41

2005.3.1(火) 2/2ﾗﾝ-ﾅ

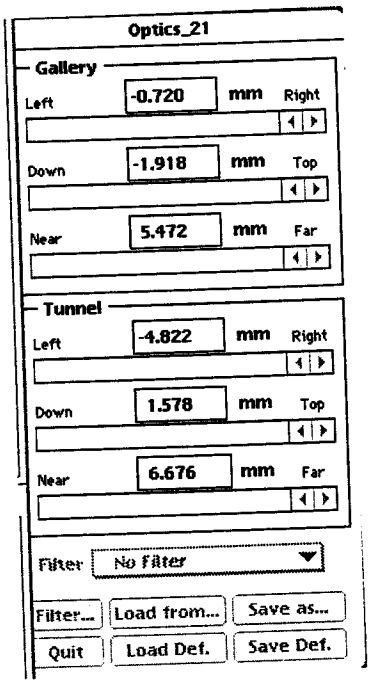
e^- 1nC ﾋﾞｰﾑ 5Hz

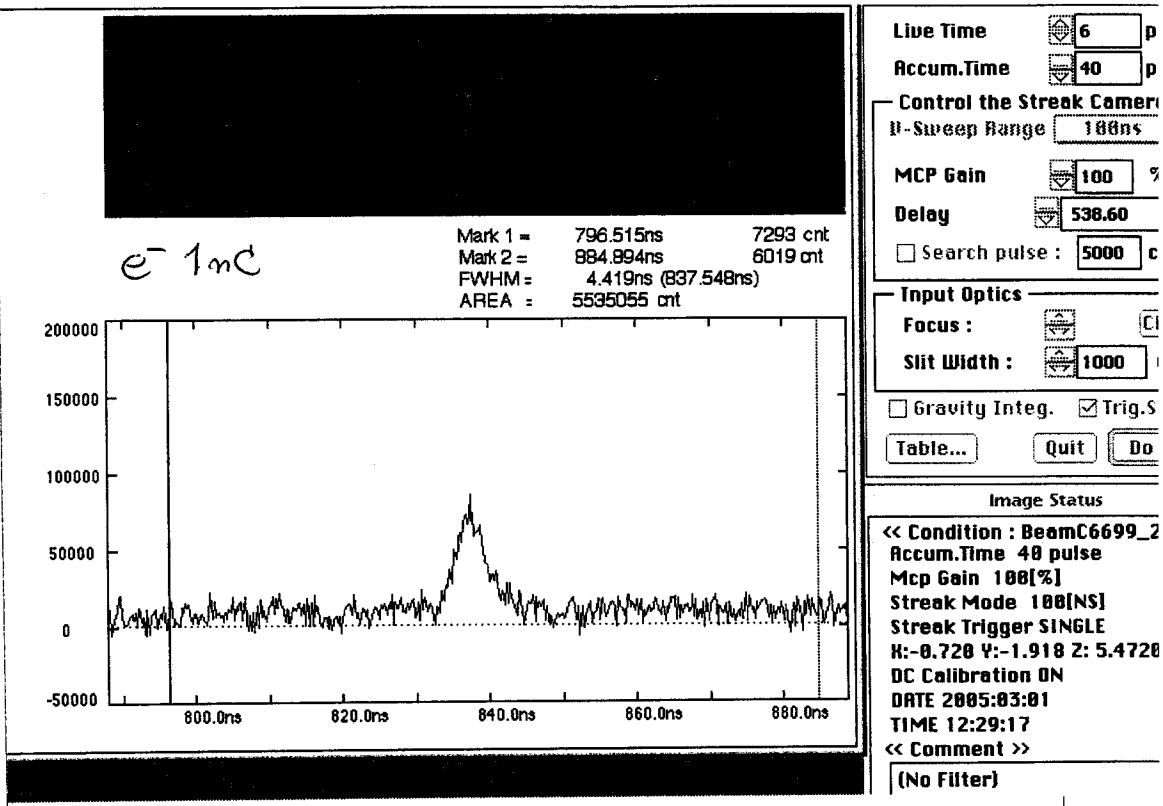
① FOCUS MODEでは ﾃﾞｨｽﾌｫｰｶｽしかみえない
(OTRはみえない)

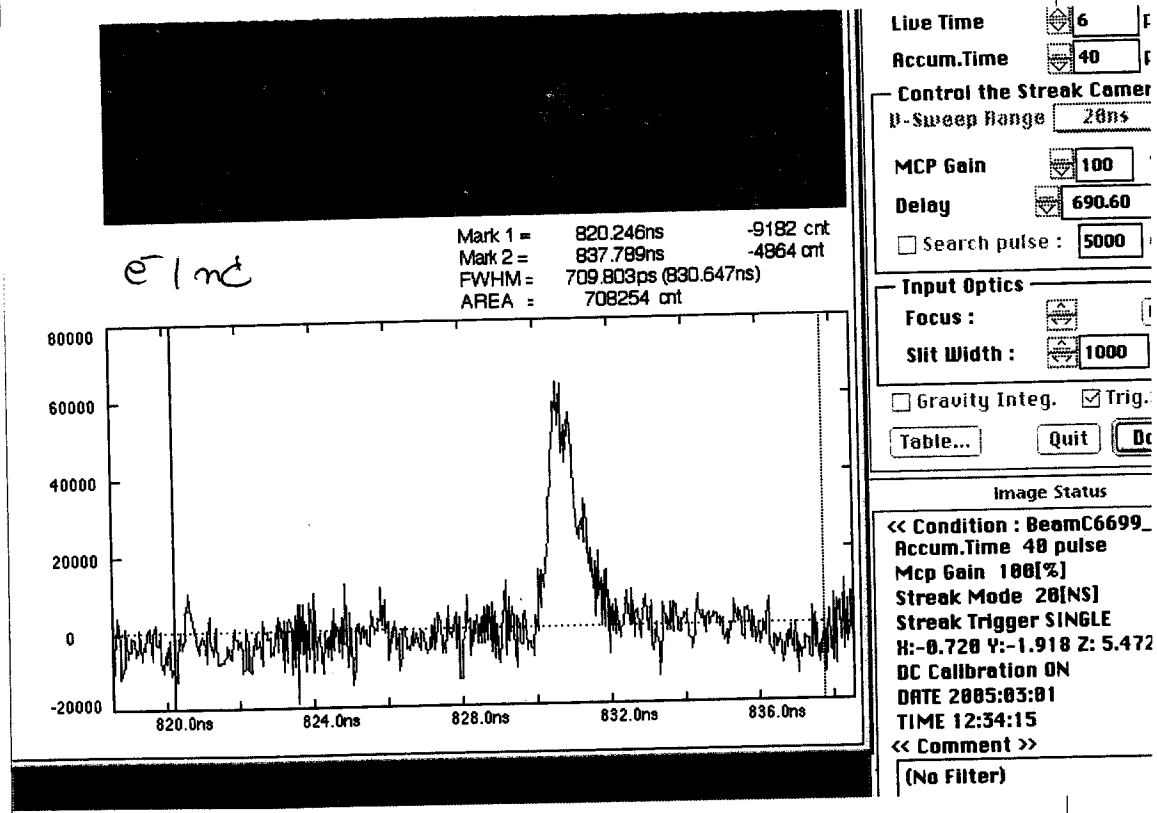
② streak modeでは 0.2ns rangeまで
みえるが、slit幅 1000mm (2000mm)

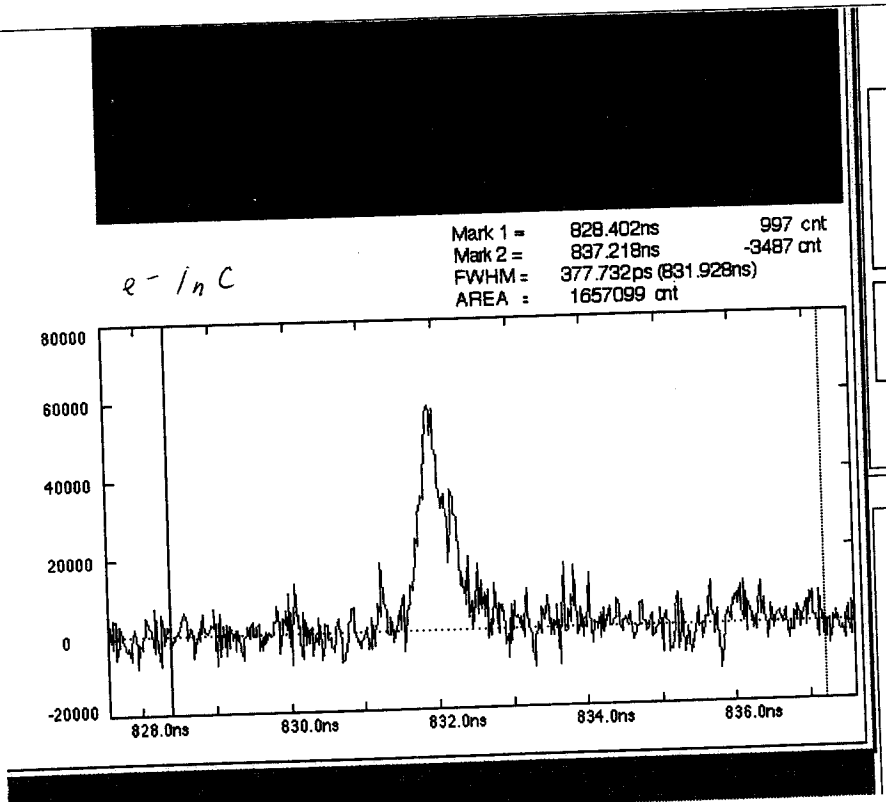
③ slitを絞ると S/N悪化にみえる.

前回の測定 Linac Study (4) p.85~
2004.9.3
と同様の結果



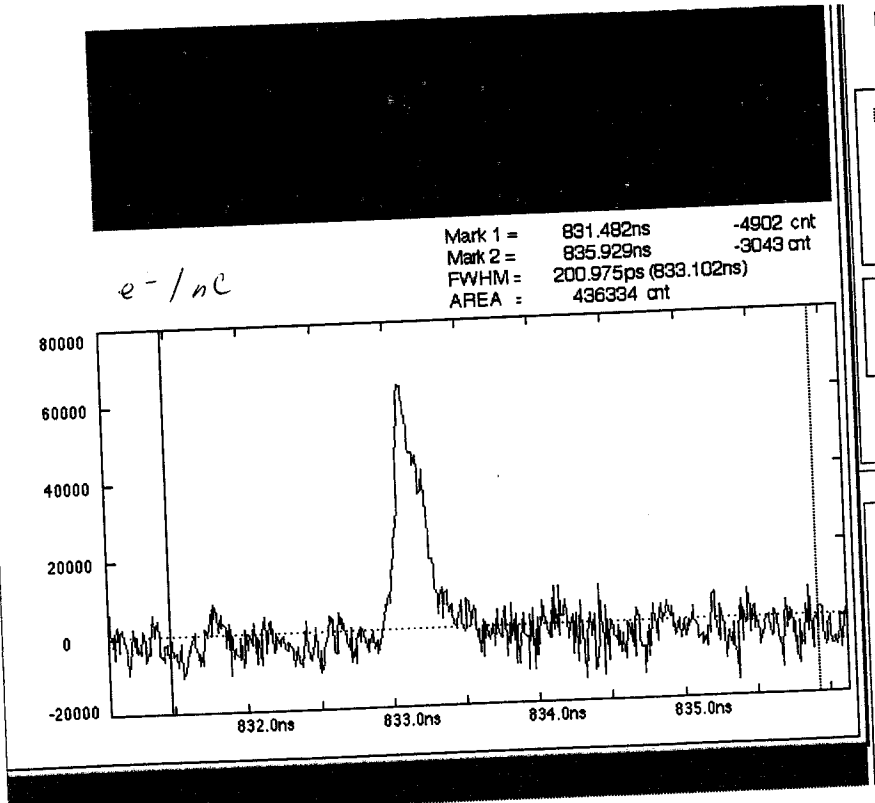

e⁻ 1nC
Mark 1 = 796.515ns 7293 cnt
Mark 2 = 884.894ns 6019 cnt
FWHM = 4.419ns (837.548ns)
AREA = 5535055 cnt
200000
150000
100000
50000
0
-50000
800.0ns
820.0ns
840.0ns
860.0ns
880.0ns
Live Time 6 p
Accum.Time 40 p
Control the Streak Camer
Sweep Range 100ns
MCP Gain 100 %
Delay 538.60
Search pulse : 5000 c
Input Optics
Focus :
Slit Width : 1000
Gravity Integ. Trig.S
Table... Quit Do
Image Status
<< Condition : BeamC6699_2
Accum.Time 40 pulse
Mcp Gain 100[%]
Streak Mode 100[NS]
Streak Trigger SINGLE
H:-0.720 V:-1.918 Z: 5.4720
DC Calibration ON
DATE 2005:03:01
TIME 12:29:17
<< Comment >>
(No Filter)


e⁻ 1nC
Mark 1 = 820.246ns -9182 cnt
Mark 2 = 837.789ns -4864 cnt
FWHM = 709.803ps (830.647ns)
AREA = 708254 cnt
80000
60000
40000
20000
0
-20000
820.0ns
824.0ns
828.0ns
832.0ns
836.0ns
Live Time 6
Accum.Time 40
Control the Streak Camer
Sweep Range 20ns
MCP Gain 100
Delay 690.60
Search pulse : 5000
Input Optics
Focus :
Slit Width : 1000
Gravity Integ. Trig.
Table... Quit
Image Status
<< Condition : BeamC6699_
Accum.Time 40 pulse
Mcp Gain 100[%]
Streak Mode 20[NS]
Streak Trigger SINGLE
H:-0.720 V:-1.918 Z: 5.472
DC Calibration ON
DATE 2005:03:01
TIME 12:34:15
<< Comment >>
(No Filter)



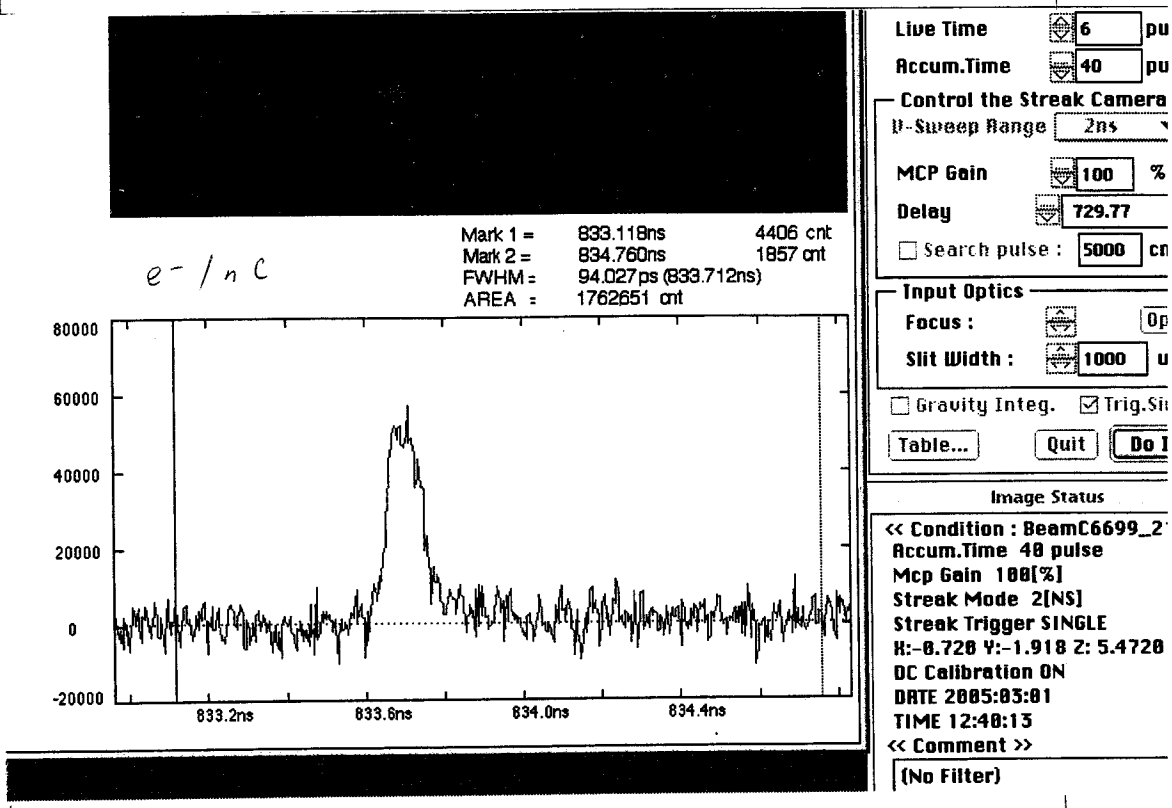
Live Time 6 pulse
Accum.Time 40 pulse
Control the Streak Camera
U-Sweep Range 10ns
MCP Gain 98 %
Delay 711.60 ns
Search pulse : 5000 cnt.
Input Optics
Focus : Open
Slit Width : 1000 um
Gravity Integ. Trig.Single
Table... Quit Do It

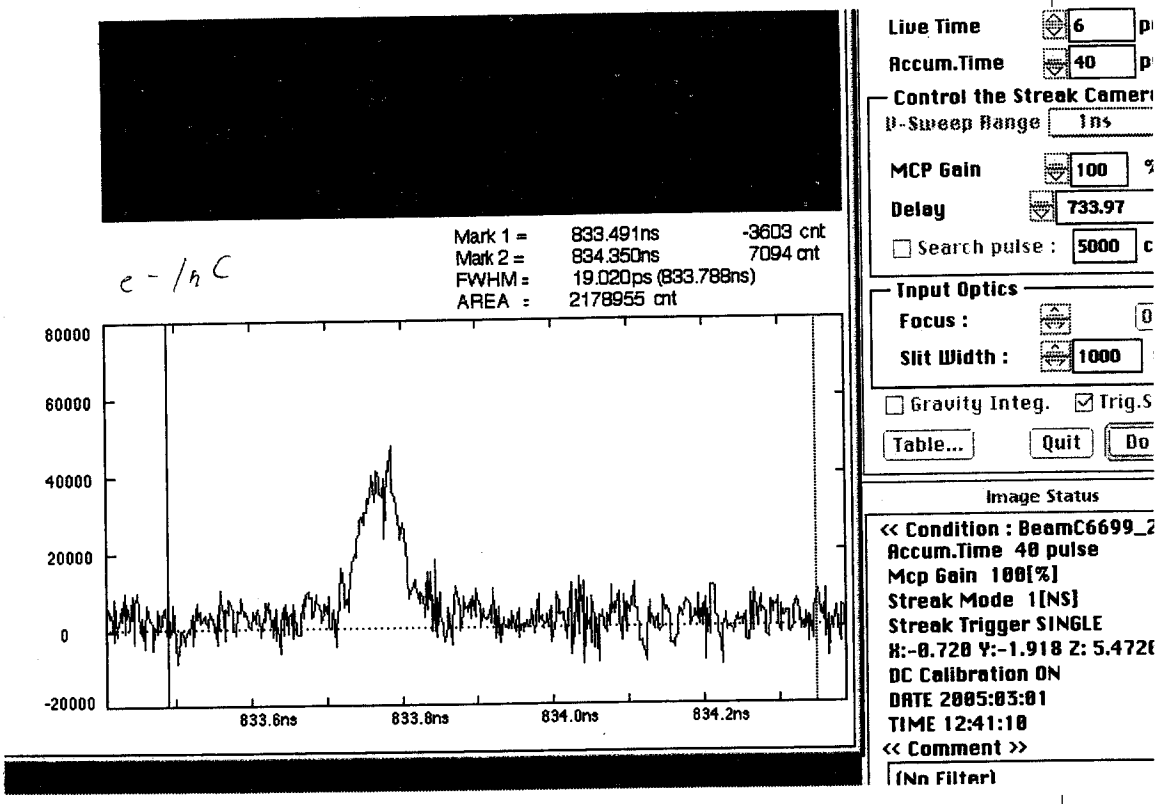
Image Status
<< Condition : BeamC6699_21 >>
Accum.Time 40 pulse
Mcp Gain 98[%]
Streak Mode 10[NS]
Streak Trigger SINGLE
H:-0.720 V:-1.918 Z: 5.4720
DC Calibration ON
DATE 2005:03:01
TIME 12:36:42
<< Comment >>
(No Filter)

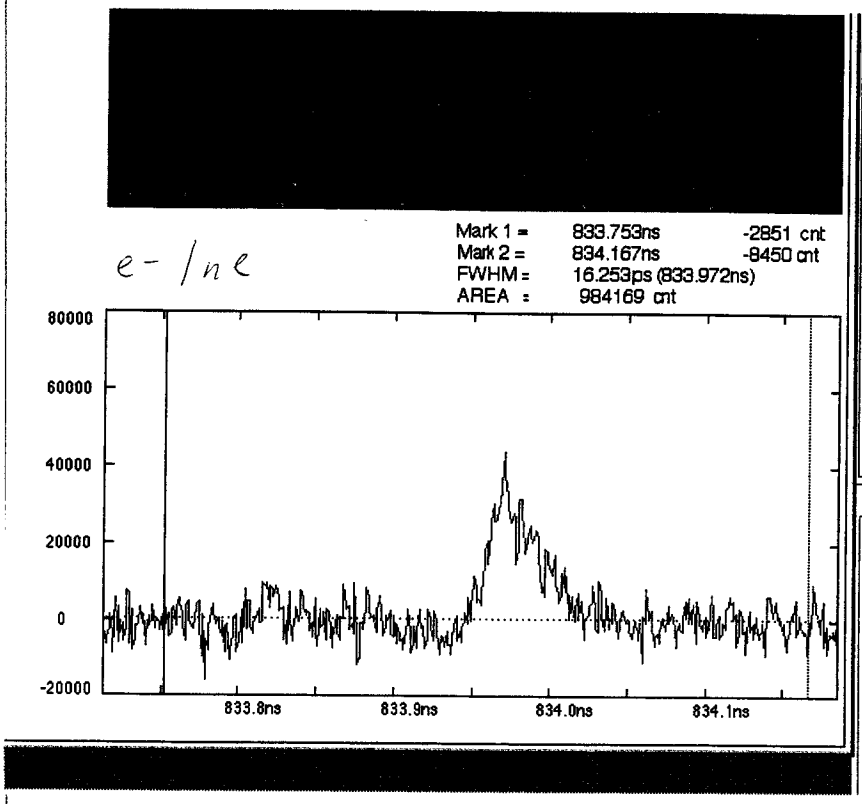


Live Time 6 pulse
Accum.Time 40 pulse
Control the Streak Camera
U-Sweep Range 5ns
MCP Gain 100 %
Delay 719.60 ns
Search pulse : 5000 cnt.
Input Optics
Focus : Open
Slit Width : 1000 um
Gravity Integ. Trig.Single
Table... Quit Do It

Image Status
<< Condition : BeamC6699_21 >>
Accum.Time 40 pulse
Mcp Gain 100[%]
Streak Mode 5[NS]
Streak Trigger SINGLE
H:-0.720 V:-1.918 Z: 5.4720
DC Calibration ON
DATE 2005:03:01
TIME 12:38:27
<< Comment >>
(No Filter)

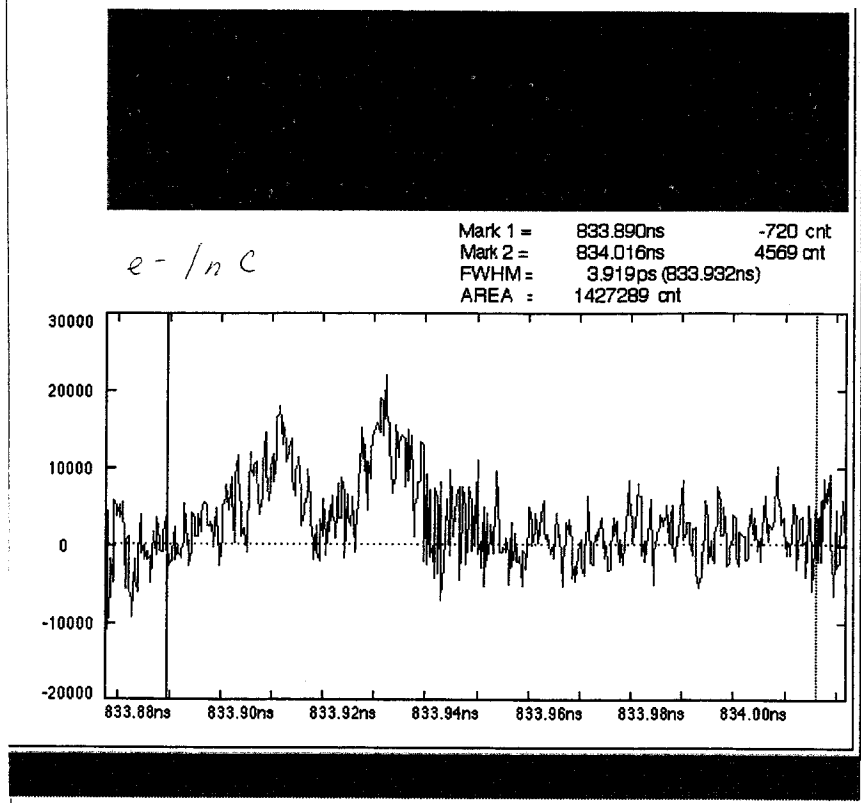

Mark 1 = 833.118ns 4406 cnt
Mark 2 = 834.760ns 1857 cnt
FWHM = 94.027ps (833.712ns)
AREA = 1762651 cnt
e⁻ / n C
80000
60000
40000
20000
0
-20000
833.2ns
833.6ns
834.0ns
834.4ns
Live Time 6 pu
Accum.Time 40 pu
Control the Streak Camera
Sweep Range 2ns
MCP Gain 100 %
Delay 729.77
Search pulse : 5000 cn
Input Optics
Focus :
Slit Width : 1000 u
Gravity Integ.
Trig.Si
Table...
Quit
Do
Image Status
<< Condition : BeamC6699_2
Accum.Time 40 pulse
Mcp Gain 100[%]
Streak Mode 2[NS]
Streak Trigger SINGLE
X:-0.720 Y:-1.918 Z: 5.4720
DC Calibration ON
DATE 2005:03:01
TIME 12:40:13
<< Comment >>
(No Filter)


Mark 1 = 833.491ns -3603 cnt
Mark 2 = 834.350ns 7094 cnt
FWHM = 19.020ps (833.788ns)
AREA = 2178955 cnt
e⁻ / n C
80000
60000
40000
20000
0
-20000
833.6ns
833.8ns
834.0ns
834.2ns
Live Time 6
Accum.Time 40
Control the Streak Camer
Sweep Range 1ns
MCP Gain 100
Delay 733.97
Search pulse : 5000
Input Optics
Focus :
Slit Width : 1000
Gravity Integ.
Trig.S
Table...
Quit
Do
Image Status
<< Condition : BeamC6699_2
Accum.Time 40 pulse
Mcp Gain 100[%]
Streak Mode 1[NS]
Streak Trigger SINGLE
X:-0.720 Y:-1.918 Z: 5.472
DC Calibration ON
DATE 2005:03:01
TIME 12:41:10
<< Comment >>
(No Filter)



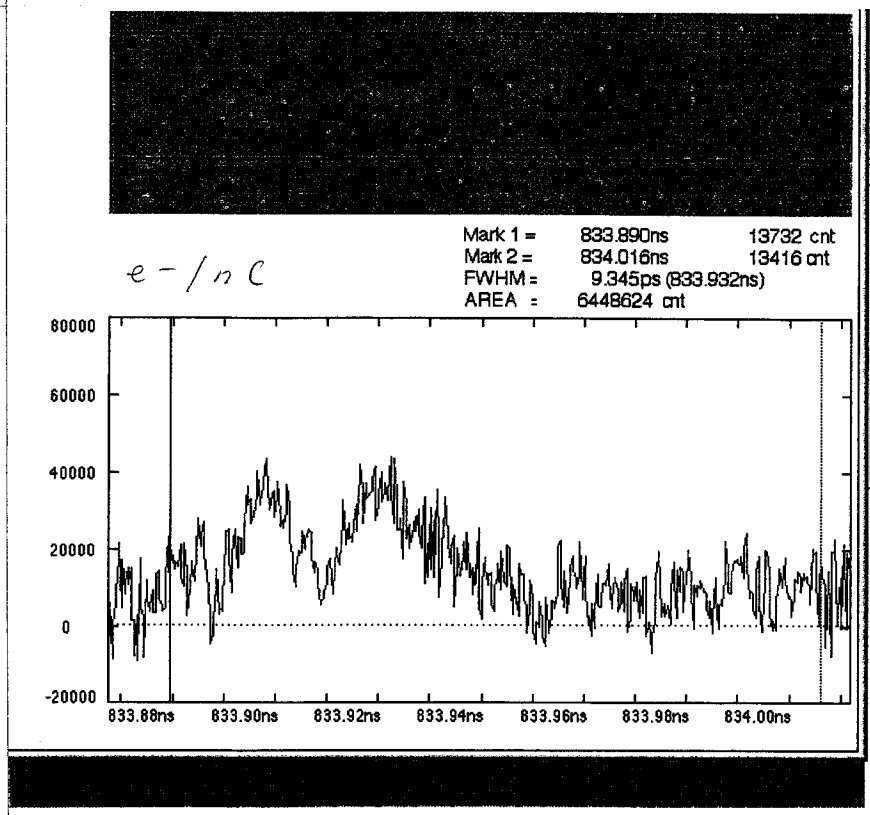
Live Time 6 pulse
Accum.Time 40 pulse
Control the Streak Camera
U-Sweep Range 0.5ns
MCP Gain 100 %
Delay 726.35 ns
Search pulse : 5000 cnt.
Input Optics
Focus : Open
Slit Width : 1000 um
Gravity Integ. Trig.Single
Table... Quit Do It

Image Status
<< Condition : BeamC6699_21 >>
Accum.Time 40 pulse
Mcp Gain 100[%]
Streak Mode 0.50[NS]
Streak Trigger SINGLE
X:-0.720 Y:-1.918 Z: 5.4720
DC Calibration ON
DATE 2005:03:01
TIME 12:43:43
<< Comment >>
(No Filter)



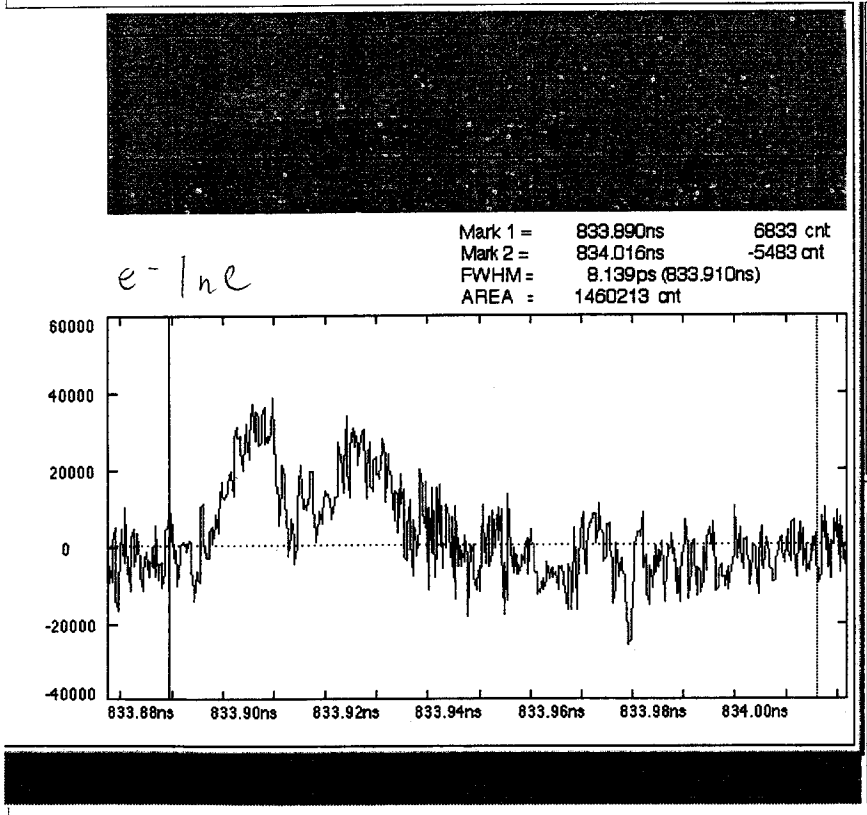
Live Time 6 pulse
Accum.Time 40 pulse
Control the Streak Camera
U-Sweep Range 0.2ns
MCP Gain 100 %
Delay 732.48 ns
Search pulse : 5000 cnt.
Input Optics
Focus : Open
Slit Width : 1000 um
Gravity Integ. Trig.Single
Table... Quit Do It

Image Status
<< Condition : BeamC6699_21 >>
Accum.Time 40 pulse
Mcp Gain 100[%]
Streak Mode 0.20[NS]
Streak Trigger SINGLE
X:-0.720 Y:-1.918 Z: 5.4720
DC Calibration ON
DATE 2005:03:01
TIME 12:45:33
<< Comment >>
(No Filter)



Live Time 6 pul
Accum.Time 100 pul
Control the Streak Camera
D-Sweep Range 0.2ns
MCP Gain 100 %
Delay 732.48
Search pulse : 5000 cn
Input Optics
Focus :
Slit Width : 1000 ur
Gravity Integ. Trig.Sin
Table... Quit Do It

Image Status
<< Condition : BeamC6699_21
Accum.Time 100 pulse
Mcp Gain 100[%]
Streak Mode 0.20[NS]
Streak Trigger SINGLE
H:-0.720 V:-1.918 Z: 5.4720
DC Calibration ON
DATE 2005:03:01
TIME 12:48:19
<< Comment >>
(No Filter)

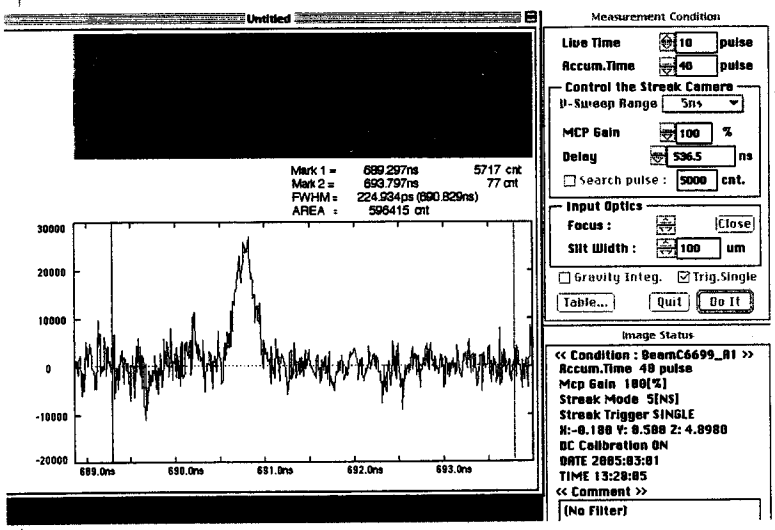


Live Time 6 pul
Accum.Time 100 pul
Control the Streak Camera
D-Sweep Range 0.2ns
MCP Gain 100 %
Delay 732.48
Search pulse : 5000 cnt
Input Optics
Focus :
Slit Width : 2000 un
Gravity Integ. Trig.Sin
Table... Quit Do It

Image Status
<< Condition : BeamC6699_21
Accum.Time 100 pulse
Mcp Gain 100[%]
Streak Mode 0.20[NS]
Streak Trigger SINGLE
H:-0.720 V:-1.918 Z: 5.4720
DC Calibration ON
DATE 2005:03:01
TIME 12:53:34
<< Comment >>
(No Filter)

(Fri Mar. 1) 12:30~ Multi-Bunch from AI Gun Study

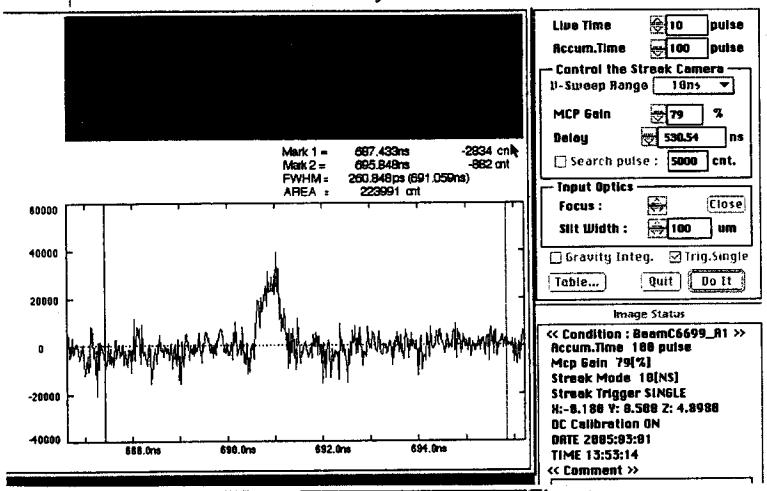
(K.f., m.S.)

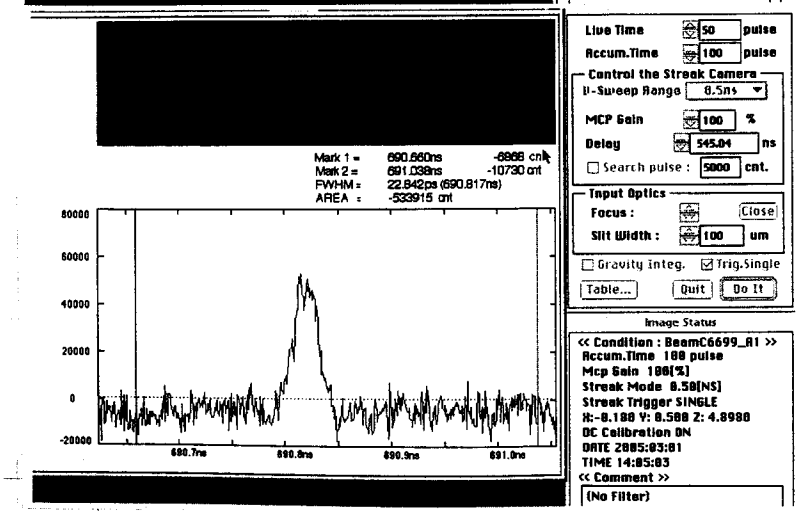


(40%出力.)

・1/8 0.2nC Gun Param. 使用(4ヵ月ぶりで使用したやつ.)

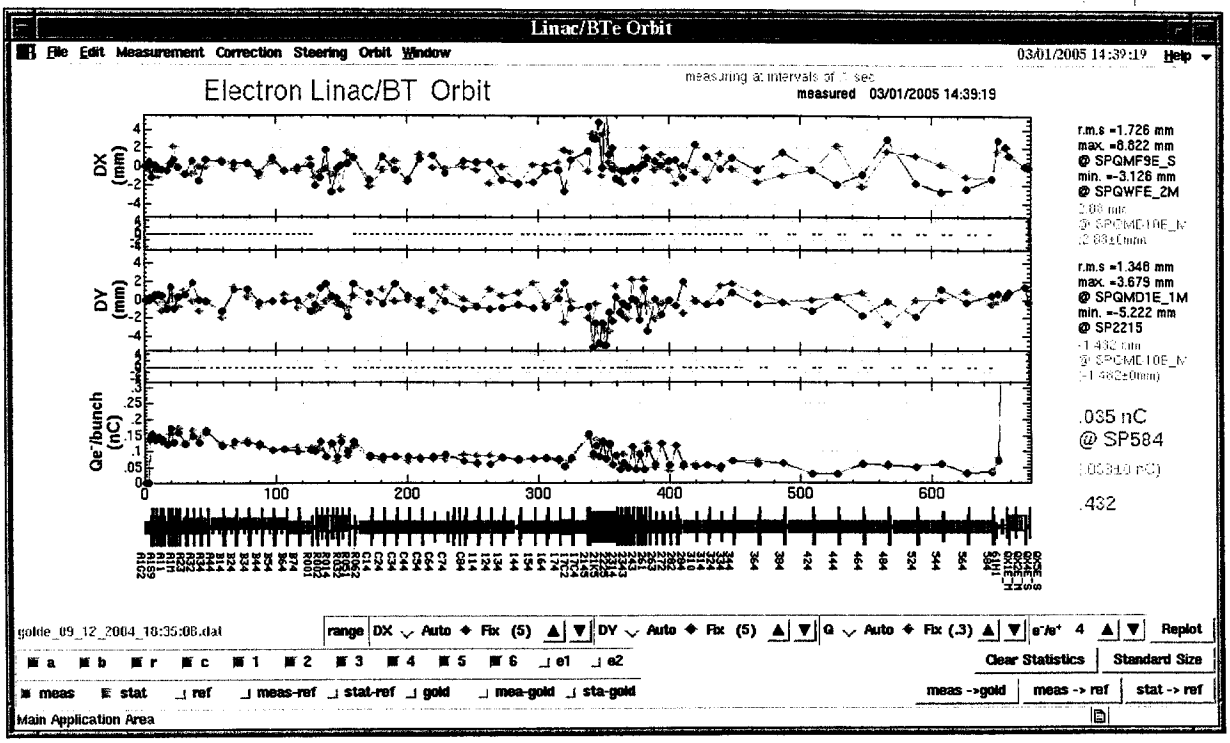
SHB 1,2 off 3.



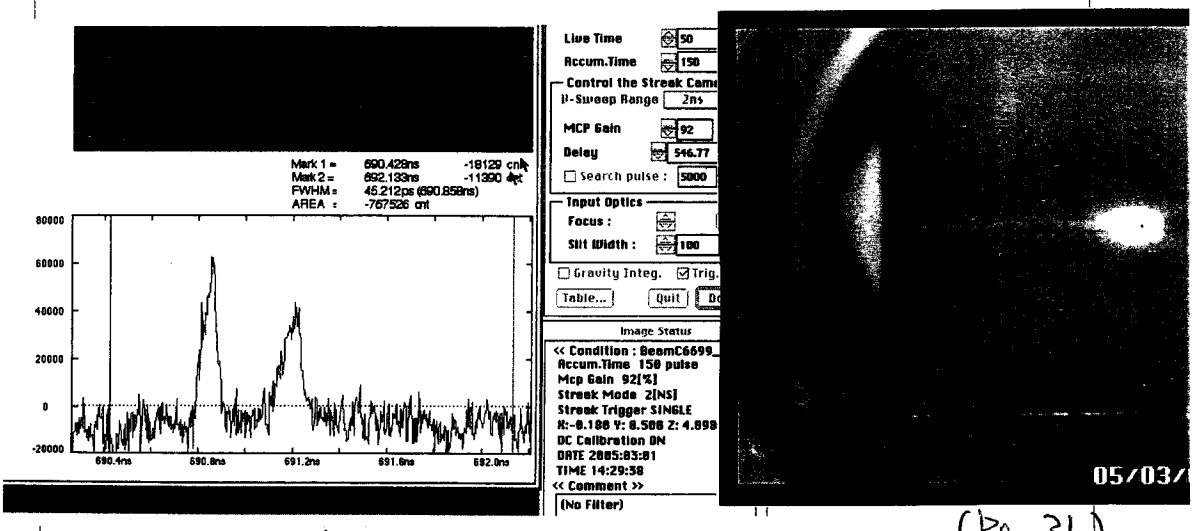


SHB1, 2ともONのままだった. (Touch Panelでは Off表示)
↑うそ

・timingを Standbyに変えて、測定.

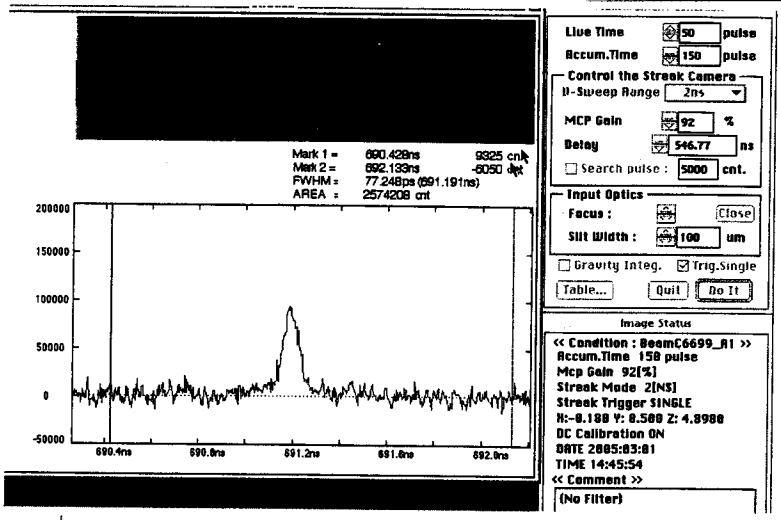


(SB-A,Bø 98.5 → 91.5 deg. に調整後)



(R0-31)

Standby.



Standby +57μs delay,

15:05 終了.

BCS スタディー

2005.Mar.01
15:42

KEKB e^+ モード

まず BCS offのまま. e^+ yield を最適化する.

SC-17-C5 0 A スポット
1 A スポット左へ

SC-17-C2 −371.868 A スポット明るい
−380. A On クレスト状態

		+5		+5		+5	
SB-C	96.5°	→	101.5	→	106.5	→	111.5
SB-1	93.5°		98.5		103.5		108.5

SC-61-H 約90° エナジースプレッドを小さくする。

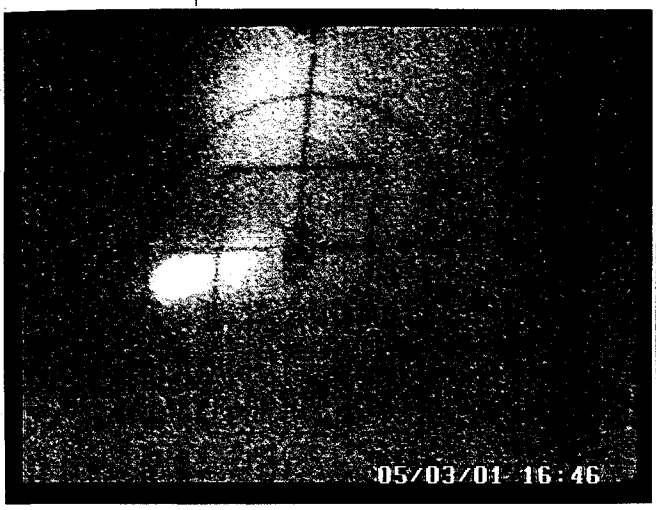
		元値
SB-2	366°	(93.5)
3	366°	(93.5)
4	366°	(93.5)
5	372.5°	(100.0)

3mm
24m 0.08%
3.77

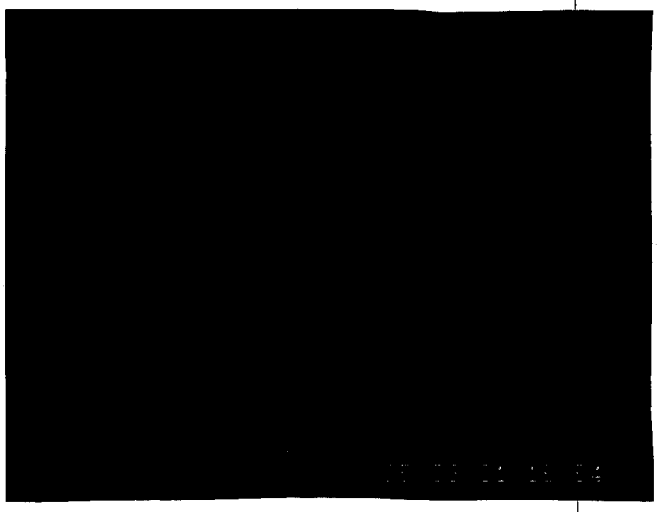
SC-17-C2

		−10°	−10°	+5°	
SB-C	~~40°~~	96.5° →	86.5° →	76.5° →	81.5°
SB-1	~~90°~~	93.5° →	83.5° →	73.5° →	178.5°

~~380A → 360°~~ −380A → −360A にセット



SC-61-H



SC-17-C2