

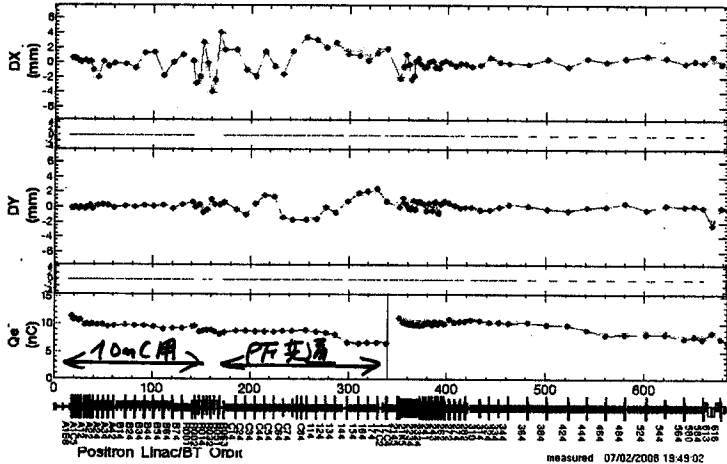
e^+ Beam

19:45

A, B 077-17. $e^-(1nC)$ Optics 2通り?.

Positron Linac/BT Orbit

measured 07/02/2008 19:47:46



r.m.s = 1.827 mm
max = 4.185 mm
min = -8.067 mm
SPQMF10P_K
SPQMF1P_3K

r.m.s = 864 mm
max = 3.332 mm
min = -2.36 mm
SPQMD9P_K
SP613

r.m.s = 1.116 mm
max = 3.985 mm
min = -4.027 mm
SP164
SPR042

r.m.s = 2.158 mm
max = 5.358 mm
min = -8.067 mm
SP164
SPQMF1P_3K

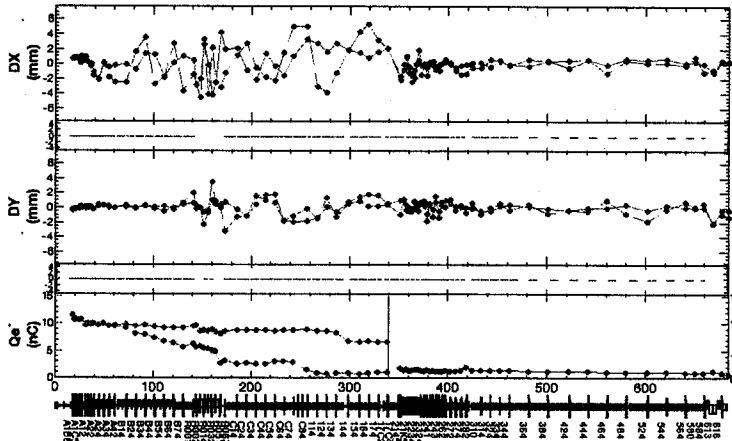
r.m.s = 1 mm
max = 3.493 mm
min = -3.214 mm
SPR042
SPR003

r.m.s = 1.094 mm
max = 5.961 mm
min = -8.067 mm
SP034
SPQMF1P_3K

r.m.s = 1.116 mm
max = 3.985 mm
min = -4.027 mm
SP164
SPR042

Positron Linac/BT Orbit

measured 07/02/2008 19:49:02

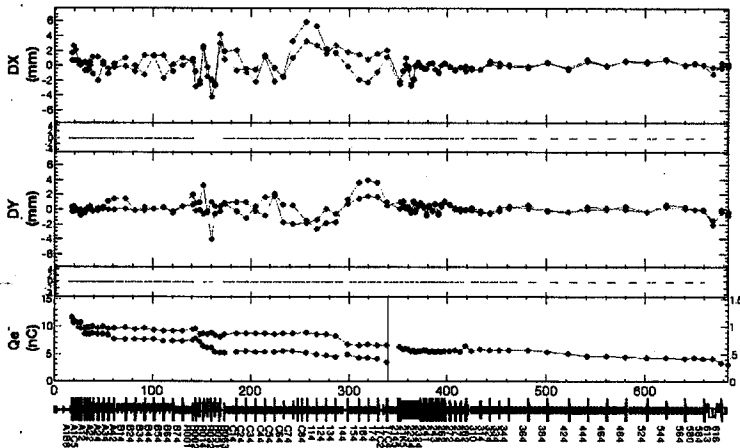


r.m.s = 2.158 mm
max = 5.358 mm
min = -8.067 mm
SP164
SPQMF1P_3K

r.m.s = 1 mm
max = 3.493 mm
min = -3.214 mm
SPR042
SPR003

Positron Linac/BT Orbit

measured 07/02/2008 19:49:56



r.m.s = 1.094 mm
max = 5.961 mm
min = -8.067 mm
SP034
SPQMF1P_3K

r.m.s = 1.116 mm
max = 3.985 mm
min = -4.027 mm
SP164
SPR042

17:19 9. parameter

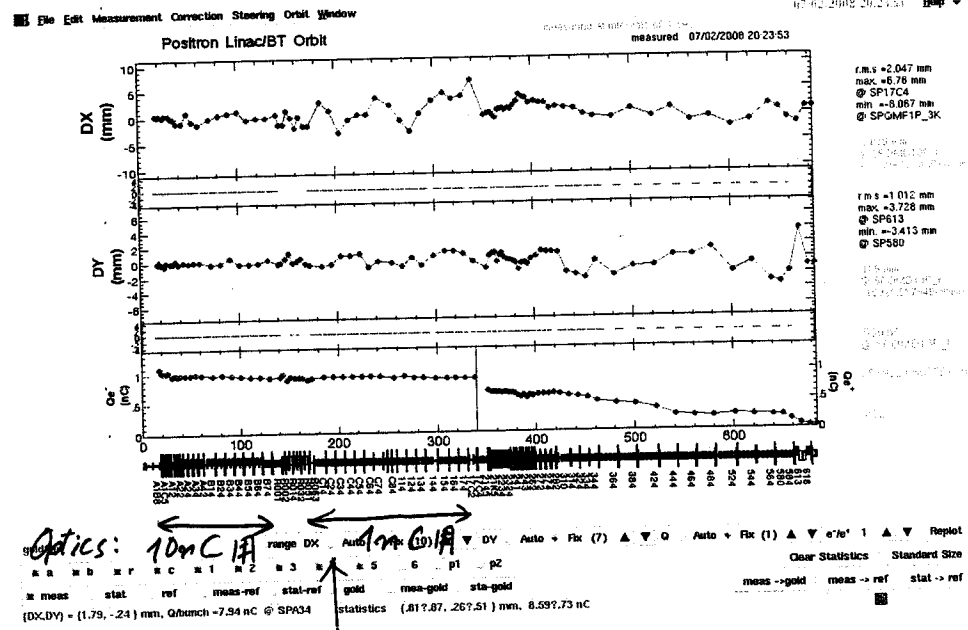
Q not e^- set (1nC) 7

STE e^- set (1nC)

やはり、10nC e^- 1nC-Optics で通すのは
むずかしい

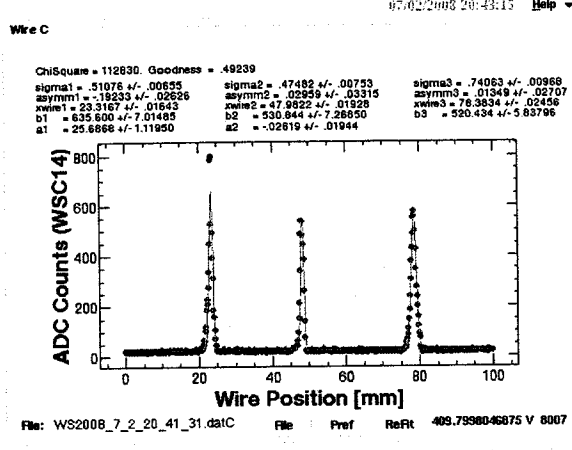
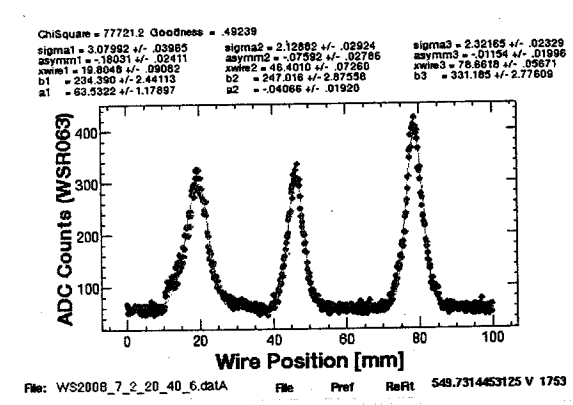
20:22:57 save (Q, ST 共)

e^- Beam



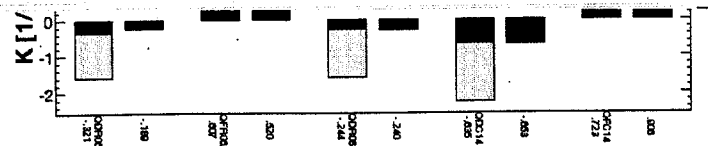
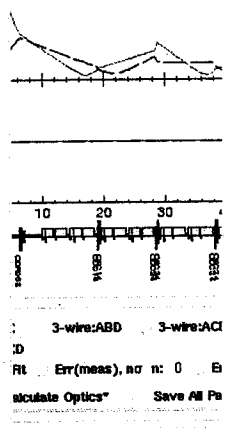
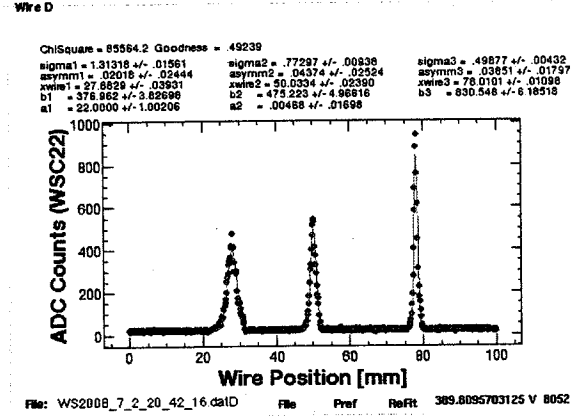
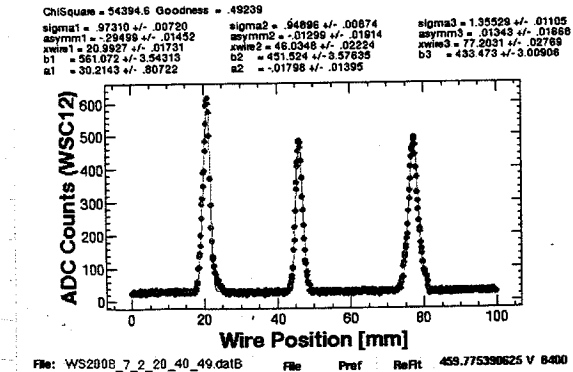
Wire Matching (e^- 1mC) \leftarrow \rightarrow e^-

File Edit Control Window



41.496	β_x @ QDC24
-2.981	α_x @ QDC24
41.522E-8	ϵ_x [m]
165.708	γ_x [1/mm-mra]
3.107	Bmag y:
1.2901E-7	cBmag y:
514.862	ysBmag y:

File Edit Control Window



Q-mag Read & Write
Read Q-mag from File
Save Q-mag to File

Wire A

ChiSquare = 240564. Goodness = .49239

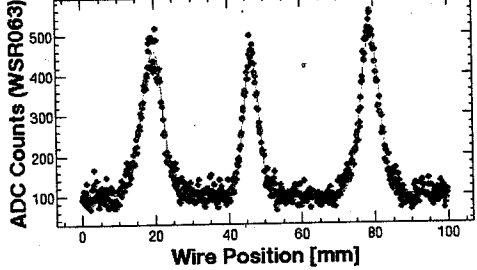
sigma1 = 2.82613 +/- .04335 sigma2 = 2.03435 +/- .03570 sigma3 = 2.50174 +/- .03519

asymm1 = -1.7893 +/- .02907 asymm2 = -.07297 +/- .03669 asymm3 = -.02721 +/- .02783

xiwire1 = 18.7535 +/- .10053 xiwire2 = 46.4477 +/- .08888 xiwire3 = 78.8988 +/- .08520

b1 = 356.817 +/- 4.48321 b2 = 347.073 +/- 5.17188 b3 = 402.518 +/- 4.71516

a1 = 103.046 +/- 2.01821 a2 = -.01996 +/- .03348



File: WS2008_7_2_21_24_23_data File Pref ReFit 549.7314453125 V 1758

Wire C

ChiSquare = 74547.1 Goodness = .49239

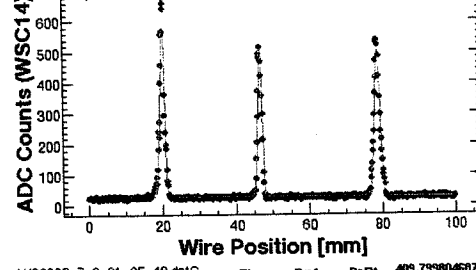
sigma1 = .61357 +/- .00670 sigma2 = .55974 +/- .00721 sigma3 = .80698 +/- .00891

asymm1 = -.13923 +/- .02244 asymm2 = .02298 +/- .02707 asymm3 = .02947 +/- .02283

xiwire1 = 20.1111 +/- .01687 xiwire2 = 48.5231 +/- .01843 xiwire3 = 78.5437 +/- .02236

b1 = 555.836 +/- 5.20938 b2 = 488.103 +/- 5.46261 b3 = 480.464 +/- 4.54831

a1 = 28.3819 +/- .92043 a2 = -.01487 +/- .01594



File: WS2008_7_2_21_25_48_dataC File Pref ReFit 405.7998046875 V 8012

Wire B

ChiSquare = 49192.1 Goodness = .49239

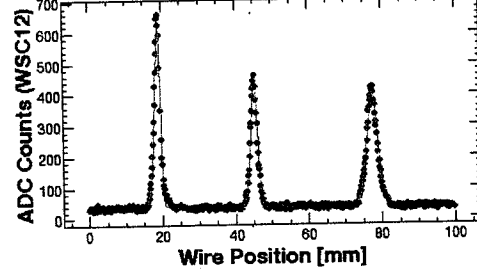
sigma1 = 7.9206 +/- .00587 sigma2 = .92894 +/- .00923 sigma3 = 1.44044 +/- .01289

asymm1 = -.28122 +/- .01467 asymm2 = -.01846 +/- .02071 asymm3 = .00737 +/- .01627

xiwire1 = 18.9499 +/- .01423 xiwire2 = 45.1075 +/- .02351 xiwire3 = 77.3816 +/- .02223

b1 = 586.053 +/- 3.79122 b2 = 401.492 +/- 3.44086 b3 = 365.133 +/- 2.77762

a1 = 38.7953 +/- .76320 a2 = -.02161 +/- .01327



File: WS2008_7_2_21_25_6_dataB File Pref ReFit 455.775390625 V 8405

Wire D

ChiSquare = 49080.7 Goodness = .49239

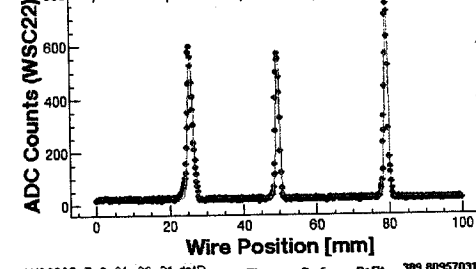
sigma1 = .72701 +/- .00822 sigma2 = .51888 +/- .00482 sigma3 = .51670 +/- .00390

asymm1 = .18441 +/- .01746 asymm2 = .02797 +/- .01884 asymm3 = -.17533 +/- .01540

xiwire1 = 25.4619 +/- .01555 xiwire2 = 49.4417 +/- .01261 xiwire3 = 78.2920 +/- .00979

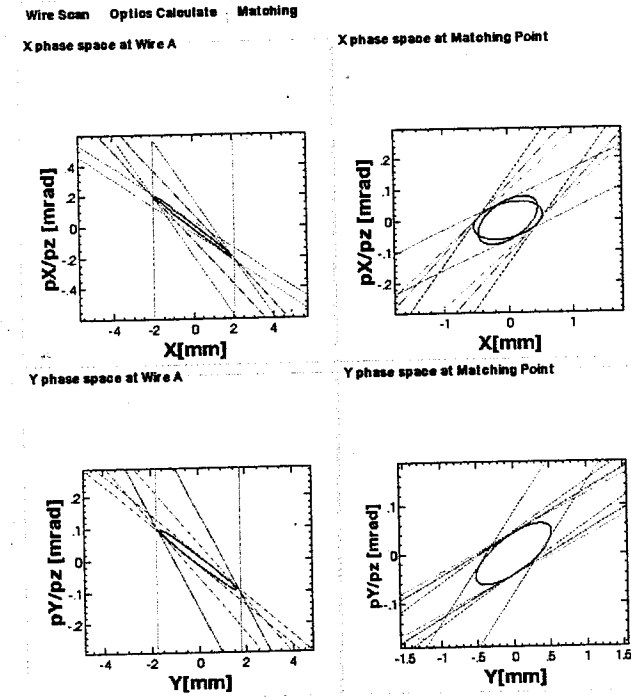
b1 = 528.482 +/- 3.88315 b2 = 558.895 +/- 4.88703 b3 = 709.368 +/- 4.59418

a1 = 28.4021 +/- .74239 a2 = -.00238 +/- .01278



File: WS2008_7_2_21_26_31_dataD File Pref ReFit 385.8095703125 V 8057

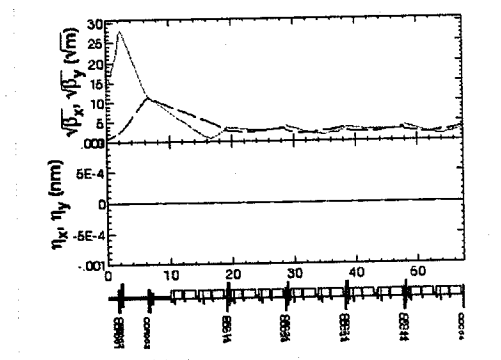
Select Matching zone on localhost:11.0



Results of Measurement

β_x @QDC24 [m] :	9.203	β_y @QDC24 [m] :	12.091
α_x @QDC24 :	-3.70	α_y @QDC24 :	-1.062
ϵ_x [m] :	3.0591E-8	ϵ_y [m] :	2.2186E-8
γ_x [r.m.m.mrad] :	122.084	γ_y [r.m.m.mrad] :	88.542
Bmag x :	1.116	Bmag y :	1.000
sBmag x :	3.4124E-8	sBmag y :	2.2186E-8
ysBmag x :	136.187	ysBmag y :	88.542

Optics Plot



Wire Selection

3-wire:ABC 3-wire:ABD 3-wire:ACD 3-wire:BCD

4-wire:ABCD

NonLinearFit Err(meas), no n: 0 Err(opt) (%): 0

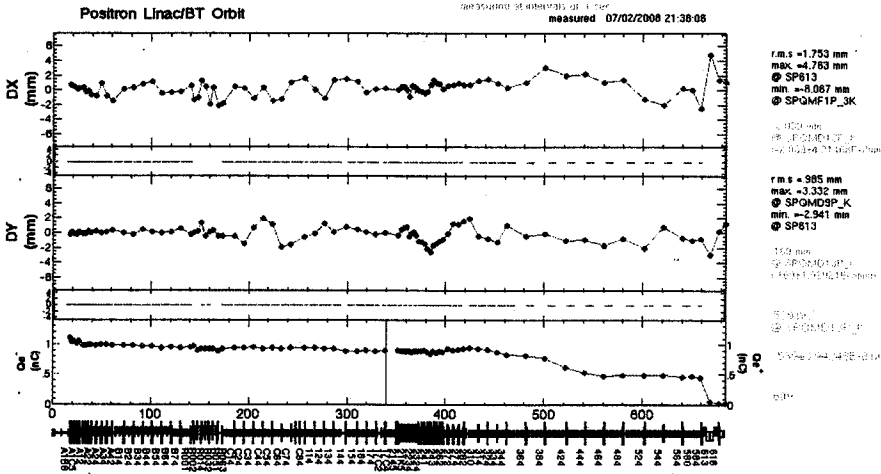
Calculate Optics Save All Parameters

Qmag values were SAVED to Adata1\KEKB\Wire\LINAC\sector\Celectron\data\Qvalue\qname_2008_7_2_21_24_13_data

45

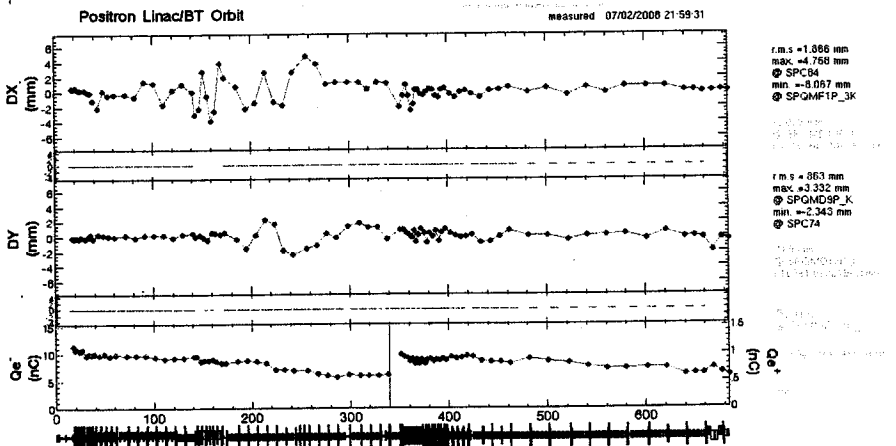
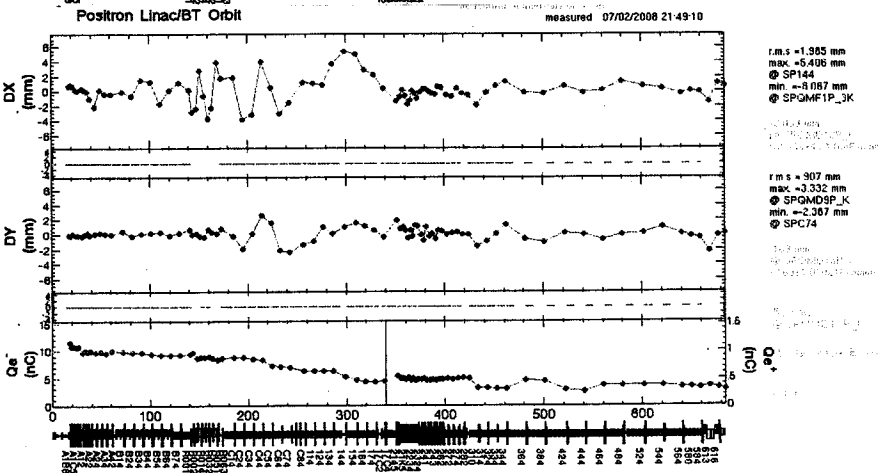
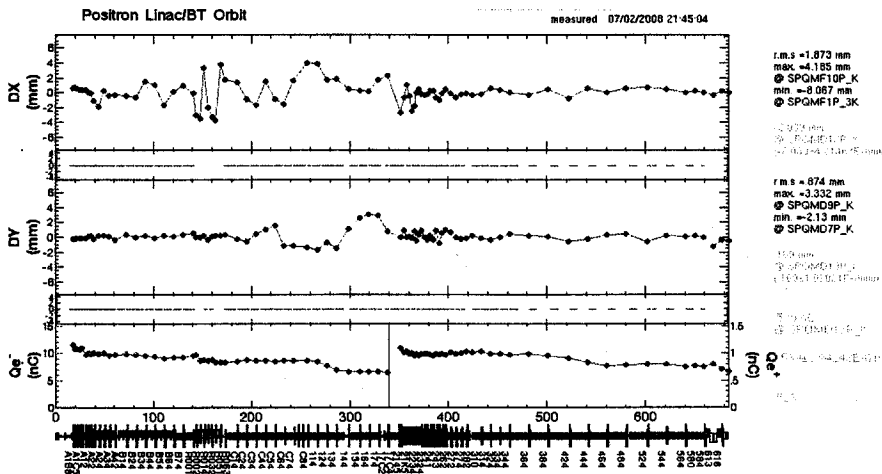
e Beam

軌道補正後
Matching後



こゝに e+ が通らな?!

e Beam



まあまあ通るので
軌道補正しよ。 (by ウツシ) 牛本氏の略

{ 0D344
QT344

{ 5.0 A
5.0 A

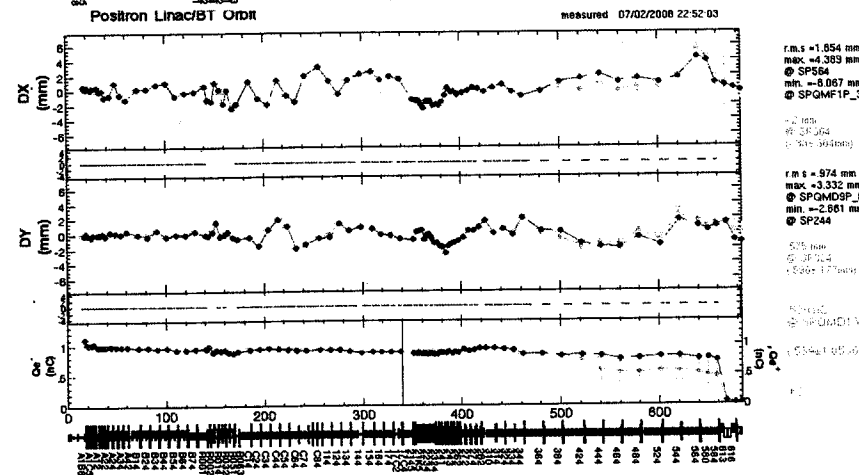
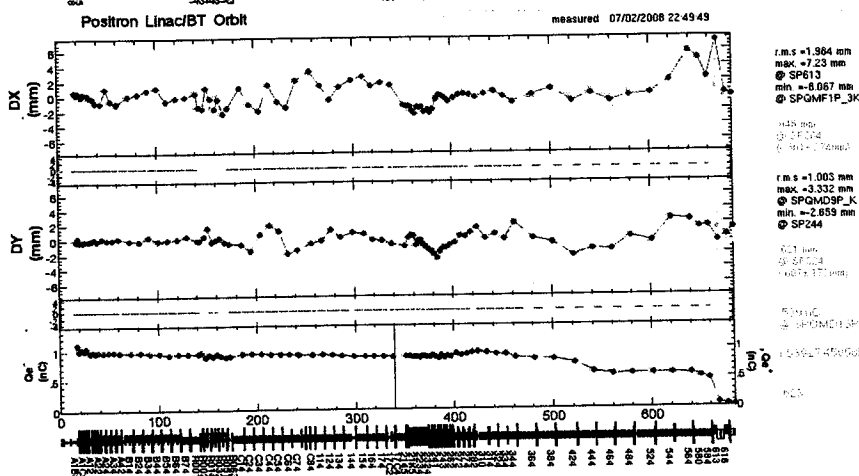
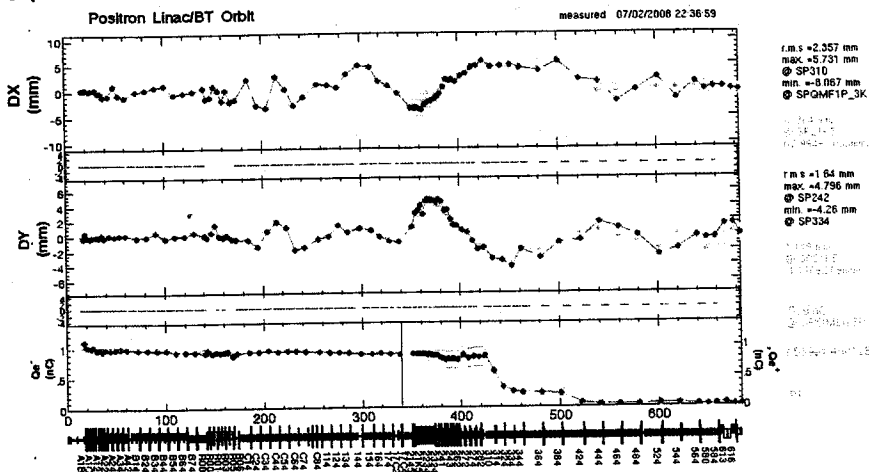
4.8~5.2 A (a)内
軌道補正した。 (3000
変動範囲内。
eで調整できる!!

22:06:01" = save

二束の e^- を通してやる。

e^- Beam

"22:50:00"
に save
手動軌道を通す



QD344
→ 4.8 A
QF344
→ 5.2 A
OK!

"22:53:19"
に save
ST:
"22:53:34"
に save

Optics 完成

e^- bis に save
本日の
結論:

○ et Optics を確認してやる。4.8~5.2A で
QD344, QF344 を 同期 して問題なかった。よしとする

秋の課題:

- あとは、軌道を追従。
- e^+ response function 測定
- GUN-delay, SHB, SB 等の微調整
- 2-8 にて、今夏 Pulse-oring を入れた。

SABOT

e^- : 08/7/2/23:01:38

e^+ : 08/7/2/23:21:46

セリニフエに
2-8 (今夏)
3-8
4-8

に入ってるので、1177で Pulse Steering を
入れたらよろしくしてく

その後 e^- の
確認、OK
で完了

47

2008/7/2

今日の Study 中. 笑口.

ACC	1-7	2-6
e^+	Acc	stand-by
e^-	standby	Acc

てあつた.

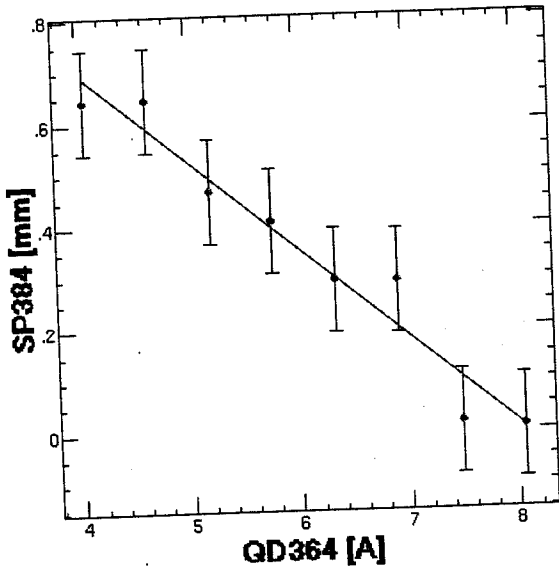
笑口. 両方とも Acc てたりする.

e^+ Magnet panel て Q. St 笑口.
 "23:30" save

Quad BPM 測定 (2008 7 2 ~ 7,3)

File Edit Window

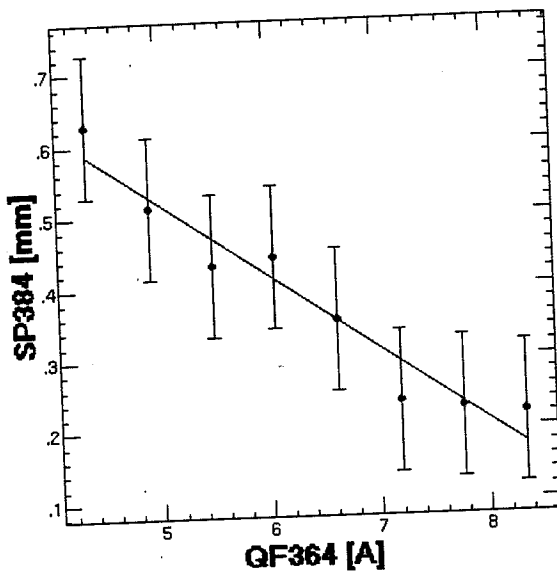
SP36-4 Horizontal



BpmCent on lcg5.linac.kek.jp:0.0

File Edit Window

SP36-4 Vertical



vmCent on lcg5.linac.kek.jp:0.0

07/02/2008 04:34:07 Help

Condition
BPM to be Calibrated :
SP364

Direction :
Horizontal Vertical

Used Components :
BPM : SP364
Steering : {"SX353",1}

from	1	1	1	1	1
to	3	3	3	3	3
number	4	4	4	4	4

Q magnet: QD364

from	-2	-2	-2	-2	-2
to	2	2	2	2	2
number	8	8	8	8	8

next remem. save
GO READ

Display
BPM : SP364
Steering step : 1

Result
When the beam is at the Q center :
BPM reading [mm]: -1.206 06 06 06 06 0
error [mm]: .00298 38 98 98 38 8

Last BPM taken into account :
SP584
rel. curr. thresh. : .7 .7 .7 .7 .7

Fit Chk I Save

07/02/2008 04:58:51 Help

Condition
BPM to be Calibrated :
SP364

Direction :
Horizontal Vertical

Used Components :
BPM : SP364
Steering : {"SY353",1}

from	-1	-1	-1	-1	-1
to	.5	.5	.5	.5	.5
number	4	4	4	4	4

Q magnet: QF364

from	-2	-2	-2	-2	-2
to	2	2	2	2	2
number	8	8	8	8	8

next remem. save
GO READ

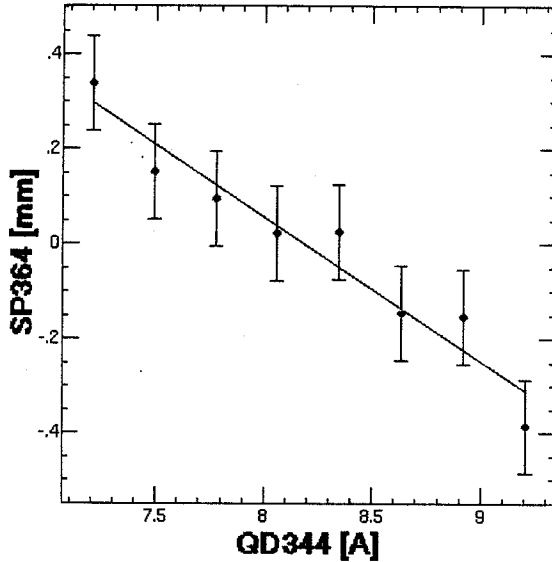
Display
BPM : SP364
Steering step : 1

Result
When the beam is at the Q center :
BPM reading [mm]: .03235 35 35 15 35
error [mm]: .00236 36 36 16 36

Last BPM taken into account :
SP584
rel. curr. thresh. : .7 .7 .7 .7 .7

Fit Chk I Save

SP_34_4 Horizontal



Condition
BPM to be Calibrated :
SP344

Direction :
Horizontal Vertical

Used Components :
BPM : SP344
Steering : {"SX333",1}

from	1	1	1	1	1
to	3	3	3	3	3
number	4	4	4	4	4

Q magnet: QD344

from	-1	-1	-1	-1	-1
to	1	1	1	1	1
number					

next remem. save

GO READ

Display
BPM : SP364 Steering step : 1

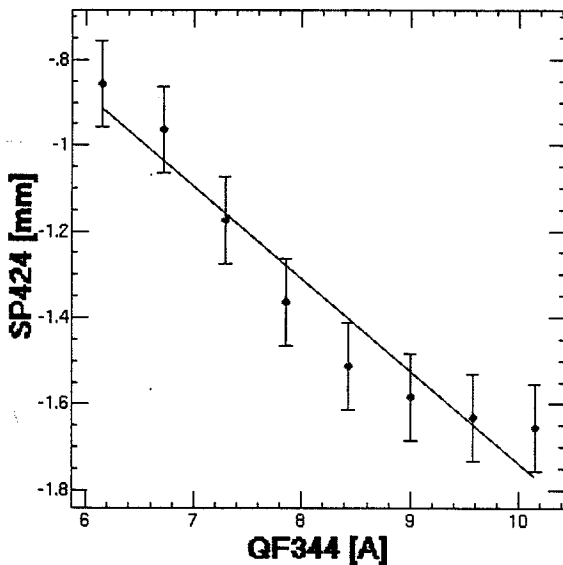
Result
When the beam is at the Q center :
BPM reading [mm]: .06009 09 09 09 09 09
error [mm]: .00321 21 21 21 21 21

Last BPM taken into account :
SP584

rel. curr. thresh. : .7 .7 .7 .7 .7 .7

Fit Chk I Save

SP_34_4 Vertical



Condition
BPM to be Calibrated :
SP344

Direction :
Horizontal Vertical

Used Components :
BPM : SP344
Steering : {"SY333",1}

from	-4	-4	-4	-4	-4
to	-2	-2	-2	-2	-2
number	4	4	4	4	4

Q magnet: QF344

from	-2	-2	-2	-2	-2
to	2	2	2	2	2
number					

next remem. save

GO READ

Display
BPM : SP424 Steering step : 1

Result
When the beam is at the Q center :
BPM reading [mm]: .10599 99 99 99 99 99
error [mm]: .00267 67 67 67 67 67

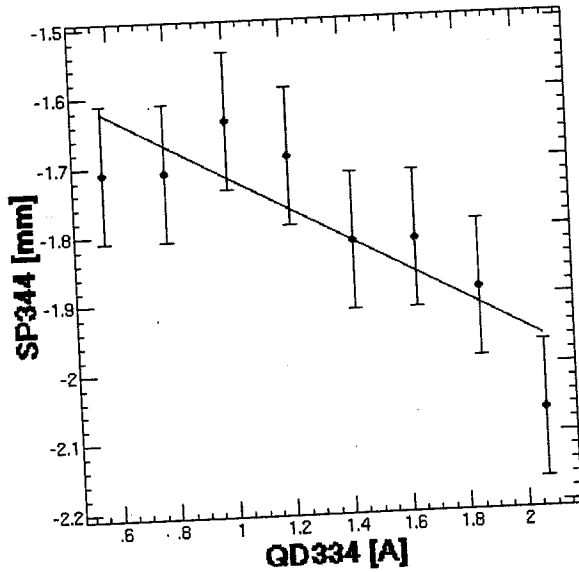
Last BPM taken into account :
SP580

rel. curr. thresh. : .7 .7 .7 .7 .7 .7

Fit Chk I Save

File Edit Window

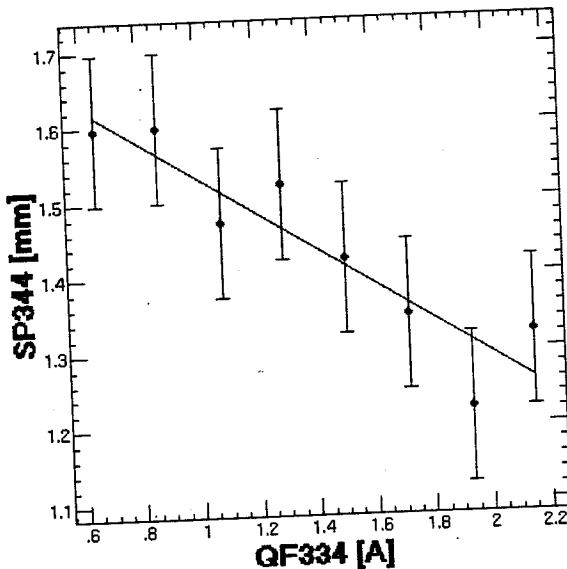
SP334 Horizontal



BpmCent on lcg5.linac.kek.jp:0.0

File Edit Window

SP344 Vertical
3



BpmCent on lcg5.linac.kek.jp:0.0

07/02/2003 06:32:58 Help

Condition
BPM to be Calibrated :
SP334

Direction :
Horizontal Vertical

Used Components :
BPM : SP334
Steering : {"SX323",1}
from -2 -2 -2 -2 -2 -2
to 2 2 2 2 2 2
number 4 4 4 4 4 4
Q magnet: QD334
from -5 -5 -5 -5 -5 -5
to 1 1 1 1 1 1
number
next remem. save

GO READ

Display
BPM : Steering step :
SP344 1

Result
When the beam is at the Q center :
BPM reading [mm]: -0.2496 36 36 96 36
error [mm]: .00594 34 34 94 34
Last BPM taken into account :
SP584
rel. curr. thresh. : 7 7 7 7 7

Fit Chk I Save

07/02/2003 06:47:01 Help

Condition
BPM to be Calibrated :
SP334

Direction :
Horizontal Vertical

Used Components :
BPM : SP334
Steering : {"SY323",1}
from 0 0 0 0
to 4 4 4 4
number 4 4 4 4
Q magnet: QF334
from -5 -5 -5 -5
to 1 1 1 1
number
next remem. save

GO READ

Display
BPM : Steering step :
SP344 1

Result
When the beam is at the Q center :
BPM reading [mm]: -3.7875 75 75 75
error [mm]: .01223 23 23 23
Last BPM taken into account :
SP613
rel. curr. thresh. : 7 7 7

Fit Chk I Save