

load cosmic ray hset

21:33 #2773 pedestal for cosmic ray (5359 events)

21:35 #2774 LED 1&5 for cosmic ray {45~49} set

21:46 #2775 COSMIC

25/May/2002.

8:09. # 2775. Stop.

HV reset for "α".

8:12. # 2776. pedestal run for α.

8:15. # 2777. LED Calibration run. for α. (LED 1+5. (45~49) set).

8:22. # 2778. α RUN. ~ 60000 events taken.

8:39. # 2779. ^{HV} reset for "COSMIC".
pedestal run for COSMIC.

8:40. # 2780. LED Calibration run for COSMIC. (same as # 2777).

8:52. # 2781. COSMIC start.

20:09 # 2781 stopped. HV reset for "α"

20:12 # 2782 pedestal run for α

20:14 # 2783 LED Calibration run for α (LED 1+5 (45~49) set)

20:29 # 2784 α run @ 1E6

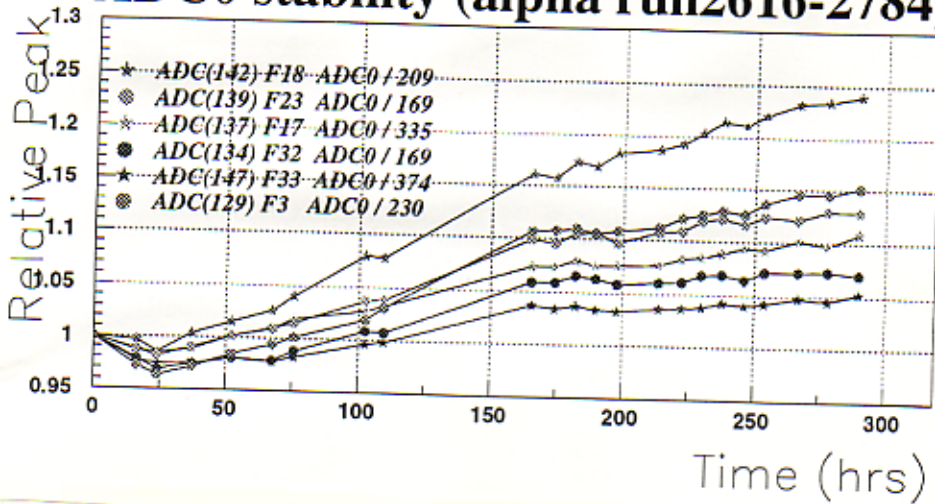
HV reset for CRs

20:40 # 2785 ~~CRs Run start~~
pedestal run for CRs (6088 evts)

20:43 # 2786 LED Calibration run for CRs (LED 1+5 (45~49) set)

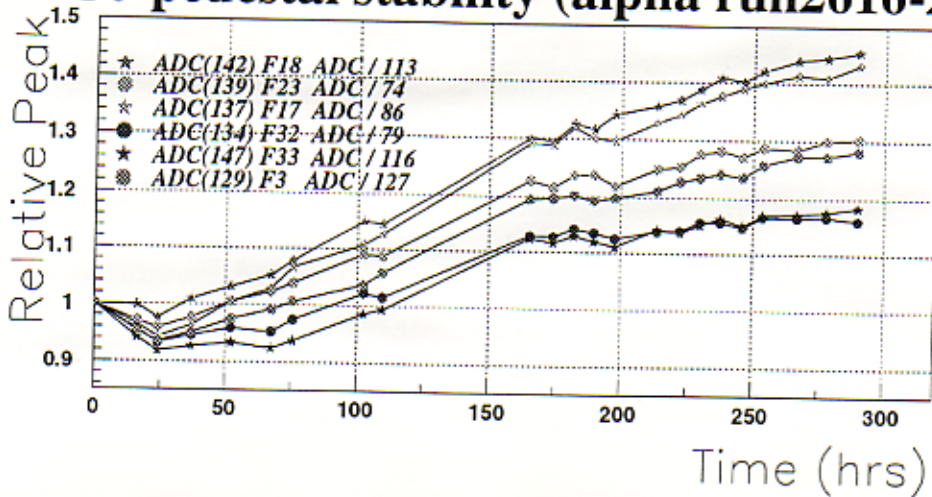
20:56 # 2787 cosmic ray

ADC0 stability (alpha run2616-2784)



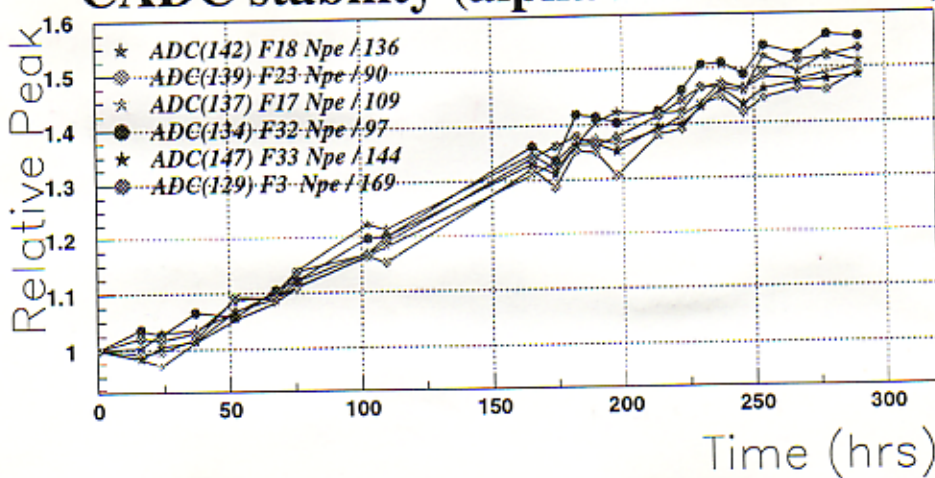
①

ADC0-pedestal stability (alpha run2616-2784)



②

CADC stability (alpha run2616-2784)



③

α Run #2616 ~ #2784. ^{13/May} ^{25/May} 23 data points

- ① ADC0
- ② ADC0 - pedestal
- ③ CADC

Time = -20.75 hrs

11

12/May 21:50 liquefaction finished.

Page 55

8:13 stop run 2787

8:14 # 2788 load hset for "α"
pedestal for α

8:16 # 2789 ~~LED~~ LED 1 & 5 {45 ~ 49} V for α

8:27 # 2790 "α" (~50000 events)

8:38 # 2791 pedestal for "cosmic ray"

8:40 # 2792 LED 1 & 5 {45 ~ 49} V for "cosmic ray"

8:44 # 2793 stopped at ~ 27000 events
LED 1 & 5 {45 ~ 49} V for "cosmic ray"

8:55 # 2794 "COSMIC"

9:00 2794 stopped because #2793 was not written on disk.

9:03 # 2795 LED 1 & 5 {45 ~ 49} V for "cosmic ray"
Not written

disk full

9:00~10:30

psmp17 shutdown to install "E" drive (IDE, 57Gbytes)
for back-up data.

~~run026nn~~

run026nn.mid

C:\online\data1 ⇒ e:\online\data\26May2002\

temporarily. --- to be cleaned up later
immigration

Ⓢ re-take pedestals and LEDs for cosmic ray run. ↴

10:46

2796 pedestal for cosmic rays (7,650 evts)

↳ ADC CH112 sigma = 13.06

↖ 944...984 in comment X

10:49 #2797 LED 1 & 5 flushing for CR. {45...49} V

11:06 #2798 Cosmic ray run.

84 26/May/2002

19:57 stop run 02798 (546 Events)

HV reset for α

20:01 #2799 pedestal IE6 for alpha

20:03 #2800 LED 1&5 flashing for α {45-49}V set

20:18 #2801 " α " Run

20:28 #2802 pedestal for cosmic ray

20:29 #2803 LED 1 & 5 {45 ~ 49}V for cosmic ray

20:41 #2804 "COSMIC"

27/May/2002

7:57 stop #2804 to load HV file for α run.

7:58 #2805 Pedestal for α

7:59 #2806 LED 1&5 flashing for α {45, ..., 49}V

8:12 #2807 α run (49591 events)

normal HV file load (LXe-IE6.hv)

8:23 #2808 pedestal for CR

8:24 #2809 LED 1 & 5 flashing for ~~CR~~ CR {45, ..., 49}V

8:36 #2810 cosmic ray run.

Rearrangement ~~of~~ of cosmic ray data ^{storage} on pstmp17.
~~directories~~

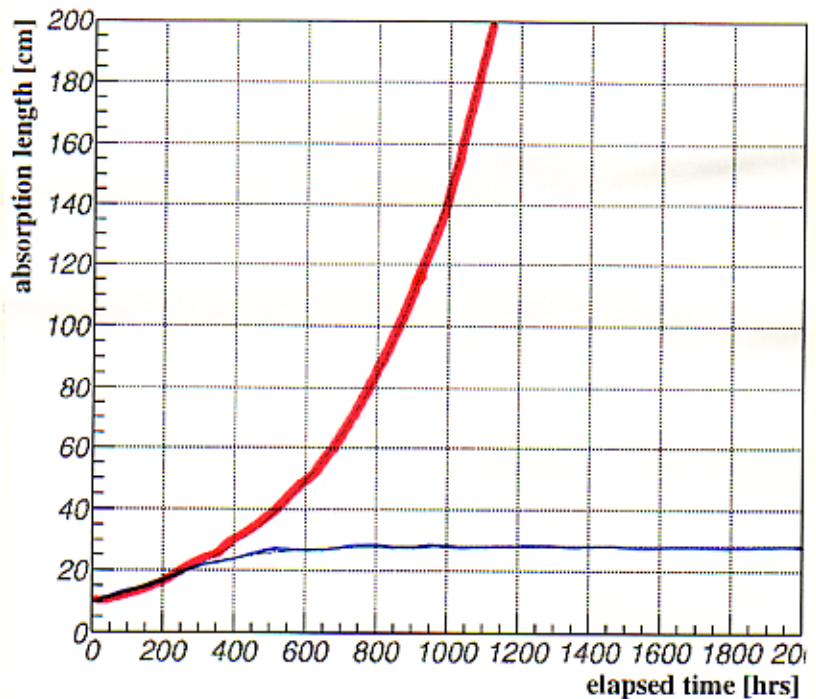
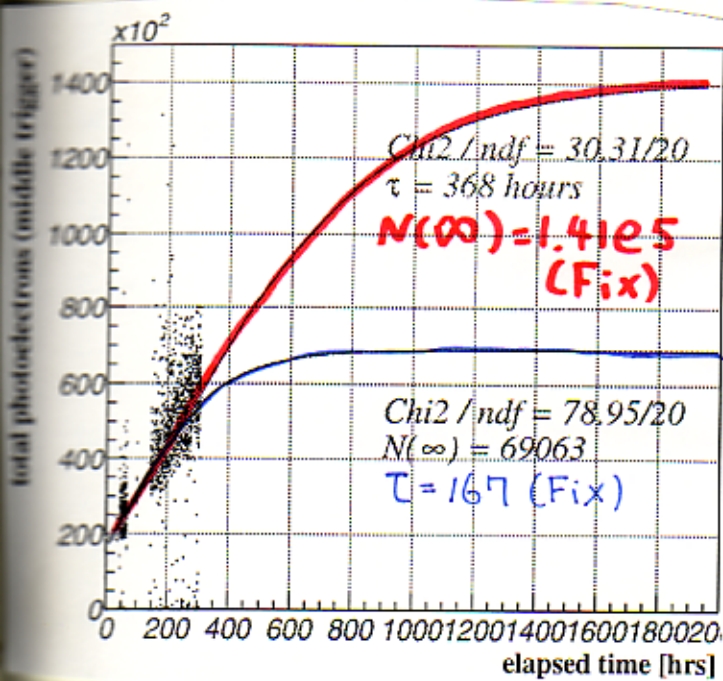
⊙ E:\online\data\LPCR4\
12/Mar/2002 ~ 04/Apr/2002

run 2267 ~ run 2530
(*.rz, *.mid, *.xls, *.idf, *.idx, *.hst)

⊙ E:\online\data\LPCR5\
11/Apr/2002 ~ 22/Mar/2002

run 2531 ~ run 2699 ... to be continued till the end
of LPCR-5

(*.rz, *.mid, *.xls, *.idf, *.idx, *.hst)



$$N = N(\infty) \exp\left(-\frac{20_{\text{cm}}}{\lambda_0} \cdot \exp\left(-\frac{t}{\tau}\right)\right) \quad \text{is } \tau \text{ Fitting}$$

11:00 Cosmic Ray DAQ stopped. (2810)

11:06 The Getter mode is changed from
"Purification" to "By-Pass"

The Oxisorbs are now by-passed.

Flow meter indicates now negative value!

11:26 RUN 2811 Cosmic RAY RUN

PURIFICATION IS STOPPED NOW
(CIRCULATION CONTINUES)

Flow Rate - 7.5 l/min

19:57 #2811 stopped. → LFe - 1E6 - for-alpha.hv loaded
~~20:00~~

19:59 #2812 Pedestal for α (6724 evts)

20:02 #2813 LED 1&5 calib. for α HV set 145...49V}

20:14 #2814 α run (49935 evts)

20:23 Normal HV files (1E6_hv) loaded.
 20:25 #2815 pedestal for CR (6219evts)
 20:27 #2816 LED 1&5 Flushing for CR
 20:40 #2817 ~~Cosmic Rays Run~~
 mistake (α Run Not CRs)
 20:47 #2818 Cosmic Rays Run
 22:15 #2818 paused for replacing LN₂ tank
 22:36 #2818 resumed.

28/May/2002

17:59 stop #2818 load hv set for α
 8:00 #2819 pedestal for α
 8:01 #2820 LED 1&5 for α {45 ~ 49}V
 8:14 #2821 " α " \rightarrow faild
 8:15 #2822 " α "
 8:26 load hv set for CR
 #2823 pedestal for CR
 8:27 #2824 LED 1 & 5 {45 ~ 49}V for CR
 8:39 #2825 "CR"
 16:25 #2826 stopped, 461 events triggered.
 load hv set for α .
 16:10 #2826 pedestal for α , 5350 events
 16:15 #2827 Led 1&5 for α
 16:25 #2828 α run. 50164 events triggered.
 load hv set for Cosmic Ray 1e6
 16:40 #2829 pedestal for cosmic Ray 5331 events
 16:45 #2830 Led 1&5 for Cosmic Ray

16:55 #2831 Cosmic Ray run started.

19:11 HV error @ 1458. → auto restore

20:10 #2831 (CR run) stopped

HV file for α loaded.

20:11 #2832 pedestal run for α (5130 evts)

20:13 #2833 LED 1 & 5 flushing for α , {45, ..., 497},

20:25 #2834 α run 5,2097 events triggered

20:35 #2835 failure

load HV set for Cosmic Ray 1e6

#2836 pedestal ~~run~~ for Cosmic Ray. 5193 events triggered

20:40 #2837 Led 1 & 5 for Cosmic Ray.

#2838 Cosmic Ray run @ 1e6 purification stopped; start.

29 / May / 2002

7:55 2838 stopped → load hvset for α

7:57 #2839 pedestal for α

7:58 #2840 LED 1 & 5 {45 ~ 493} V for α

8:11 #2841 " α "

→ mid file was not written on disk

8:19 #2842 pedestal for CR

8:20 #2843 LED 1 & 5 {45 ~ 493} V for CR

8:33 #2844 faild

8:34 #2845 " α "

8:44 2845 stopped

8:45 #2846 pedestal for α load hvset for " α "

8:47 #2847 LED 1 & 5 {45 ~ 49} V for α

8:59 #2848 " α "

9:10 load hv set for CR
 #2849 pedestal for CR
 9:12 #2850 LED 1 & 5 {45~49}V for CR
 9:27 #2851 "CR"

16:00 Cosmic Ray run #2851 was stopped. ~~29 events~~ 40 events triggered.

load hv set for alpha.

16:05 pedestal for alpha. #2852. 5100 events.

#2853 alpha run. 50/20 events

16:15 ~~#2854~~ Led 1 & 5 for alpha. ← Failure!

#2855 Led 1 & 5 for alpha

16:30 ~~#2856~~ alpha run ← Fal 不調 127 失敗.

* #2853, #2855 2 led α 9 ティンクをこの順番を間違えた。
 (また) 1度 α をとった

#2857 alpha run 50, 4/4 events

16:45 load hv set for cosmic Ray.

#2858 pedestal for Cosmic Ray. 5769 events

#2859 Led 1 & 5 for Cosmic Ray.

17:00 ~~run~~ Cosmic Ray run started.

#2860

30 / May / 2002

17:56 stop 2860

17:58 #2861

load HV set for α
 pedestal for α

17:59 #2862

LED 1 & 5 {45~49}V for α

8:11 #2863

" α " → stopped because of HV error

8:17 #2864

" α "

8:27 #2865

load HV set for CR
 pedestal for CR

- 9:42 #2866 LED 1 & 5 {45~49}V for CR
 10:04 #2867 "CR"
 16:20 Cosmic Ray run #2867 was stopped.
 load HV set for α .
 #2868 pedestal for α . 6068 events
 #2869 Led for α .
 16:35 ~~#2870 failure~~
~~#2871 failure~~
 #2872 α run 59350 events
 load HV set for CR.
 16:50 #2873 pedestal for CR
 #2874 Led for CR.
 17:00 ~~#2875 failure~~
 #2876 Cosmic Ray run started.
 23:56 stop 2876
 load HV set for α
 23:57 #2877 pedestal for α
 23:58 #2878 LED 1 & 5 {45~49}V for α
 31/May/2002
 0:11 #2879 " α " failed
 0:12 #2880 " α "
 load HV set for CR
 0:22 #2881 pedestal for CR
 0:24 #2882 LED 1 & 5 {45~49}V for CR
 0:36 #2883 CR
 7:25 stop 2883

31/May/02. load HV set for α

7:26 #2884 pedestal for α

7:28 *2885 LED 1 & 5 {45-49}V for α

7:39 #2886 α

load HV file for CR

7:53 #2887 pedestal for CR (4.963 eVts)

7:54 #2888 LED 1 & 5 {45-49}V for CR

8:25 #2889 Cosmic Ray run start

16:13. Stop the RUN #2889.

HTV set reload for " α ".

16:17. #2890. Pedestal for " α ".

16:19. #2891. LED calibration for " α " run, setting is same as #2885.

16:31. #2892. α run.

HTV set reload for "COSMIC".

16:40. #2893. Pedestal for "COSMIC".

16:43. #2894. LED calibration for "COSMIC". (LED 1+5, {40.5-49}V setting)

17:02. #2895. COSMIC, start.

18:28 #2895 stopped for switching on purifiers 82 events

18:30 Getter SWITCHED ON

Oxisorb. BY-PASS REMOVED.

18:40 #2896 COSMIC WITH PURIFICATION STARTED

1/June/02

02:00 #2896 Cosmic Ray run stopped. 423 events triggered.

HV set for α max loaded.#2897 pedestal run for α . 538/ events.2:05 #2898. Led calibration for α .#2899 α run

Load HV set for Cosmic Ray.

2:30 #2900 pedestal for cosmic Ray. 5142 events.

#2901 Led run for Cosmic Ray.

2:45. #2902. Cosmic Ray run. started.

8:58 stop 2902

9:00 #2903 ^{load HV set for α} pedestal for α 9:01 #2904 LED 1 & 5 445 ~ 493V for α 9:13 #2905 " α "

load HV set for CR

9:22 #2906 pedestal for CR

9:24 #2907 LED 1 & 5 445 ~ 493V for CR

9:36 #2908 " α "

16:10. Stop the RUN. #2908.

HV reset for " α ".16:12. #2909. pedestal run for α .16:13. #2910. LED calibration RUN. for α . (LED 1+5. 45~49V).16:24 #2911. α RUN.

HV reset for "COSMIC".

16:34. #2912. pedestal run for COSMIC.

16:35. #2913. LED calibration RUN. for COSMIC. (LED 1+5. 45~49V).

16:53. #2914. COSMIC start.

23:59 stop 2914

2 / June / 2002

0:00 #2915 load HV set for α
 pedestal for α
 0:01 #2916 LED 1 & 5 {45 ~ 49} V for α
 0:14 #2917 " α "
 0:23 #2918 load HV set for CR
 pedestal for CR
 0:25 #2919 LED 1 & 5 {45 ~ 49} V for CR
 0:37 #2920 COSMIC RAY

8:02 stop 2920

load HV set for α
 8:03 #2921 pedestal for α
 8:04 #2922 LED 1 & 5 {45 ~ 49} V for α
 8:16 #2923 " α "
 load HV set for CR
 8:26 #2924 pedestal for CR
 8:28 #2925 LED 1 & 5 {45 ~ 49} V for CR
 8:39 #2926 "COSMIC"

9:11. #2926. pause. ; Because of HV error. @ pstamp4. slot 0.



(Unfortunately, I cannot find the wrong channel.
 since pstamp4 cannot connect the web server on HV supply.)

▶ pstamp4. (LRS 1458). reboot. ⇒ OK.

9:17. #2926. resume ...

16:00 #2926 stopped (480 events.)

loaded HV set for α 16:04 #2927 pedestal for α (5000 events)16:06 #2928 LED 1 & 5 {45 ~ 49} V set for α 16:19 #2929 α Run (50000 events)

2 / June / 2002

loaded HV set for CR

- 16:31 #2980 pedestal for CR
 16:33 #2931 LED 1&5 {45~49}V set for CR
 16:46 #2932 CR Run started.

3 / June / 2002

0:11 #2932 stopped

loaded HV set for α

- 0:14 #2933 pedestal for α (5,000 events)
 0:17 #2934 LED 1&5 {45~49}V for α
 0:29 #2935 α Run (50,000 events)

loaded HV set for CR

- 0:42 #2936 pedestal for CR (5,000 events)
 0:44 #2937 LED 1&5 {45~49}V for CR
 0:56 #2938 CR Run
 1:31 stop 2938

7:32 #2939 load HV set for α
 pedestal for α

7:33 #2940 LED 1 & 5 {45~49}V for α

7:45 #2941

" α "
 load HV set for CR
 pedestal for CR

7:58 #2943 LED 1&5 {45~49}V for CR

8:13 #2944

"CR"

~~15:42 stop 2944~~

03/ June / 2002.

16:13. Stop the RUN. #2944.

HV reset for α .16:14. Pedestal run for α . \Rightarrow RUN #2945.16:16. #2946. LED calibration for α . (LED45, 45~49 set).16:27. #2947. α RUN.

HV reset for COSMIC.

16:38. #2948. Pedestal run for COSMIC.

16:40. #2949. LED calibration run for COSMIC.

16:51. #2950. COSMIC. start.

04/ June / 2002.

0:00 #2950 stopped. 443 events triggered

load HV set for alpha.

#2951 pedestal run for alpha. 5/50 events.

0:03 #2952. led run for α .0:20 #2953 α run

0:33 load HV set for Cosmic Ray

#2954 pedestal for Cosmic Ray. 5250 events

0:35 #2955 led run for Cosmic Ray.

0:40 #2956 Cosmic Ray Run started. \leftarrow Failure.
Fail was stopped.

#2957 Cosmic Ray Run started

Run #2953 was not written in Hard disk

01:19 Cosmic Run #2957 was stopped, because I have to calibrate again.
load HV set for α .
 α run.

01:21 #2958 pedestal for α , 5/80 events

01:25 #2959 led run for α .

01:31 #2960 α run.

load HV set for Cosmic Ray.

1:48 #2961 pedestal for Cosmic Ray. 5/20 events

1:50 #2962 led for Cosmic Ray.

~~02:03 #2963 Cosmic Ray run~~, \leftarrow Fal 不調, Fal 再起動

02:05 #2964 Cosmic Ray run started.

04/Jun/2002

- 8:07 #2964 stopped.
- 8:08 #2965 pedestal for α (8089 events)
- 8:10 #2966 LED 1 & 5 flashing for α {45, ..., 49}
- 8:23 #2967 α run.

~~X~~ normal HV setting ...

loaded HV file for α .

8:26 #2968 pedestal for α (5.171 events)

8:27 #2969 LED 1 & 5 flashing for α {45, ..., 49}

8:39 #2970 α run. (62.207 events)

load normal HV file.

8:51 #2971 pedestal for CR (24.982!! events)

8:56 #2972 LED 1 & 5 flashing for CR {45, ..., 49}

9:07 #2973 CR run

- 16:07 # 2973 stopped for calibration & α -daq.
 HV file for α loaded
- 16:15 # 2974 pedestal for α (5628 evts)
- 16:18 # 2975 LED 1&5 for α
- 18:53 # 2976 pedestal for α (5110 evts)
- 18:56 # 2977 LED 1&5 for α
- 19:21 # ~~2978~~ α
 78
- 19:30 HV file for CR loaded
 # 2979 pedestal for CR (9345 evts)
- 19:35 # 2980 LED 1&5 for CR
- 19:47 # 2981 CR started

5 / June / 2002

- 7:26 stop 2981
 load HV set for α
- 7:27 # ~~2982~~ pedestal for α
- 7:28 # 2983 LED 1 & 5 {45~49}V for α
- 7:44 # 2984 α
- 7:53 # 2985 pedestal for CR
 load HV set for CR
- 7:55 # 2986 LED 1 & 5 {45~49}V for CR
- 8:08 # 2987 CR
- 16:27 # 2987 stopped (489 events)
 load HV set for α
- 16:29 # 2988 pedestal for α
- 16:31 # 2989 LED 1&5 for α {45~49}V set
- 16:44 # 2990 α Run
 load HV set for CR
- 16:55 # 2991 pedestal for CR
- 16:57 # 2992 LED 1&5 for CR {45~49}V set

17:10 #2993 CR Run started

12:30 #2993 Stop due to check the pedestal. \Rightarrow (#2988.
ADC #1159 is very wide.
but #2991 has no problem.)

#2994 test run for pedestal check.
(NO DATA WRITTEN).

12:34 #2994 COSMIC. Start.

Trigger 'C' (for pedestal & LED) was used.

So all the data were pedestal.

23:56 #2995 pedestal for α load HV set for α

DATA FILE was removed

23:57 #2996 LED 1 & 5 {45~49}V for α

\hookrightarrow disk access error?

6 / June / 2002

0:24 #2997 LED 1 & 5 {45~49}V for α

0:37 #2998 α

load HV set for CR

0:46 #2999 pedestal for CR

0:48 #3000 LED 1 & 5 {45~49}V for CR

0:59 #3001 CR

S

8:20 #3001 Stopped.

α - HV loaded.

8:22 #3002 pedestal for α (5,997 events)

8:24 #3003 LED 1 & 5 flashing for α {45, -49}V

8:36 #3004 α run.

normal - HV loaded

8:47 #3005 pedestal for CR (6,467 events)

8:48 #3006 LED 1 & 5 flashing for CR, 45~49V

8:59 #3007 CR run

06 / June / 2002.

16:04. Stop the RUN # 3007.

HV. reset for " α ."16:06. # 3008. pedestal run for α .16:07 # 3009. LED Calibration run for α . (LED 1+5, 45~49V setting).16:19. # 3010. α res run.

16:28. HV reset for COSMIC.

16:28. # 3011. pedestal run for COSMIC.

16:30. # 3012. LED Calibration run for COSMIC. (LED 1+5, 45~49V).

⚠ 16:41. #3012 stop, since HV supply (lower one) has been falling down.

16:42. # 3013. LED calibration run again. Setting is same as #3012.

✖ 16:58. # 3014. COSMIC. Start. failed.

17:00. # 3015. COSMIC. Start.

23:41 # 3015 stopped

07 / June / 2002

load HV set for α 0:11 #3016 pedestal run for α ADC 159, & 160. are very wide pedestal. RMS ~ 400 ch.
Pedestal run. Again.

0:14 #3017. pedestal run. Again.

0:36 #3018 //

0:56 #3019 //

! ADC 159 & 160 ~~are~~ are no good.1:31 #3020 pedestal run for α 1:34 #3021 LED 1 & 5 for α HV 345-493 set \Rightarrow Failed since HV error.

07/June/2002

1:43 #3022 LED 1&5 for α HV {45-49} set1:55. #3023. α .

load HV set for CR

2:06 #3024 pedestal for CR

2:09 #3025 LED 1&5 for CR {45-49} ∇

#3026 ~ #3029. --- failed.

2:46. #3030. COSMIC. Start.

8:01 #3030 Stopped

 α -HV loaded.8:03 #3031 pedestal for α (4951 events)8:05 #3032 LED 1&5 flashing for α {45-49} ∇ 8:16 #3033 α run (5008 events)


normal-HV loaded

8:26 #3034 pedestal for CR (5120 events)

8:27 #3035 LED 1&5 flashing for CR {45-49} ∇

8:39 #3036 CR run.


12:52. Stop the RUN #3036, due to pick TDC module up to AIST.

 We cannot take DATA with each trigger counter separately, because we have no TDC module for trigger counter timing information.

So, we'll take DATA using only TC2 (MIDDLE) as DATA trigger.

13:48. #3037. COSMIC, triggering TC2 only.

21:26 Stop the RUN #3037. due to check TDC module.

#3038  Check the TDC. OK. Return to AIST.

07/June/2002

load HV set for α

22:52 #3039 pedestal for α .
 22:54 #3040 LED 1&5 for {45-49}V
 23:06 #3041 α Run

load HV set for CR

23:18 #3042 pedestal for CR
 23:19 #3043 LED 1&5 for CR {45-49}V
 23:34 #3044 CR Run (TC2 only)
 23:52. #3044. Stop. TDC is coming back!

08/June/2002.

0:00. #3045. Start. for COSMIC Ray RUN.
 8:27 #3045 stopped

 α HV file loaded

8:29 #3046 pedestal for α (5,388 events)
 8:31 #3047 LED 1&5 flashing for α {45,...,49}V
 8:43 #3048 α run (61,814 events)

normal HV file loaded

8:55 #3049 pedestal for CR (5,270 events)
 8:57 #3050 LED 1&5 flashing for CR {45,...,49}V
 9:09 #3051 CR run.

15:02. #3051. Paused. because of HV error.

Error channel is HV 13-4 (BK4). \rightarrow Enabled via WEB.

15:05. Resumed.

08/June/2002

16:02 #3051 stopped.

load HV set for alpha.

16:05 #3052 pedestal for α 16:07 #3053 LED 1&5 flashing for α HV setting {45-49}16:18 #3054 α Run

load HV set for CR

16:30 #3055 pedestal for CR

16:32 #3056 LED 1&5 flashing for CR run HV {45-49}

16:44 #3057 CR Run

S

23:41 #3059 stopped

HV file for α loaded.23:42 #3058 pedestal for α (5,981 events)23:44 #3059 LED flashing for α {45~49}V23:55 #3060 α run (52,309 events)

HV file for CR loaded

0:05 #3061 pedestal for CR (4,981 events)

0:07 #3062 LED flashing for CR {45~49}V

0:18 #3063 CR run.

7:49 stop 3063

7:50 #3064 pedestal for α load HV set for α 7:52 #3065 LED 1 & 5 {45~49}V for α 8:03 #3067 α

load HV set for CR

8:13 #3068 pedestal for CR

8:15 #3069 LED 1 & 5 {45~49}V for CR

8:26 #3070 CR

09/June/02

15:46 3070 stop

load HV set for α

15:47 #3071 pedestal for α

15:49 #3072 LED 1 & 5 {45~493V for α

16:00 #3073 α

load HV set for CR
16:13 #3074 pedestal for CR

16:14 #3075 LED 1 & 5 {45~493V for CR

16:26 #3076 CR

S

23:59 #3076 stopped

HV file for α loaded.

10/Jan/2002

0:00 #3077 pedestal for α (8,928 events)

0:02 #3078 LED 1 & 5 flashing for α {45~493V

0:15 #3079 α run.

0:24 #3080 pedestal for CR (5,069 events)

0:27 #3081 LED 1 & 5 flashing for CR {45~493V

0:38 #3082 CR run

8:06 stop 3082

HV file for α was loaded.

8:07 #3083 pedestal for α

8:08 #3084 LED 1 & 5 {45~493V for α

8:20 #3085 α

8:30 #3086 HV file for CR loaded
pedestal for CR

8:31 #3087 LED 1 & 5 {45~493V for CR

8:46 #3088 CR

10/ Jun/2002

16:15 #3088 CR run stopped.

16:16 #3089 failed. HV file for α loaded.

16:17 #3090 pedestal for α (5,044 events)

16:18 #3091 LED 1 & 5 flash for α 145...491V

16:30 #3092 α run (50,150 events)

HV file for CR loaded.

16:39 #3093 pedestal for CR (5,090 events)

16:41 #3094 LED 1 & 5 flash for CR 145~491V

16:53 #3095 CR run start.

11/ Jun/2002.

00:01 Stopped run 3095. 435 events triggered.

Hv file for α was loaded.

00:05 run #3096 pedestal run for α . 5/50 events

00:06 run #3097 Led run for α

00:08 run #3098 α run. 5,303 events

Hv file for Cosmic Ray was loaded.

~~00:29 run #3099 pedestal run for CR. 5/20 events~~

~~00:31 run #3100 Led run for CR. → failure! Hv file was incorrect.~~

00:33 run #3101 pedestal run for CR. ~~5/18 events~~ 5,238 events

00:38 run #3102 Led run for CR.

00:50 run #3103 CR run start

08:00 CR run #3103 was stopped. 413 events triggered.

Hv set for α was loaded.

8:02 pedestal run for α (5101 events) run #3104.

BT 22 (ch 159) overflow., since p.98 106/June 1

8:06 Led run for α run #3105

8:20 run #3106 & run start. => Pal (13).
run #3107 & run. 6,170 events

odbecht 12
disk nearly full
stopping run (u)
X-ute-3.0

no data on disk

以「不」用ファイル在西に消して1GB確保。
Back up 不願い(はあ)のバッチ

drive IC: 9 空き容量
加「残り」5.25MB

9:10 run #3108 & run. 50,280 events
HV set for CR was loaded.

9:20. run #3109 pedestal for CR. 5240 event
run #3110 Led for CR.

9:37 run #3111 CR start

6/10 持ち上げ
E=control/drvn/CPRES
一部はmidを移動
不可取

13:05

Flow rate increased up to ~~7.5~~ 7.6 lpm

16:05 RUN #3111 end 402 events

HV set for d RUN loaded

16:06 RUN #3112 Pedestal for d.

16:11 RUN #3113 LED for d

16:23 RUN #3114 d RUN

Normal HV set for Cosmic RUN restored

The mini-Card for C159-160 is replaced
Now ch 159-160 are OK!

17:00 RUN #3115 Pedestal for Cosmic

17:01 RUN #3116 LED for Cosmic

17:18 RUN #3117 Cosmic

It was found ~~that~~ during replacing the mini-card, the ADC RAW histogram titles were not correct.

The fal source code (adccalib.c) was modified correspondingly

after starting RUN #3117. Please re-compile FAL

Before the next calibration RUN.

17:36 SM

12/June/2002.

00:20 Stopped Cosmic Ray run #3117

re-compiled FAL done

00:30. HV set for α was loaded.

#3118 pedestal for α .

00:34 #3119 Led run for α

0:45 #3120 α run.

HV set for CR loaded.

0:55 #3121 pedestal for CR.

#3122 Led run for CR

1:10 #3123 CR run.

8:25 run #3123 was stopped.

HV set for α was loaded.

#3124 pedestal for α

#3125 Led run for α

~~#3126 α run.~~ → ~~no event~~ no event

8:46 #3137 α run

HV set for CR loaded.

8:55 # pedestal for CR

8:56 #3129 Led run for CR

9:10 #3130 Cosmic Ray run

16:01 #3130 stopped.

α HV file loaded

16:03 #3131 pedestal for α (5.162 events)

16:04 #3132 LED 1 & 5 flash for α

16:19 #3133 α

load HV set for CR

16:28 #3134 pedestal for CR

16:30 #3135 LED 1 & 5 {45~49}V for CR

16:45 #3136 CR

13/Jan/2002 0:04 #3136 stopped

0:05 #3137 pedestal for α (4.992 events)

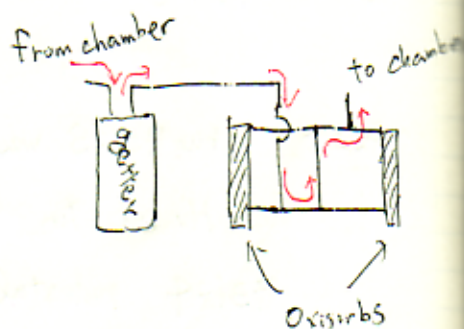
0:07 #3138 LED 1 & 5 flash for α

0:19 #3139 α run. (50.192 events)

normal HV file loaded

0:38

The Oxisorbs are by-passed
 Now getter is used for Purification
 only



0:43 #3140 pedestal for CR — failed

0:51 #3141 pedestal for CR

0:53 #3142 LED 1 & 5 {45~49}V for CR

1:07 #3143 CR

- 08:47 Stop CR #3143.
 HV file for α loaded.
- 08:48 #3144 pedestal for α .
 #3145 led run for α .
- 9:01 #3146 α run.
 HV file for CR loaded.
- 9:12 #3147 pedestal for CR.
 #3148 led run for CR.
- 9:25 #3149 CR.
- 15:42 stop 3149
 load HV set for α
- 15:43 #3150 pedestal for α
- 15:45 #3151 LED 1 & 5 {45 ~ 49}V for α
- 16:12 #3152 α - fail
_e
- 16:19 #3153 α
 load HV set for CR
- 16:32 #3154 pedestal for CR
- 16:34 #3155 LED 1 & 5 {45 ~ 49}V for CR
- 16:45 #3156 CR
- S
- 23:39 #3156 stopped
 HV file for α loaded.
- 23:40 #3157 pedestal for α (5,091 events)
- 23:42 #3158 LED 1 & 5 {45 ~ 49}V for α .
- 23:53 #3159 α run
- HV file for CR loaded
- 14/Jan/2002 0:02 #3160 pedestal for CR (5,156 events)
- 0:08 #3161 LED 1 & 5 for CR {45 ~ 49}V
- 0:19 #3162 CR run.

Japan vs Tunisia
 3 - 0

- 8:06 stop #3162
 HV file for α loaded.
- 8:07 #3163 pedestal run for α .
- 8:12 #3164 Led run for α .
- 8:23 #3165 α run
 HV file for CR loaded.
- 8:32 #3166 pedestal run for CR
- 8:35 #3167 Led run for CR.
- 8:48 #3168 CR \rightarrow failure. Pal drift work.
- 8:49 #3169 CR run.

11:43 earthquake.

- 13:14 #3169 stop
 stop circulation
 cold head s.v. \rightarrow 170K
 load HV set for α
 liquid N_2 setting (1.31 / 1.30) atm

- 13:15 #3170 pedestal for α
- 13:17 #3171 LED 1 & 5 {45-49} V for α
- 13:25 #3172 α \rightarrow failed HV error
- 13:56 #3173 α
- 13:58 start recovering a part of Xenon to 1 gallon cylinder. (~2L of liquid)
- 14:29 #3174 α
- 15:00 #3175 α
- 15:29 #3176 α
- 16:16 #3177 α
- 16:49 #3178 α
- 17:23 #3179 α

7 June
14/Jan/2002

109

18:01 #3180 α

18:20 #3181 pedestal for α

18:21 #3182 LED 1 & 5 flash for α {45...49}V

18:37 #3183 α run

19:03 #3184 α run

19:32 #3185 α run

20:01 #3186 α run

20:39 #3187 α run

21:36 #3189 α

load HV set for CR

21:45 #3189 pedestal for CR

21:47 #3190 LED 1 & 5 {45-49}V for CR

22:02 #3191 CR

(Add a dew point meter and high speed circulation pump.
He leak test $\sim 8 \times 10^{-8}$ mbar l/sec

15/June/2002

0:15 start evacuating purification line (include dew point meter & new circulation pump.)

8:22 Stop the RUN #3191, lower HV supply has ~~stopped~~ stopped.

SCFE start. \Rightarrow failure, again and again. \Rightarrow Fat is strange??

\Rightarrow DAQ machine reboot. ALOK.

9:12 HV set load for α .

9:14 pedestal for α . #3192.

9:15 LED calibration RUN for α . {45-49}V setting \rightarrow RUN #3193.

9:22 α . #3194. α .

LIT set load for COSMIC.

9:38 #3195 pedestal for COSMIC.

9:39 #3196 LED calibration for COSMIC. (LED 1+5, 45-49V setting).

9:51 #3197 COSMIC.

17:14 #3197 stopped

110

15/Jan/2002

HV file for α loaded

17:16

#3198 pedestal for α (5,031 events)

17:17 #3199 LED 1 & 5 flash for α {45...49}V

17:28 #3200 α run

HV file for CR loaded

17:40 #3201 pedestal for CR

17:42 #3202 LED 1 & 5 flash for CR {45...49}V

18:02 #3203 CR run

16/Jan/2002

0:00 #3203 stopped.

loaded HV set for α .

0:04 #3204 pedestal run for α (5000 events)

0:07 #3205 LED 1 & 5 for α {45-49}V.

0:21 #3206 α Run

loaded HV set for CR

HV could not be changed.
SCFE restarted.

0:42 #3207 pedestal Run for CR

0:45 #3208 LED 1 & 5 for CR {45-49}V

0:57 #3209 CR Run

1:05 Purification line He leak test ($< 24 \times 10^{-10}$ Pa m³/sec
 3.8×10^{-3} Pa

3:00 " ($< 27 \times 10^{-9}$
 3.6×10^{-3} Pa

8:02 #3209 stopped

loaded HV setting for α

8:03 #3210 pedestal Run for α

8:05 #3211 LED 1&5 for α {45-49}V8:19 #3212 α Run

loaded HVset for CR

8:34 #3213 pedestal for CR

8:36 #3214 LED 1&5 for CR {45-49}V.

8:49 #3215 CR Run

10:00 purification line 9.4×10^{-4} Pa

14:00 { Circulation pump turn on

purification line baking start @ 40V

16:15 #3215 stopped

HV-file for α loaded ~~and~~ after restarting SCFE.16:48 ~~#3216~~ #3219 pedestal for α (5,120 ~~events~~)16:49 ~~#3217~~ #3220 LED 1&5 flash for α {45-49}V17:01 ~~#3218~~ #3221 α run (50,659 evts)

loaded CR hv file

17:11 #3222 pedestal for CR (5,639 evts)

17:12 #3223 LED 1&5 flash for CR {45-49}V

17:25 #3224 CR run

17/ Jun/2002 He leak test of the ~~the~~ blue small diaphragm pump $< 1 \times 10^{-10}$ Pa m³/sec

0:10 stop 3224 (HV error occurred, and HV did not restart automatically)

load HV set for α 0:14 #3225 pedestal for α 0:16 #3226 LED 1&5 {45-49}V for α 0:29 #3227 α

load HV set for CR

0:39 #3228 pedestal for CR — trigger miss

0:44 #3229 pedestal for CR

0:45 #3230 LED 1&5 for CR {45-49}V

1:01 #3231 CR

#3216
S
#3218
failed.

112 12/Jan/2002.

1:19 purification line baking → ~~70~~V

5:50 " baking off
Furnace

8:00. Stop the COSMIC RUN. # 3231.

Hv reset for α.

8:02. # 3232. pedestal run for α.

8:03. # 3233. LED calibration RUN for α. (same as previous setting).

8:14. # 3234. α RUN.

HV reload to COSMIC RUN.

8:24. # 3235. pedestal run for COSMIC.

8:26. # 3236. LED calibration RUN for COSMIC. (same as previous setting).

8:37. # 3237. COSMIC rays RUN.

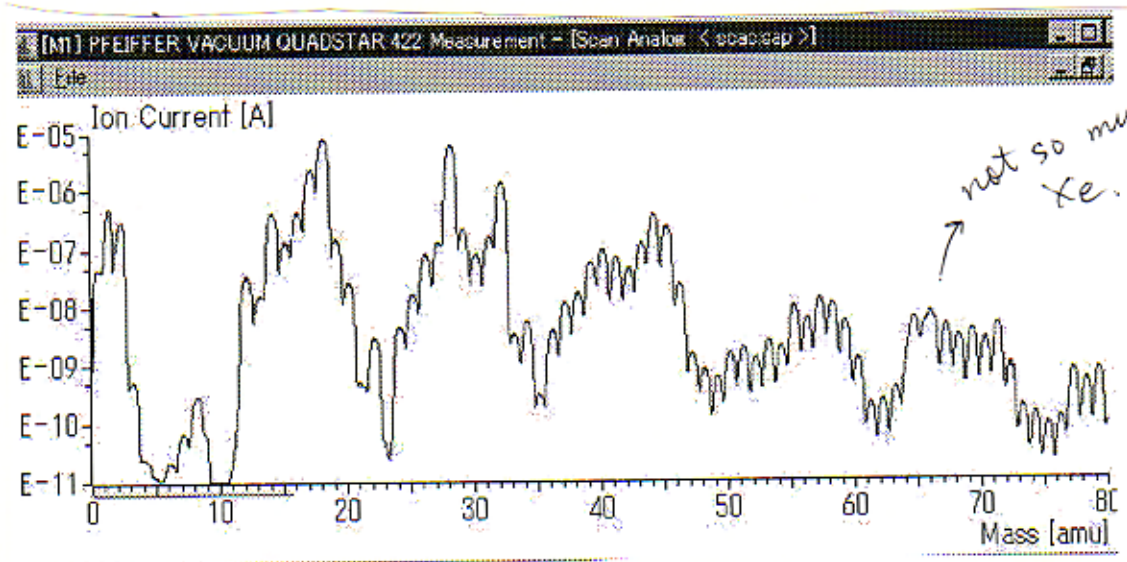
11:53 circulation pump stop $P_{\text{purification}} \sim 2.5 \times 10^{-3} \text{ Pa}$

12:40 \hookrightarrow ~~P_{prf}~~ P_{prf} is improving \Rightarrow saturated @ $1.4 \times 10^{-3} \text{ Pa}$

13:50 RGA with mass spectrometer rga00017

- circulation pump off
- baking off

$P_{\text{prf}} \sim 1.4 \times 10^{-3} \text{ Pa}$



[M] PFEIFFER VACUUM QUADSTAR 422 Measurement - [MultColTab]

File

Measurement Number: 14				Process	Process
Nbr	Type	Ident	Unit	13:38:27	13:38:04
0	Part.Pres	TOTAL	mbar	2.017E-05	2.017E-05
1	Part.Pres	Ar	mbar	1.100E-07	1.103E-07
2	Part.Pres	CO2	mbar	2.913E-07	2.935E-07
3	Part.Pres	H2	mbar	1.106E-07	1.080E-07
4	Part.Pres	H2O	mbar	1.012E-05	1.009E-05
5	Part.Pres	CxHy	mbar	7.231E-08	7.307E-08
6	Part.Pres	N2 / CO	mbar	7.443E-06	7.460E-06
7	Part.Pres	O2	mbar	2.026E-06	2.037E-06
8	Part.Pres	He	mbar	1.078E-10	1.063E-10
9					

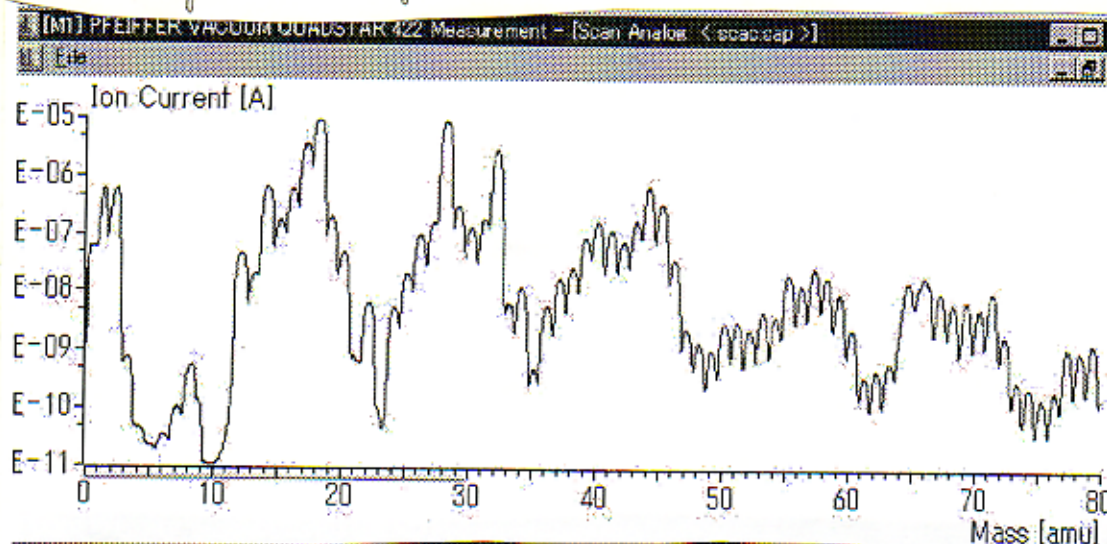
14:05

close the valve between circulation pump and chamber
to evacuate the residual xenon gas between the valve
and chamber

15:06

~~P_{prof}~~ $\sim 1.3 \times 10^{-3}$ Pa no significant improvement

RGA again vga00018



[M] PFEIFFER VACUUM QUADSTAR 422 Measurement - [Scan Analyse <scap.scap>]

File

Measurement Number: 8				Process	Process
Nbr	Type	Ident	Unit	15:08:53	15:09:16
0	Part.Pres	TOTAL	mbar	2.404E-05	2.373E-05
1	Part.Pres	Ar	mbar	1.609E-07	1.560E-07
2	Part.Pres	CO2	mbar	4.124E-07	3.979E-07
3	Part.Pres	H2	mbar	1.716E-07	1.655E-07
4	Part.Pres	H2O	mbar	1.040E-05	1.034E-05
5	Part.Pres	CxHy	mbar	9.579E-08	9.193E-08
6	Part.Pres	N2 / CO	mbar	9.438E-06	9.333E-06
7	Part.Pres	O2	mbar	3.358E-06	3.251E-06
8	Part.Pres	He	mbar	1.633E-10	1.565E-10
9					

17/ Jun 2002

16:00 #3237 stopped

HV file for α loaded.16:01 #3238 pedestal for α (5114 evts)16:03 #3239 LED 1&5 for α {45-49V}16:14 #3240 α run (50,748 evts)

HV file for CR loaded

16:23 #3241 pedestal for CR (5,011 evts)

16:24 #3242 LED 1&5 for CR

16:36 #3243 CR run

21:30 #3243 stopped to start the circulation with large pump

21:32 #3244 pedestal for α (5389 evts)21:33 #3245 LED 1&5 flushing for α {45...49V}

* vacuum level @ purification line

 $\sim 1.2 \times 10^{-3}$ Pa ~~was~~ w/ circulation pump off $\sim 2.3 \times 10^{-3}$ Pa w/ " on⇒ probably due to
the outgassing
from the pump* Dewpoint meter was installed just after the pump
readout of the controller was fed into the data logger

(4mA - 20mA DC current)

#3244, 3245 wrong!

HV file for α was not loaded.21:52 #3244 again pedestal for α (5479 evts)

21:53 #3245 again LED 1&5

22:15 #3246 α to monitor * after restarting circulation
w/ larger pump

#3246 stopped

22:40 HV file for CR loaded

#3247 CR started

18/June/2002.

0:02 #3247 Stop.

HV set for α .

0:04. ~~#3248. α .~~ failure

0:05. #3249. α . (41104 evt taken).

HV set for COSMIC.

0:13. #3250. COSMIC.

0:05. #3250 Stop.

HV set for α .

0:06. #3251. α . (53226 evt. taken)

HV set for COSMIC.

0:16. #3252. COSMIC.

0:05. #3253. Stop.

HV set for α .

0:06. #3253. α .

HV set for COSMIC. (39606 events).

0:14. #3254. COSMIC.

0:04. #3254 Stop.

HV set for α .

0:05. #3255. α . (4942 events).



There are NO drastic change of the light yield.

Let's increase flow rate! (8.6 g/m \rightarrow 12.8) (pressure ^{1.5 atm} 3 atm)

03:23. #3256. α .

04:00 #3257 α Run

HV set for CR

4:11 #3258 CR Run

Monitoring RON
for New PUMP.

18/ Jun./ 2002.

05:05. Stop #3258

HV set for α .05:07. #3259. α . (30998 events).

Checking the monitoring RUN#3255, #3256, #3252, #3259.

No drastic change. All OK.

➔ Flow Rate UP! (7atm \rightarrow 7.9atm) (12.8 μ /m \rightarrow 18.5) MAX

Max FLOW RATE \sim 18 μ /m. α . monitoring RUN, resumed.05:41. #3260. α . (5059 events).

HV set for CR

6:02 #3261 CR Run

7:04 #3261 Stopped

HV set for α .7:05. #3262. α .Monitoring STOP, Check for New Circulation System is finished. \rightarrow OK.7:22. #3263. pedestal for α .7:23. #3264. LED calibration RUN for α . (45-49V. for LED 1+5).

Stop the RUN #3264, because of HV error!

7:33 #3265. LED calibration, again.

7:45. #3266. α .

HV set for CR.

7:56 #3267 pedestal for CR

7:58 #3268 LED 125 for CR 945-493V

8:12 #3269 CR Run started

16:13 #3269 stopped \rightarrow

⚠ pstump12 on /scratch disk full (100% full).
 4/22/02. 16:13. data directory /scratch1/cosmic-jun-2002 is full. mid file is 100% full.
 4/22/02. 16:13. ... /scratch1/data on disk is 100% full.

Caution!!

\Rightarrow Last a few minutes in #3269 is contaminated by pedestal trigger due to wrong operation of logic switch

- 16:13 HV file for α loaded.
- 16:16 # 3270 alpha pedestal for
- 16:18 # 3271 LED 1&5 for α
- 16:32 # 3272 alpha (50094 evts)
- 16:41 ~~# 3273~~ HV file for CR loaded
- 16:54 # 3273 pedestal for CR (8647 evts)
- 16:55 # 3274 LED 1&5 for CR
- 17:08 # 3275 CR started \Rightarrow Event # 785217! wrong data.
Data size 821MB \rightarrow Delete

19/ Jun / 2002

00:15 # 3275 stopped

HV set for alpha.

#3276 ~ #3279 FAST BUS TEST

- 0:041 # 3280 pedestal for α (4987 evts)
- 0:43 # 3281 LED 1&5 flash for α {45, ..., 49}V
- 0:56 # 3282 α Run (49895 events)
HV set for CR
- 1:08 # 3283 pedestal for CR
- 1:11 # 3284 LED 1&5 flash for CR {45, ..., 49}V
- 1:23 # 3285 CR

Last a few minutes data should be discarded.

Event # ≥ 610
Time ≥ 2.89374

8:20 stop Cosmic Ray run #3285

Hv file for alpha loaded.

8:22 # 3286 pedestal for α .

8:25 # 3287 Led run for α .

8:37 # 3288 HV α file for CR loaded (~100000 events)

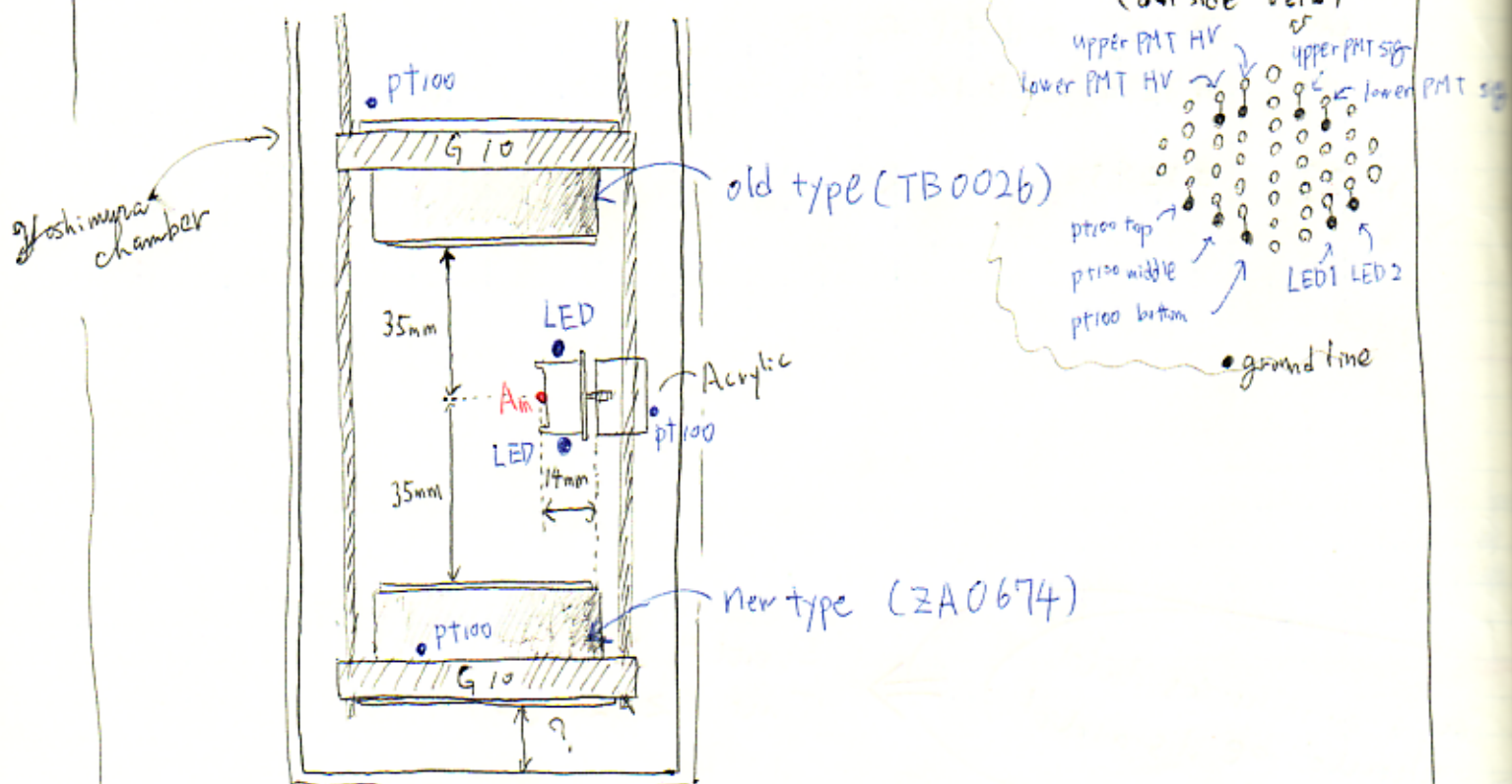
8:55 # 3289 pedestal for CR

8:56 # 3290 LED 1 & 5 {45~49}V for CR

3291 failure

9:10 # 3292 CR run

set up for new type PMT; Q.E. measurement



16:05 circulation stopped
20/June/2002

0:25 Stop #3292

0:26 HV file for α loaded
#3293 pedestal for α .

0:28 #3294 Led for α .

0:41 #3295 α

0:50 HV file for CR loaded.
#3296 pedestal for CR

0:53 #3297 Led run for CR

1:05 #3298 CR

5:00 Yoshimura chamber evacuation start

7:59 Stop #3298
HV file for α loaded

8:01 #3299 pedestal for α .

8:03 #3300 Led for α → failed

Led: 電圧が低かったため SCPE connection error
→ SCPE を再起動

#3301 Led for α → failure

Led run to 走らせると scpe.exe が止まる。HV12 connect できず。
→ HV restart. ⇒ HV connection OK!

9:00 #3302 Led for α

9:10 #3303 α

HV file for CR loaded

9:20 #3304 pedestal for CR

9:23 #3305 Led for CR

9:34 #3306 CR → failure. trigger miss.

#3307 CR