

3/Aug/2004

15:00 stop totally valve for refrigerator
stop Compressor
0.120 MPa

15:04 #7670 pedestal beam off

#7671 LED "

15:12 #7672 α "

15:21 #7673 CR "

16:47 0.130 MPa

17:02 stop 7673

17:04 #7674 pedestal "

17:06 #7675 LED "

17:24 #7676 α "

17:37 #7677 CR "

18:45 0.136 MPa

19:06 stop 7677 (during this run, beam was turned on)

19:07 #7678 pedestal beam ON

19:08 #7679 LED "

19:15 #7680 α

19:27 0.138 MPa

19:27 #7681 CR

21:55 stop 7681

21:56 #7682 pedestal beam ON

21:57 #7683 LED "

22:07 #7684 α "

22:15 #7685 CR "

0.147 MPa

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00:17 IV pressure 0.153 MPa

00:23 #7686 pedestal w/ beam OFF refrigerator OFF

00:28 #7687 LED "

00:36 #7688 alpha "

00:45 #7689 CR "

2:43 #7690 pedestal beam OFF refrigerator OFF

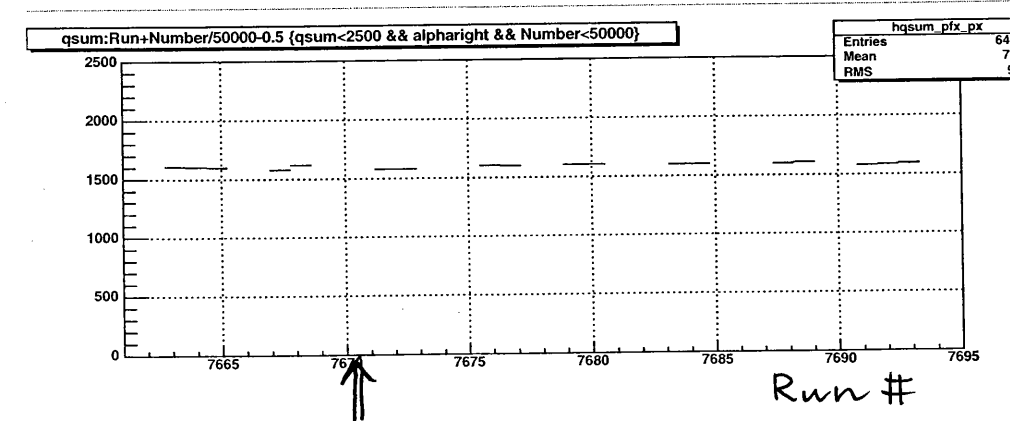
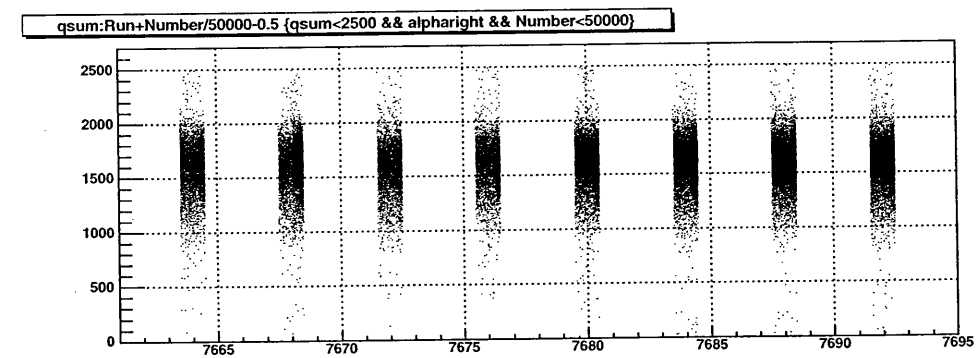
2:44 #7691 LED "

2:49 IV pressure 0.161 MPa

2:50 #7692 alpha beam OFF refrigerator OFF

2:57 #7693 CR "

Alpha peak position



refrigerator stop

No significant change in alpha peak after stopping compressor

1/2 3-7-1-E 1/2
E=32 10-12-5-1/2
1/2-1/2 3-1/2-1/2

20:57 #7717 α

Separator ON. only muon selected. mode (2)

beam shutter opened.

3Hz 0.16Hz
" 0.3 m/cm²/s

beam closed (21:15)

beam opened (21:45)

22:03 #7718 α beam ON

only μ^+ (2) HV = -195KV
SEP41 = -10100



22:19

22:24

Network connection to
paused the run,

HV02 lost.
restarted SCFE, resumed the run
(22:27)

mode (4)

0:30

beam blocker closed (#7718).

1:09

beam blocker open

1:49

#7719

pedestal

mode (4), beam blocker open

(#7720 \Rightarrow JUNK)

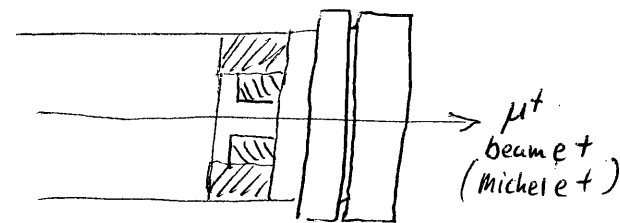
1:56

#7721 LED

Measurements

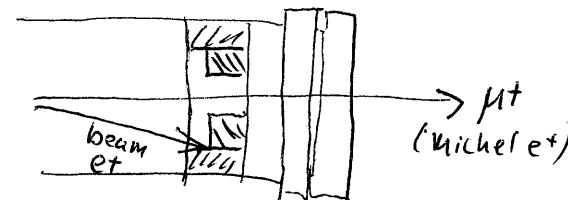
(1) Separator OFF

HV = 0KV
SEP41(magnet) = 0



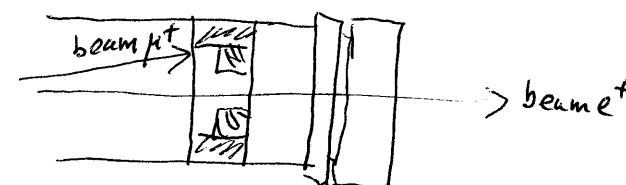
(2) Separator ON for μ^+

HV = -195KV
SEP41(magnet) = -1010



(3) Separator ON for beam e+

HV = -195KV
SEP41(magnet) = -200



(4) Separator ON No particles

HV = -195KV
SEP41(magnet) = +1400



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2:08

separator setting mode (3) (beam e+ only)

2:09

#7722

pedestal

beam blocker open w/ mode (3)

2:12

#7723

alpha

beam blocker open mode (3)

2:33

3:03

beam blocker closed

3:03

beam blocker open

3:41

separator setting mode (2) (μ^+ only)

3:42

#7724

pedestal

beam blocker open w/ mode (2)

3:46

#7725

alpha

"

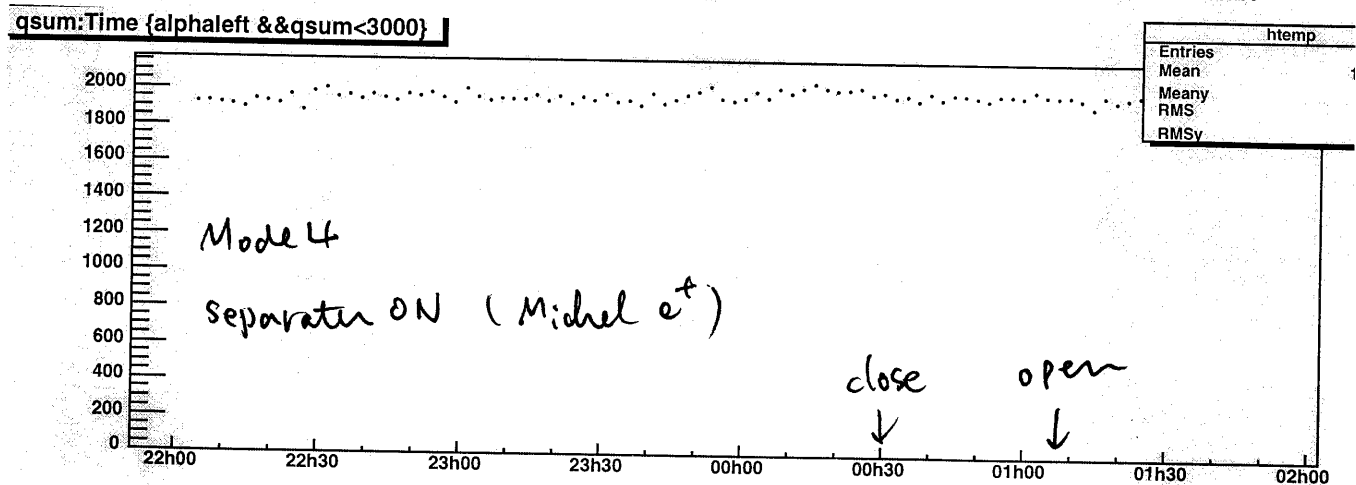
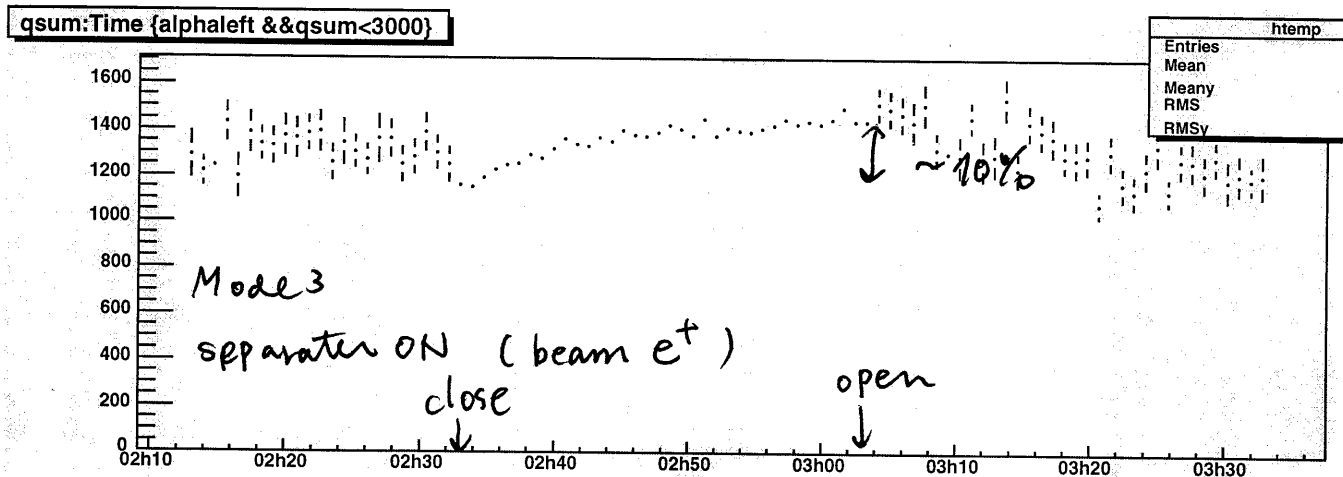
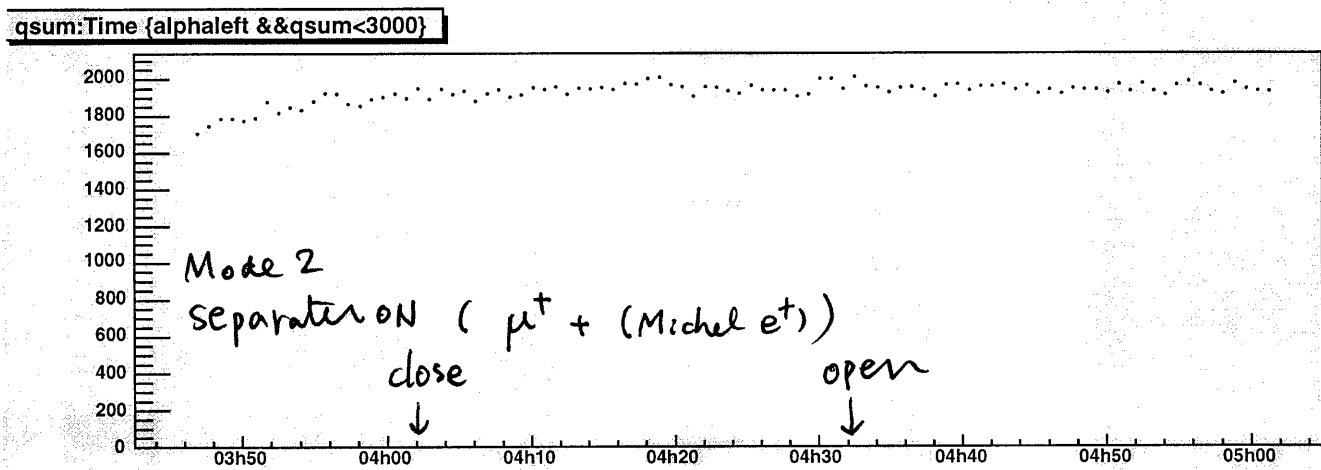
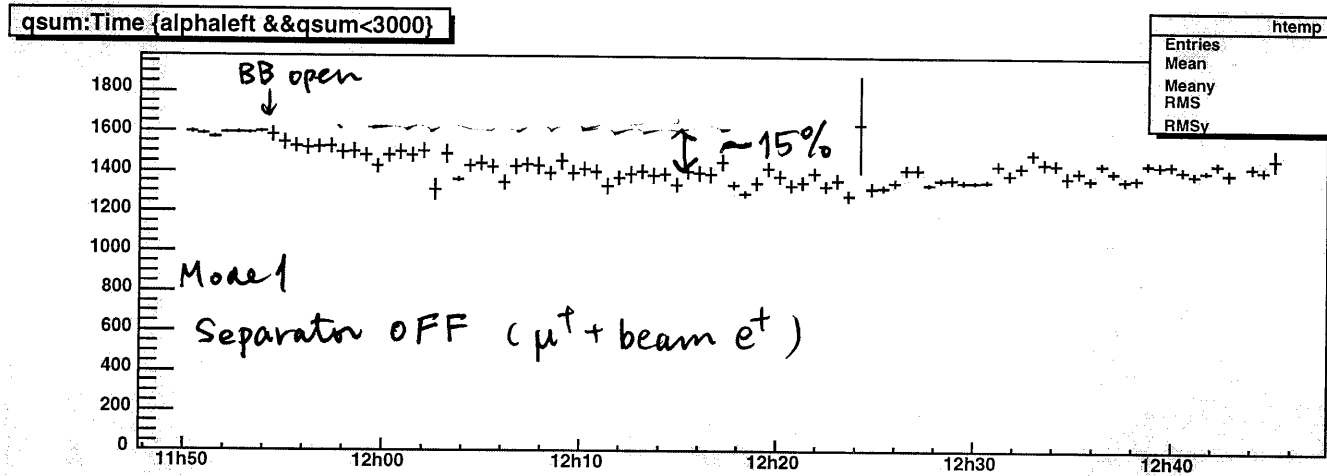
4:02

beam blocker closed

4:32

" open

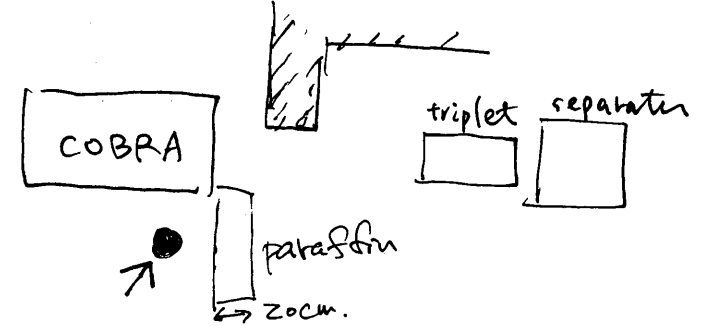
Effect of separator



6:29 SCFE ~~stopped~~ → ~~restarted~~

6:30 Separator OFF

He-3 counter is placed at the other side



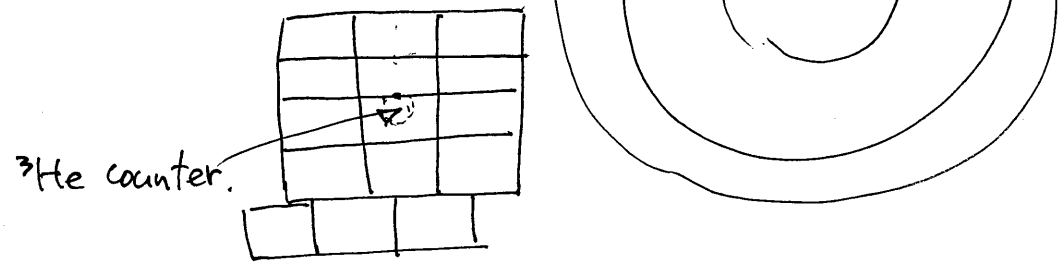
⇒ spectrum is distorted due to high γ BG.

⇒ Two lead bricks are placed in front

$$714 \text{ counts} / 17 \text{ min } 26 \text{ sec} = 1.4 \text{ n/cm}^2/\text{sec}$$

~~separator out~~

⊗ put CH_2 wall in front of the ^3He counter. paraffin thickness = 20cm.



#7727 Pedestal — JUNK

9:05 #7728 pedestal, beam off, w/ paraffin, separator off. — JUNK.

9:08 #7729 pedestal. } beam on. w/ paraffin separator off

#7730 LED

9:17 #7731 α

9:37 beam blocker OPEN.

10:16 #7731 STD

5-Aug-2004.

10:21 #7732 CR beam off, w/ ³He counter w/ paraffin. separator off

ADC #61 (ADC #13#61) has broad pedestal : ~ 10 @ run# 7729. ~ 30 @ 7722 ← two peaks!!

395 counts / 1000 sec = 0.8 n/sec/cm²

11:39 #7732 stop.
#7733 pedestal. beam off.

ADC #61 's pedestal get better. keep watching.

#7734 LED.

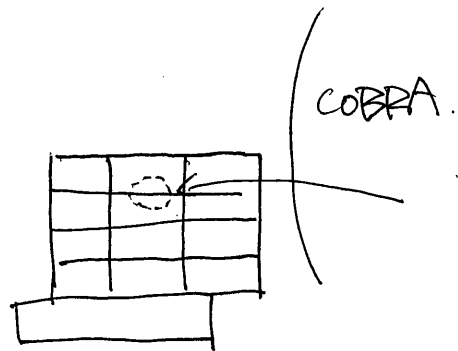
#7735 α

12:33 #7736 CR. beam off.

15:00 Getter heater OFF

TANK started to be cooled down.

75:20 360L in the dewar.
↳ 17:00 will be empty.



15:00 #7736 Stop.

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15:05 #7737 pedestal beam on.

15:06 #7738 LED

15:12 #7739 alpha

16:50 stopped to refill 400L Liq N₂ dewar.
{ 400L Liq N₂ → 350L filled.
100L Liq N₂ → full. }

³He counter with paraffin. upper side scan.
0.9 n/sec/cm² //

18:26 #7740 pedestal beam on.

ADC #61

- still has broad pedestal.
→ will be replaced minicard.

- We will put paraffin block wall behind ³He counter. to see where the thermal neutron comes from.

18:30 #7741 LED

18:45 #7742 alpha.

19:25 #7743 CR.

21:11 #7744 pedestal

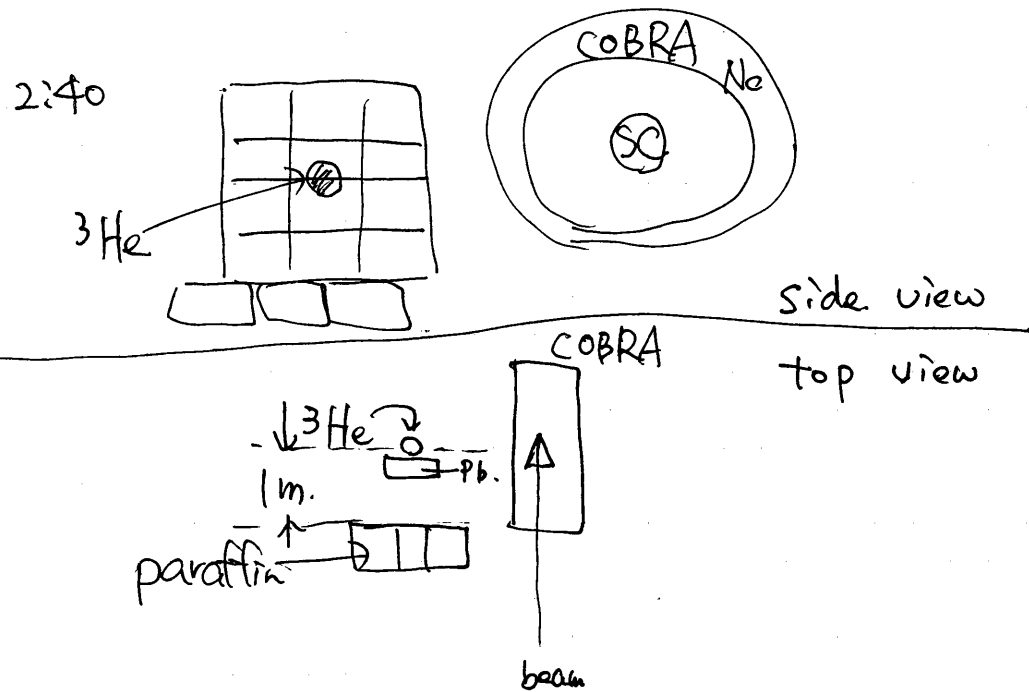
21:13 #7745 LED beam on.

21:35 #7746 alpha

ADC #61 minicard replaced.

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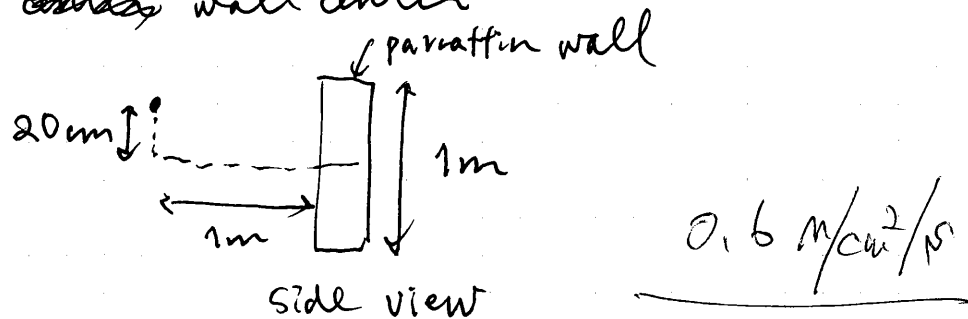
1:25 fill OV with N₂ gas (1/4 atm)
 1:30 start recovery



³He counter put 1m behind paraffin block.

2:43 #7747 pedestal
 2:46 #7748 LED
 2:57 #7749 alpha ⇒ for neutron measurement
 4:50 #7750 CR run for neutron measurement

He³ counter placed 20cm high from paraffin wall center



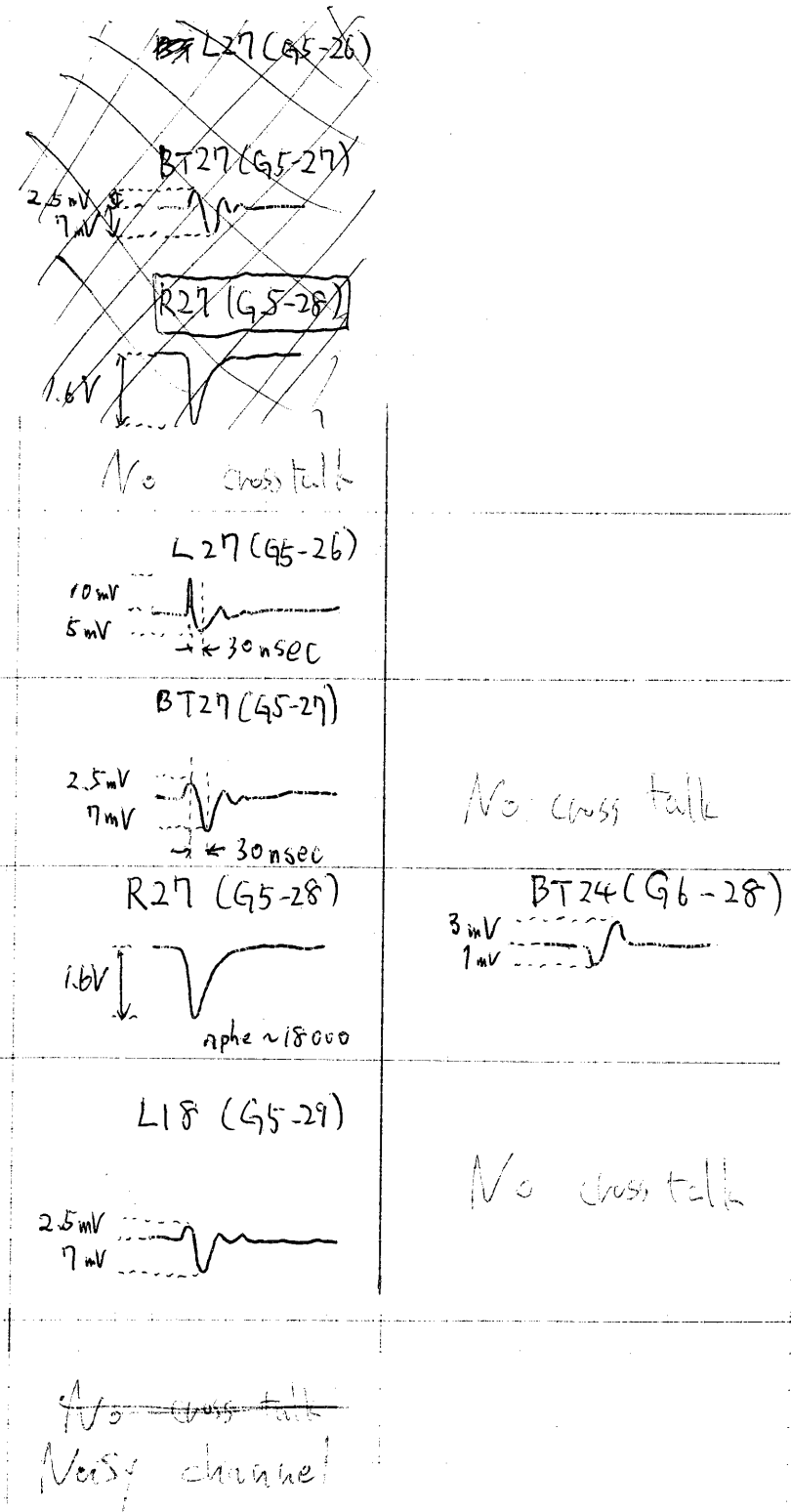
5:08 #7751 CR run for neutron meas.
 same as #7750

5208 LN₂ vessel 150L

#7752 pedestal
 #7753 JUNK

Crosstalk study

- o measure pulse shape before ~~splitter~~ splitter.
- o HV all channel off.
- o HV R27 ON (1100 V)

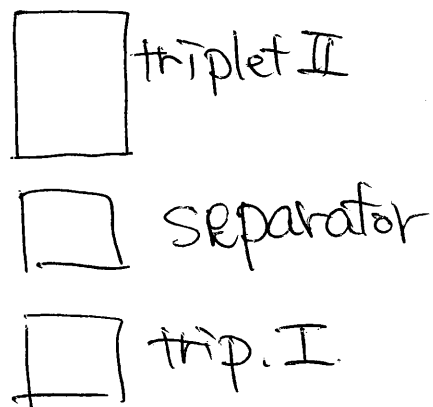
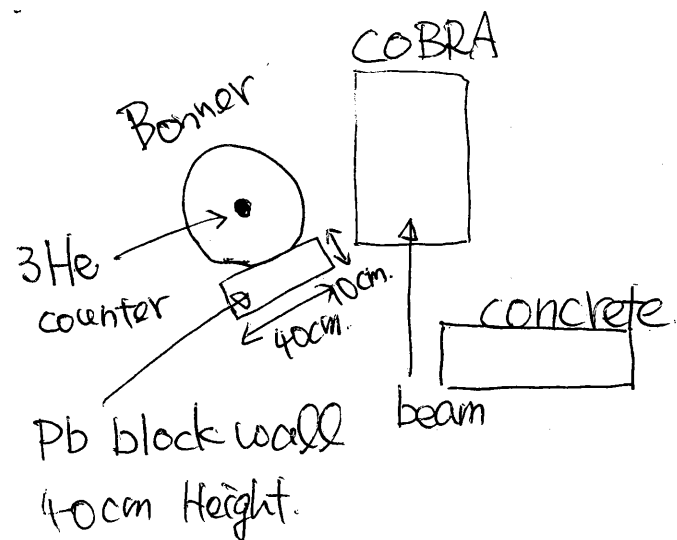


#7754 LED R27 1200V 20dB attenuator

6/Aug/2009.

7:02 CR run for neutron meas. same as #7759

15:



15:13 #7756 ~~pedestal~~ CR for neutron measurement

Bonner sphere 12 inch //

1.7 n/cm²/s

17:45 #7757 same as #7756

LO₂ 'cool dewar' refill.

18:05 #7758 Bonner sphere 5 inch

20:23 #7758 STOP

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22:42 #7759 CR for Neutron Measurement.

Bonner sphere 2 inch.

00:20 #7760 CR run for neutron meas.

Bonner sphere 0 inch.

2:30 Xe recovery completed.

3:00 IV filled with GN₂ for heat exchange
~ 0.05 MPa

3:46 #7761 CR run for neutron meas.

Bonner sphere 8 inch

5:01 #7762 CR run for neutron meas.

Bonner sphere 3 in

~~6:10~~ #7763 CR run for neutron

6:22 Bonner sphere 10 inch

CVS commit

meg onln 01	online/src/frontend/* online/include/*
meg onln 02	online/src/analyzer/*
pc 4884	online/macro/*
mag scol	online/src/scfe/*
	online/src/labview/*

Data Storage

~~afs // afs//p~~

afs // afs/psi.ch/project/meg/2004_1/meglp/

calib	calibrated .root, data
data1	.mid
data2	data directory on megonln02 (online histograms)
offline	offline program data
online1	online program data on megonln01
online2	online program data on megonln02
hrdata	hr setting file
slowcontrol	slowcontrol data & program