescope)
Events (trig) = 50207 aida_tlu
Events (telescope) = 50206 Data Collector
Events (SRS) = 50744

3:19 RUN20 FECØ 3 GeV (RUN Telescope 2892
Events(trig) =
Events (telescope) =
Events (SRS) = Bad

3:27 RUN21 FECØ 3 GeV
(RUNTelescope 2893
Events(trig) = 50633
Events(telescope) = 49170
Events(SRS) = 51177

3:46 RUN22 FECØ 3 GeV, RUN Telescope 2894
Events (trig) = 50548
Events (telescope) = 50498
Events (SRS) = 51112

4:07 RUN23 Pedestal FECØ
$N_{event_{SRS}} = 5252$

4:17 RUN24 - TERMinate

4:23 RUN25 - TERM

4:27 RUN26 - physics 2 GeV FECØ
RUNTelescope 2897
Nevent (trig) = 53620
Events(telescope) = 53617
Events (SRS) = 54135

4:47 RUN27 2GeV FEC0
Run telescope 2898
Events(trig) = 50520
Events(Telescope) = 50514
Events (SRS) = 51007

5:04 RUN28 1GeV FEC0
Run telescope 2899
TERMINATE

5:07 RUN29 1GeV FEC0
Run telescope 2900
Events (trig) = 52132
Events (telscope) = 52100
Events (SRS) = 52684

5:21 RUN30 1 GeV FEC0
Run telescope 2901
Events (trig) = 52756
Events (telescope) = 52751
Event (SRS) = 53279

5:39 RUN31 5 GeV FEC0
Run telescope 2902
Events (trig) = 50227
Events (telesup) = 50218
Events (SRS) = 50781

6:11 RUN32 5 GeV FEC0
Run telescope = 2903
Events (trig) = 52630 ← !
Event (telescope) = 50081 ← ⊙
Events (SRS) = 52176

6:43 RUN33 5GeV FEC0
TERMINATE Data Collector = 0

6:46 RUN34 5GeV FEC0
Run telescope 2905
Events (trig) = 53562 aida_tlu
Events (telescope) = 53561 Data Collector
Events (SRS) = 54159

7:18 RUN6 Pedestal FEC1
Events = 5129
file run6.root

7:29 RUN7 FEC1 physics 1 GeV
Run telescope 2906
Events (trig) = 51574
Events (telescope) = 51562
Events (SRS) = 29226

7:46 RUN 2 PEDESTAL FEC2
Events = 6127 7:55
file run2.root (0 channels)
Bad result ?

8:02 RUN 3 PEDESTAL FEC2
Events ≈ 5000
file run3.root (0 channels)
! → Forgot switch run type to pedest

3:03 Physics FEC2 1 GeV Run 4
alpide Run 2907
Events (trig) = 60569
Events (telescope) = 59269
Events (SRS) = 34322
End of Run 4 : 8:30 am

~8:40 Pepestal FEC 2 Run 5
Events = 5478.
file run5.root

28:51 Physics FEC2 1 GeV
Run Number (alpides) : 2908
→ • when uploading run5.root to options „pedestal file" in mm DAQ says „loaded 0 chennels"

Run 6
Events trig) = 45667 events
Events (telescop-data coll.) = 45663 events
Events (SRS) = 25818 events.

We connect cable 14 (layer 14) to FEC1 to have
7 apv [(14-13) x2 + 14 x 1]
We coldest run FEC2 with only masters

xl

• For the next runs layers: 11, 12, 13, 14 → connected to FEC 1
↓ 2 APV ↓ 2 APV ↓ 2 APV ↓ 1 APV

11:55 FEC1 RUN 9 Padestal

RUN 9 FEC 1

12:15 - FEC1 PHYSICS 1 GeV

EVDAQ TELESCOPE RUN 2909
FCAL SRS RUN FEC 1 10

TLU TRIGGERS: 54 272
TELESCOPE EVENTS: 54 265
SRS —"— : 54 746

WRONG MAP FILE FOR MIDAQ —

- DATA INVALID

- FEC 1 PHYSICS 1 GeV

TELESCOPE RUN 2910
SRS RUN FEC1 11

12:40 - FEC1 RUN 12 PEDESTAL

5013 entries

13:05 FEC 1 RUN № 14, 1 GeV

SRS

EVDAQ RUN Number 2911

TLV TRIGGERS : 50944

Telescope events : 50885

SRS : ≈ 50 000

13:08 FEC 1 RUN 15, 1 GeV

EVDAQ RUN Number 2912

TLV TRIGGERS : 57933

Telescope events : 57864

SRS events : 58458

End of RUN 13:23

- Change trigger delay on FEC5 to ~~match~~ match delay on FEC0

13:31 FEC 1 RUN 16 , 1 GeV

EVDAQ RUN Number 2913

TLV TRIGGERS : 51890

TELESCOPE events : 51881

SRS Events : 52356

END of RUN : 13.47.

13:49 FEC 1 RUN 17 , 2 GeV

EVDAQ RUN Number 2914

TLV TRIGGERS : 50633

TELESCOPE events : 50605

SRS Events : 51101

END of RUN : 14:08.

← EVDAQ RUN Number 2515 - failed

13:59 FEC 1 RUN 18 , 2 GeV

EVDAQ RUN Number 2916

TLV TRIGGERS : 50289

TELESCOPE events : 50271

SRS Events : 50769

END of RUN : 14:35

14:41 FEC 1 RUN 21 , 3 GeV

EVDAQ RUN Number 2917

TLV TRIGGERS : 50698

TELESCOPE Events : 48806

SRS Events : 51146

15:03 FEC 1 RUN 23, 3 GeV

EVDAQ RUN NUMBER : 2919

TLV TRIGGERS : 50185

TELESCOPE EVENTS : 49187

SRS EVENTS : 50634

END of RUN : 15:22.

15:24 FEC 1 RUN 24 PEDESTAL ← failed

15:27 FEC 1 RUN 25 PEDESTAL

50525 entries.

END 15:30.

15:33 FEC 1 RUN 26, 4 GeV

EVDAQ RUN NUMBER : 2920

TLV TRIGGERS 50092

TELESCOPE EVENTS : 50078

SRS EVENTS : 50545

END of RUN 15:57.

16.01 FEC 1 RUN 27, 4 GeV

EVDAQ RUN NUMBER : 2921

TLV TRIGGERS : 50143

TELESCOPE EVENTS : 50110

SRS EVENTS : 50606

END of RUN 16:25

16.30 FEC 1 Run 28, 4 GeV

EVDAQ RUN NUMBER : 2922

TLU TRIGGER : 50501

TELESCOPE EV: 50275

16:53 FEC 1 Run 29, 5 GeV

EUDAQ RUN NUMBER: 2923

TLU TRIGGER 50297

TELESCOPE EV.: 50271

SRS EV.: 49823

END TIME: 17:22

17:25 FEC 1 Run 31, 5 GeV

EUDAQ RUN NUMBER: 2925

TLU TRIGGER : 50505

TELESCOPE EV.: 50499

SRS EV.: 50945

END TIME: 17:55

(DOF X_0) SENSOR #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
NO OF HVs	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	1
FEC HDMI & CABLE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
FEC	2	2	0	0	0	0	0	0	0	0	1	1	1	1	2	2
HDMI FEC SOCKET	0	1	0	1	2	3	4	5	6	7	0	1	2	3	2	3

FEC2 NOT WORKING WITH ONLY MASTER BOARDS

	/	/	2	3	4	5	6	7	8	9	10	11	12	13	/	/
	/	/	2 3	4 5	6 7	8 9	10 11	12 13	14 15	16 17	18 19	20 21	22 23	24 –	/	/

17:56 FEC 1 Run 32, E = 5 GeV

EUDAQ RUN NUMBER: 2926

TLU TRIGGER: 50264

TELESCOPE EV.: 50244

SRS EV.: 50755

END TIME: 18:26

E = 5 GeV, new position
T = 46 2 for FECO, FEC1

The original position of ~~BEAM~~ LCAL:
vertical: + 103,5 mm
horizontal: + 83.9 mm

LOWER CUT RUNS STARTING

FECO run 35 - pedestal run
SRS EV: 5060

19:18 FECO run 36 - physics run, SVR = 1, 5 GeV
EUDAQ RUN NUMBER
TLU TRIGGER
TELESCOPE
STOPED to ~~set~~ set the ~~the~~ trigger freq.
~~BUSY~~ BUSY to 25 μsec

19:24 FECO run 39 - physics, SVR = 1,
EUDAQ RUN NUMBER - 2929
TLU TRIGGER EV: 503 ~~52~~
TELESCOPE EV: 50078
SRS EV: 50875
END TIME: 20:27

20:35 FECO run 41 - physics, SVR = 1
EUDAQ RUN NUMBER: 2931
TLU TRIGGER EV: ~~50815~~ 50297
TELESCOPE EV 50178
SRS EV: 50815

~~20:57~~ ~~FEC0 FUN~~

FEC 1 run 33 - pedestal run

SRS ev: 5159

21:12 FEC 1 run 34 - physics, SNR-1.

EUDAQ RUN NUMBER 2932

TLU TRIGGER EV: 50225

TELESCOPE EV: 50218

SRS EV: 50651

END TIME: 21:30

21:37 FEC 1 run 35 - physics, SNR-1

EUDAQ RUN NUMBER 2933

TLU TRIGGER EN: 50137

TELESCOPE EV: 49907

SRS EV: 50533

END TIME: 21:00

21:00 FEC 1 run 36 - physics. SNR 1

EUDAQ RUN NUMBER 2935

TLU TRIGGER EN 50303

Telescope ev: 50278

SRS EV: 50770

END TIME 22:27

Alpide 0 behaved strangely counting less events than other alpides. We had to restart EUDAC 3 times, because after first 2 restarts alpide 4 didn't work

22:48 FEC 1 run 40 physics SNR 1

Posission 1 cm down

EUDAQ RUN NUMBER 2939

TLU TRIGGER EN: 50355

TELESCOPE EV: 50168

SRS EVE 50829

END TIME 23:07

23:10 FEC 1 run 41 physics SNR 1
CUDAQ RUN NUMBER 2942
TLU TRIGGER EV 50250
TELESCOPE EV 50241
SRS EV: 50712
END TIME 23:33

23:38 FEC 0 run 42 physics SNR: 1
CUDAQ RUN NUMBER 2942
TLU TRIGGER EV 50164
TELESCOPE EV 50163
SRS EV: 50720
END TIME: 00:00

00:03 FEC 0 run 43 physics SNR: 1
17/11/19 CUDAQ RUN NUMBER // data doesn't look good
TLU TRIGGER EV
TELESCOPE EV
SRS EV
END TIME

00:16 FEC 0 run 45 pedestals

RUNs before out of trigger

00:24 FEC 0 run 47 physics
32397 LumiCal events
end time 1:01 eudaq events 31966
eudaq triggers 32050
TLU TRIGGER EV 32050
TELESCOPE EV 31966
SRS EV 32397
EUDAQ RUN NUMBER 2947
END TIME 1:01

01:12 RUN 49 physics FEC0

EUDAQ RUN NUMBER 2949
TLU TRIGGER EV 48819
TELESCOPE EV 48691
SRS EV 49347

END TIME 01:41

LUMICAL POSITION for run 49 and next
X = 83,9
Y = 104,5

01:42 FEC1 RUN50 pedestals

SRS EV

ERROR in mm DAQ — rerun

01:44 FEC1 RUN ~~51~~ 42 pedestals

SRS EV 5087

END TIME 01:51

01:52 FEC1 RUN 43 physics
EUDAQ RUN NUMBER 2951
TLU TRIGGER EV 50313
TELESCOPE EV 50224
SRS EVI 50778

END TIME 02:22

02:23 FEC1 RUN44 physics
EUDAQ RUN NUMBER 2952
TLU TRIGGER EV 50055
TELESCOPE EV 49685
SRS EV 50528

END TIME 2:52

LUMICAL position | for next runs
X = 85,3
Y = 94,6

03:00 FEC1 RUN45 physics
EUDAQ RUN NUMBER 2953
TLU TRIGGER EV 50474
TELESCOPE EV 047301
SRS EV 50908

END TIME 3:30

3:33 FEC0 RUN50 physics END TIME 04:02
EUDAQ RUN NUMBER 2954
TLU TRIGGER EV 50069
TELESCOPE EV 47028
SRS EV 50583

NEW LUMICAL POSITION
X = 86,5 Y = 84,7

04:07 FECO RUN 51 physics
EUDAQ RUN NUMBER 2955
TLU TRIGGER EV 50027
TELESCOPE EV 50022
SRS EV 50556
END TIME 4:37

04:40 FEC1 RUN 46 physics
EUDAQ RUN NUMBER 1
TLU TRIGGER EV 50231
TELESCOPE EV 49999
SRS EV 50657
END TIME 05:09

NEW LUMICAL POSITION
X = 87,8 Y = 74,8

FEC1 RUN47 physics
EUDAQ RUN NUMBER
TLU TRIGGER EV
TELESCOPE EV
SRS EV
ERROR EUDAQ

05:15 FEC1 RUN48 physics
EUDAQ RUN NUMBER 4
TLU TRIGGER EV 14171
TELESCOPE EV —
SRS EV 14307
END TIME 05:25 ERROR EUDAQ
RESTART

05:29 FEC1 RUN 51 physics
EUDAQ RUN NUMBER 7
TLU TRIGGER NUMBER EV 50049
TELESCOPE EV 47952
SRS EV 50500
END TIME 05:58

06:03 FECO RUN 52 physics
EUDAQ RUN NUMBER 8
TLU TRIGGER EV 50253
TELESCOPE EV 50228
SRS EV 50789
END TIME 06:32

NEW LUMICAL POSITION
X = 82,7 Y = 114,4

06:39 FECO RUN 53 physics
EUDAQ RUN NUMBER 9
TLU TRIGGER EV 49953
TELESCOPE EV 49840
SRS EV 50492
END TIME 7:09

FEC1 RUN 52 physics
EUDAQ RUN NUMBER 10
TLU TRIGGER EV 50116
TELESCOPE EV 50023
SRS EV 50598
END TIME 7:41

FEC1 RUN pedestals
NEW LUMICAL POSITION
X = 81,2 Y = 124,3
FEC1 RUN 53 pedestals
SRS EV 5000
END TIME 7:53
FEC0 RUN 54 pedestals
SRS EV
END TIME 9:01

FEC0 RUN 55 physics
EUDAQ RUN NUMBER 11
TLU TRIGGER EV 50234
TELESCOPE EV : 50076
SRS EV : 50172
END TIME ! 08:36

FEC0 RUN 54
EUDAQ RUN NUMBER : 13
TLU TRIGGER EV. 49645
TELESCOPE EV : 47761
SRE EV 50089
END TIME: 09:14

New Lumical position : X = 80,1; Y = 134,0
FEC1, ped run 53; physic run 55
EUDAQ RUN NUMBER : 14
TLU TRIGGER EV : 52109
TELESCOPE EV : 48934
SRS EV : 52603
END TIME: 9:55

FEC0, ped run 54, physics run 56
EUDAQ RUN NUMBER : 15
TLU TRIGGER EV 50588
TELESCOPE EV : 50532
SRS EV 51110
END TIME : 10:28

New Lumical position: X = 78.4; Y = 144

10:36 FECO, physics run 57

EUDAQ RUN NUMBER: 16
TLU TRIGGER EV: 50578
TELESCOPE EV: 50553
SRS EV: 50881

END TIME: 11:06

11:12 FEC1, physics run 56

EUDAQ RUN NUMBER: 18
TLU TRIGGER EV: 50689
TELESCOPE EV: 50552
SRS EV: 50995

END TIME: 11:43

New Lumical position: X = 77.3; Y = 154.0

11:50 FEC1, physic run 57

EUDAQ RUN NUMBER: 19
TLU TRIGGER EV: 52039
TELESCOPE EV: 51798
SRS EV: 52496

END TIME: 12:23

12:24 FECO, physics run 58

EUDAQ RUN NUMBER 20
TLU TRIGGER EV: 51276
TELESCOPE EV: 49293
SRS EV: 51841

New Lumical position X = 75.9, Y = 163.

13:03 FECO, physics run 59

EUDAQ RUN NUMBER 21
TLU TRIGGER EV: 50156
TELESCOPE EV: 50150
SRS EV: 50659

13:32

FEC 1 physics run ~~60~~ ? } crushed
EUDAQ run 22

13:42 FEC 1 physics run 59
EUDAQ run N 24 not correct
TLU TRIGGER
TELESCOPE
SRS

13:52 FEC 1 phys run 60
EUDAQ run N25
tlu trigger 50269
telescope 50269
SRS 50613

14:25 Beam off
14:30 Beam on
New luminosity position N2 x= 74.8 y= 173.8
FEC 1 phys run 61
EUDAQ run 26
tlu trigger 50213
telescope 50212
SRS 50709

15:06 FEC 0 phys run 60
EUDAQ run 27
tlu trigger 50404
telescope 50406
SRS 50957

15:42 FEC 0 phys run 61 Repeat the previous run with position N2
EUDAQ run 28
tlu trigger 52180
telescope 52179
SRS 52740

16:15 Beam off

Lumical position N8 x = 80 y = 134,7

16.40 Beam on 5 GeV Luxe

16:30 FECO pedestal run 62

16:34 FEC1 pedestal run 62

16:43 FECO phys run 64

EUDAQ run 31

tlu trigger 50067

telescope 50067

SRS 50564

17:14 FEC1 phys run 63

EUDAQ run 32

tlu trigger 50561

telescope 50561

SRS 51037

17:45 Beam off

17:49 Beam on

NO LumiCal

17:50 EUDAQ run 34

tlu trigger 398855

telescope 398798

18:01 EUDAQ run 36

tlu trigger 303273

telescope 303273

18:09 EUDAQ run 38
Hu trigger 310463
telescope 310463

18:15 Beam off

Turgsten target

Beam on

18:17

18:18 EUDAQ run 39
telescope 308260
Hu trigger 308264

18:24 EUDAQ run 40
telescope 300528
Hu trigger 300583

18:30 EUDAQ 41
Hu 366721
telescope 366711

18:37 EUDAQ 42
Hu 299401
telescope 299594

18:43

18:47 Switch on Magnet 200

18:50 EUDAQ run 43
telescope & Hu 292224

18:56 EUDAQ run 46
telescope & Hu 318541
381540

19:01 EUDAQ run 47
telescope 306624
TLU 306675

19:09 EUDAQ run 48
394366
TLU 394422

19:24 EUDAQ run 49
telescope 310230
TLU 310264

Run 50 Crushed

19:35 EUDAQ run 51
telescope 333680
TLU 333715

19:41 EUDAQ run 52
telescope 303789
TLU 303917

Magnet 200A, No Target

19:48 EUDAQ run 53
telescope 326354
TLU 326354

20:00 EUDAQ RUN 54
TELESCOPE 327926
TLU 328491

20:06 EUDAQ Run 55

Telescope 308880

TLU 309707

Magnet 200A, No target

telescop was moved by ~2cm.

20:19 EUDAQ Run 58

Check beam position after moving the telesc.

telescope 358081

TLU 358200

No magnet No target, Telescope is back in the original position.

After checking the position moved orbit to X = 130.4

20:37 Run 60 Telescope. 363708

TLU 364438

Magnet 200A

20:46 Run 61 Telescope. 350400

TLU 351602

Magnet 200A

20:48 FECO RUN 65 - PEDESTALS (4613 events)

Magnet 200A, target W 0.1mm. Telescope + Luminical.

21:05 Run 62 EUDAQ

Run 66 FECO 62525

21:59 Run 63 EUDAQ TLU 67045

TELESCOPE 67040

Run 67 FECO SRS 67749

22:30 Run 65 EUDAQ

69 FECO

Saved telescope data and Luminal data on the external Hardware - Keep by Vieta

There is a folder named "ALPIDE_data" in "tgc" computer ~~under~~ in

Home / Silicon TAU / ALPIDE_data / realdata