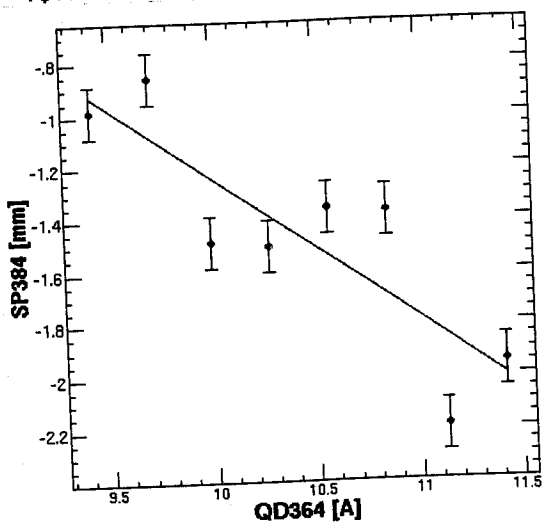
1

03/04/2006 01:35:46 Help

File Edit Window

SP384	-0.056	0.017 (	0.167)
SP424	-0.093	0.022 (	0.253)
SP444	0.051	0.029 (	0.166)
SP464	-0.146	0.046 (	0.244)
SP484	-0.060	0.024 (	0.311)



Condition
BPM to be Calibrated : SP364
Direction : ◆ Horizontal Vertical
Used Components :
BPM : SP364
Steering : {{"SX353",1}}
from -2.5
to 1
number 4
Q magnet: QD364
from -1
to 1
number 8
next remem. save
GO READ

Display
BPM : SP384
Steering step : 1

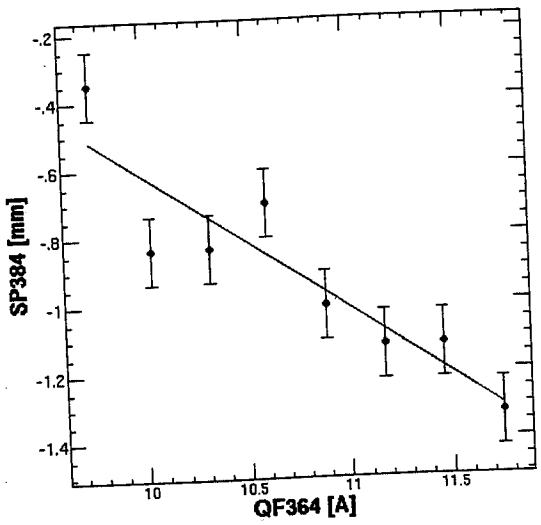
Result
When the beam is at the Q center :
BPM reading [mm]: -.0552
error [mm]: .01055
Last BPM taken into account : SP484
rel. curr. thresh. : .7
Fit Chk I Save

Hard Hard Hard Copy

03/04/2006 02:02:57 Help

File Edit Window

SP384	0.119	0.043 (	0.175)
SP424	0.100	0.031 (	0.316)
SP444	0.183	0.033 (	0.274)
SP464	0.104	0.024 (	0.295)
SP484	0.054	0.019 (	0.258)



Condition
BPM to be Calibrated : SP364
Direction : Horizontal ◆ Vertical
Used Components :
BPM : SP364
Steering : {{"SY353",1}}
from -1
to 2
number 4
Q magnet: QF364
from -1
to 1
number 8
next remem. save
GO READ

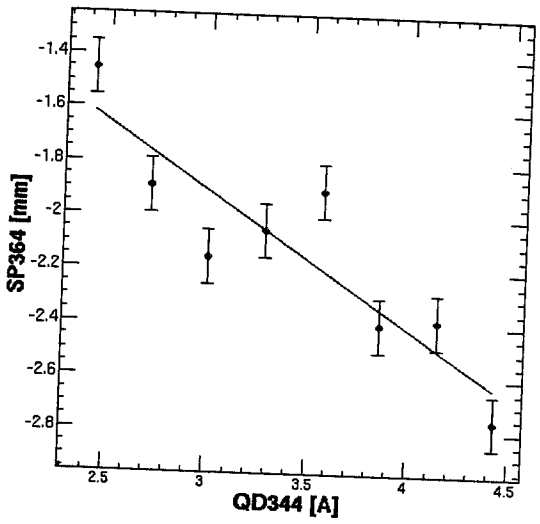
Display
BPM : SP384
Steering step : 1

Result
When the beam is at the Q center :
BPM reading [mm]: 1.47026E-4
error [mm]: .00857
Last BPM taken into account : SP484
rel. curr. thresh. : .7
Fit Chk I Save

Hard Hard Hard Copy

File Edit Window

SP364	0.012	0.024 (	0.283)
SP384	-0.012	0.023 (	0.368)
SP424	-0.078	0.037 (	0.327)
SP444	-0.131	0.066 (	0.202)
SP464	-0.049	0.016 (	0.183)



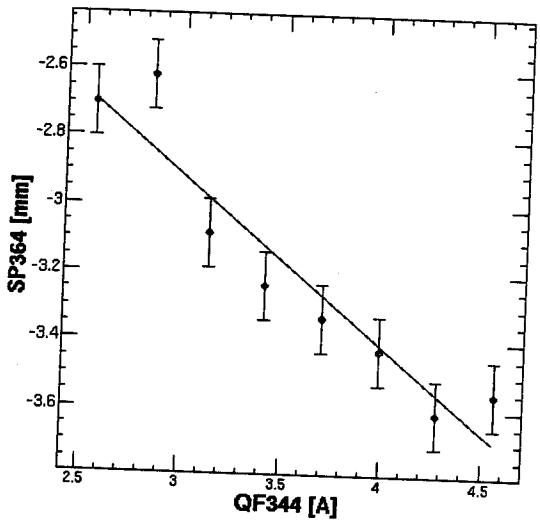
03/04/2006 03:37:19 Help

Condition
BPM to be Calibrated :
SP344
Direction :
Horizontal Vertical
Used Components :
BPM : SP344
Steering : {{"SX333",1}}
from -3
to 1
number 4
Q magnet: QD344
from -1
to 1
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SP364 1
Result
When the beam is at the Q center :
BPM reading [mm]: -.01723
error [mm]: .00828
Last BPM taken into account :
SP464
rel. curr. thresh. : .7
Fit Chk I Save

Hart Hart Hart Hart Hart Main Application Area

File Edit Window

SP364	0.041	0.024 (	0.190)
SP384	0.078	0.019 (	0.254)
SP424	0.041	0.016 (	0.265)
SP444	-0.006	0.019 (	0.239)
SP464	0.062	0.020 (	0.311)



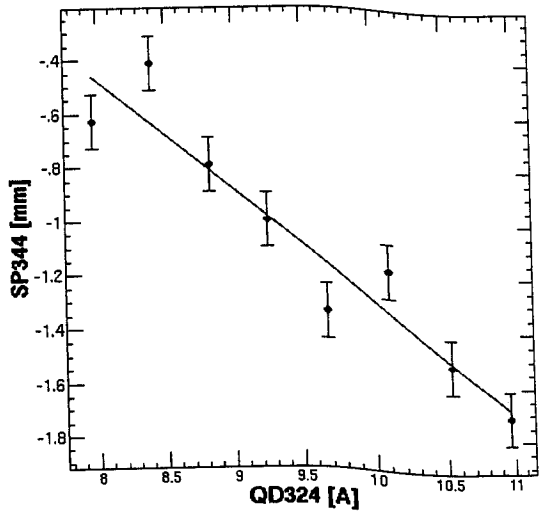
03/04/2006 03:31:15 Help

Condition
BPM to be Calibrated :
SP344
Direction :
Horizontal Vertical
Used Components :
BPM : SP344
Steering : {{"SY333",1}}
from -3
to 1
number 4
Q magnet: QF344
from -1
to 1
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SP364 1
Result
When the beam is at the Q center :
BPM reading [mm]: .04118
error [mm]: .00718
Last BPM taken into account :
SP464
rel. curr. thresh. : .7
Fit Chk I Save

Hart Hart Hart Hart Main Hard Copy

File Edit Window

SP334	0.142	0.019 (	0
SP344	0.173	0.010 (	0
SP364	0.045	0.016 (	0
SP384	0.060	0.016 (	0
SP424	-0.605	0.558 (	0



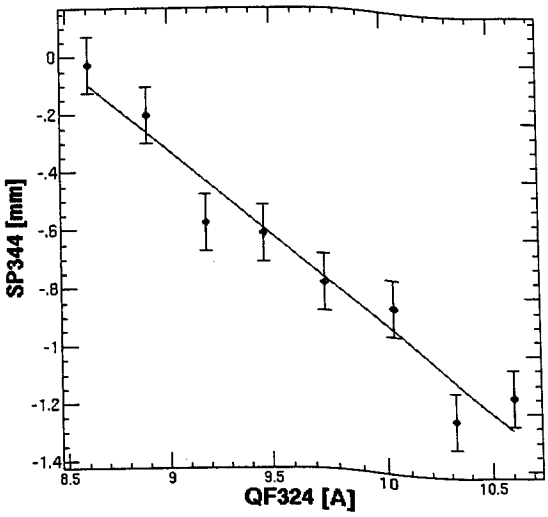
03/04/2006 Help

Condition
BPM to be Calibrated :
SP324
Direction :
Horizontal Vertical
Used Components :
BPM : SP324
Steering : {{"SX313",1}}
from -1.5
to 2
number 4
Q magnet: QD324
from -1.5
to 1.5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SP344 1
Result
When the beam is at the Q center :
BPM reading [mm]: .11981
error [mm]: .00708
Last BPM taken into account :
SP424
rel. curr. thresh. : .7
Fit Chk I Save

Main Application Area

File Edit Window

SP334	0.193	0.040 (	0.149)
SP344	0.083	0.023 (	0.155)
SP364	0.171	0.020 (	0.279)
SP384	0.173	0.019 (	0.304)
SP424	0.177	0.020 (	0.329)



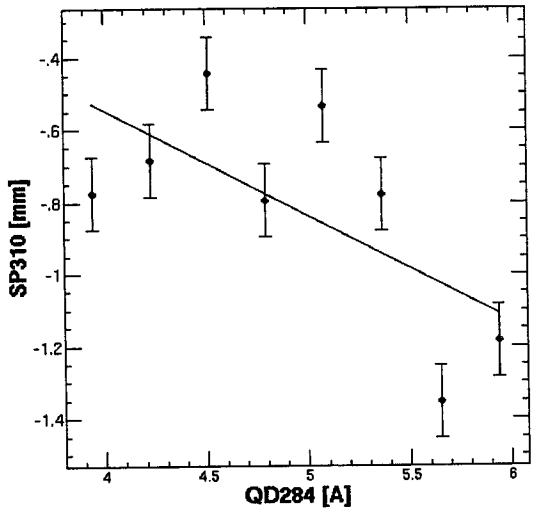
03/04/2006 Help

Condition
BPM to be Calibrated :
SP324
Direction :
Horizontal Vertical
Used Components :
BPM : SP324
Steering : {{"SY313",1}}
from -2
to 2
number 4
Q magnet: QF324
from -1
to 1
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SP344 1
Result
When the beam is at the Q center :
BPM reading [mm]: .17551
error [mm]: .00742
Last BPM taken into account :
SP424
rel. curr. thresh. : .7
Fit Chk I Save

Hard Copy

File Edit Window

SP310	-3.065	4.980	(0.218)
SP314	0.304	0.096	(0.443)
SP324	0.305	0.091	(0.590)
SP334	0.256	0.074	(0.572)
SP344	0.171	0.056	(0.486)



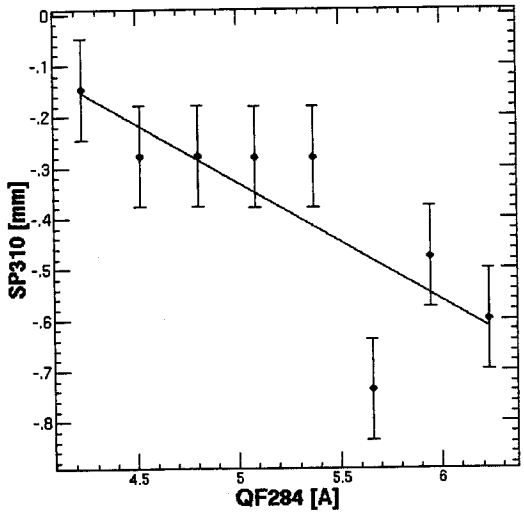
Help

Condition
BPM to be Calibrated :
SP284
Direction :
Horizontal Vertical
Used Components :
BPM : SP284
Steering : {{"SX273",1}}
from -2
to 2
number 4
Q magnet: QD284
from -1
to 1
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SP310 1
Result
When the beam is at the Q center :
BPM reading [mm]: .1874
error [mm]: .01849
Last BPM taken into account :
SP344
rel. curr. thresh. : .7
Fit Chk I Save

Hard Copy

File Edit Window

SP310	1.141	0.942	(0.184)
SP314	0.653	0.215	(0.299)
SP324	0.256	0.096	(0.422)
SP334	0.337	0.096	(0.403)
SP344	0.323	0.077	(0.399)



Help

Condition
BPM to be Calibrated :
SP284
Direction :
Horizontal Vertical
Used Components :
BPM : SP284
Steering : {{"SY273",1}}
from -1
to 3
number 4
Q magnet: QF284
from -1
to 1
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SP310 1
Result
When the beam is at the Q center :
BPM reading [mm]: .32881
error [mm]: .04944
Last BPM taken into account :
SP344
rel. curr. thresh. : .7
Fit Chk I Save

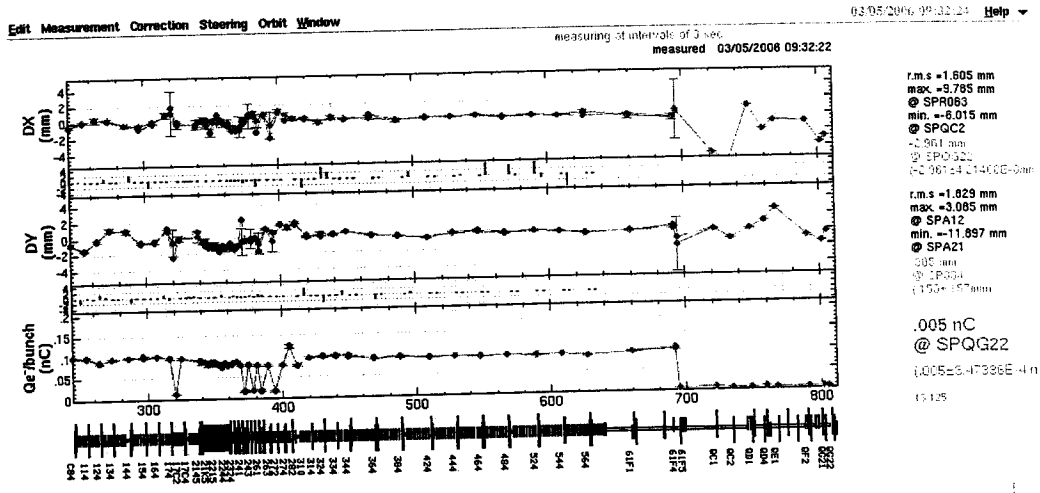
Hard Copy

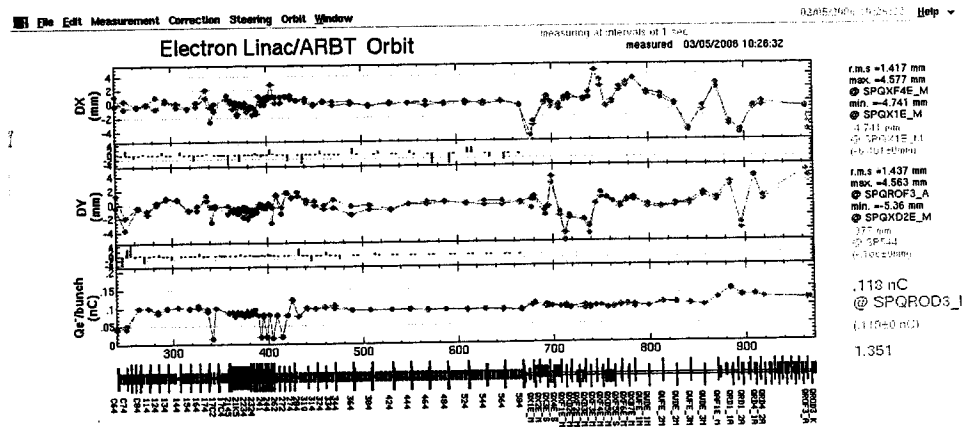
5

'06/3/5 PF-BT Qの Fudge Factor 測定 (飯田)

(鈴木. 豊富. 久積(三井))

軌道確認





SX-57-1 1.828(A) ··· Sc-58-4 中心

2.504(A) ··· Sp-58-4 中心

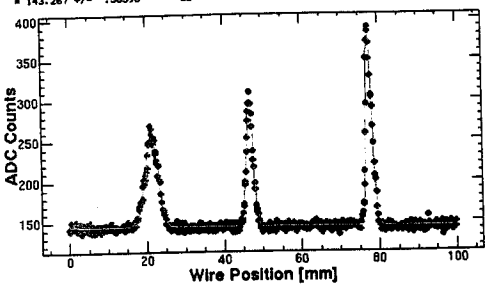
set

File Edit Window

Wire A

ChiSquare = 10382.9 Goodness = .49239

sigma1 = 1.68224 +/- .02183	sigma2 = .83821 +/- .01033	sigma3 = .80774 +/- .006
asymm1 = -.07033 +/- .02526	asymm2 = .03560 +/- .02562	asymm3 = .34145 +/- .016
xwire1 = 21.4983 +/- .05202	xwire2 = 46.7428 +/- .02630	xwire3 = 77.2719 +/- .016
b1 = 112.036 +/- 1.18380	b2 = 156.739 +/- 1.66194	b3 = 235.874 +/- 1.696
a1 = 143.267 +/- .36596	a2 = -.08471 +/- .00614	

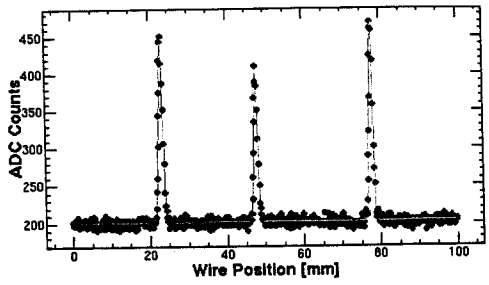


File: WS2006_3_4_14_40_48.datA File Pref ReRt 599.70703125 V 7422

Wire C

ChiSquare = 14063.6 Goodness = .49239

sigma1 = .55286 +/- .00628	sigma2 = .49199 +/- .00710	sigma3 = .50194 +/- .005
asymm1 = .02170 +/- .02359	asymm2 = .02882 +/- .03048	asymm3 = -.04792 +/- .022
xwire1 = 22.9636 +/- .01598	xwire2 = 47.6321 +/- .01837	xwire3 = 77.7629 +/- .013
b1 = 243.810 +/- 2.38214	b2 = 200.021 +/- 2.52105	b3 = 267.049 +/- 2.499
a1 = 199.091 +/- .39582	a2 = .02613 +/- .00682	

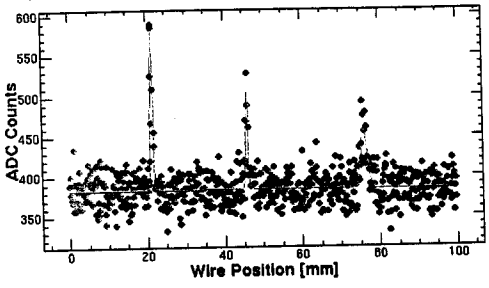


File: WS2006_3_4_14_38_40.datC File Pref ReRt 499.755859375 V 6725

Wire B

ChiSquare = 283556. Goodness = .49239

sigma1 = .29551 +/- .02076	sigma2 = .31823 +/- .03536	sigma3 = .80943 +/- .096
asymm1 = .03470 +/- .14597	asymm2 = -.10842 +/- .23019	asymm3 = .21647 +/- .241
xwire1 = 21.3400 +/- .05285	xwire2 = 45.9514 +/- .00960	xwire3 = 75.8423 +/- .239
b1 = 204.148 +/- 12.3751	b2 = 124.225 +/- 11.9314	b3 = 73.2088 +/- 7.499
a1 = 382.239 +/- 1.48790	a2 = .01076 +/- .02598	

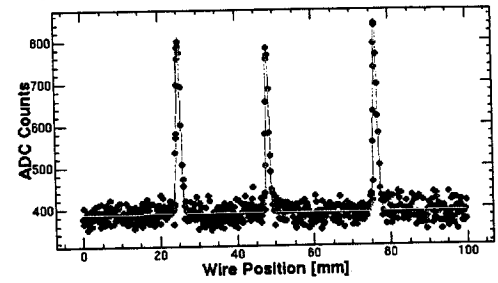


File: WS2006_3_4_14_39_28.datB File Pref ReRt 599.70703125 V 6676

Wire D

ChiSquare = 235610. Goodness = .49239

sigma1 = .55646 +/- .01473	sigma2 = .42674 +/- .01408	sigma3 = .50968 +/- .013
asymm1 = -.07177 +/- .05490	asymm2 = .09437 +/- .06870	asymm3 = .10729 +/- .054
xwire1 = 25.1541 +/- .03741	xwire2 = 48.1436 +/- .03589	xwire3 = 76.3363 +/- .034
b1 = 426.511 +/- 9.71741	b2 = 388.767 +/- 11.0798	b3 = 444.864 +/- 10.14
a1 = 386.037 +/- 1.61456	a2 = .03761 +/- .02794	



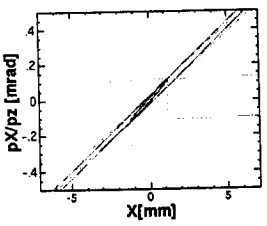
File: WS2006_3_4_14_37_54.datD File Pref ReRt 599.70703125 V 7023

03/04/2006 14:42:10

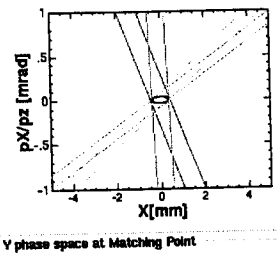
Edit Window

Wire Scan | Optics Calculate | Matching

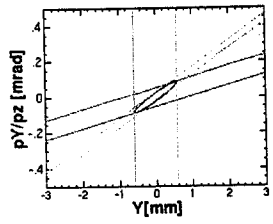
X phase space at Wire A



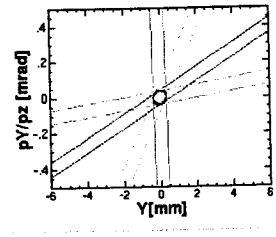
X phase space at Matching Point



Y phase space at Wire A



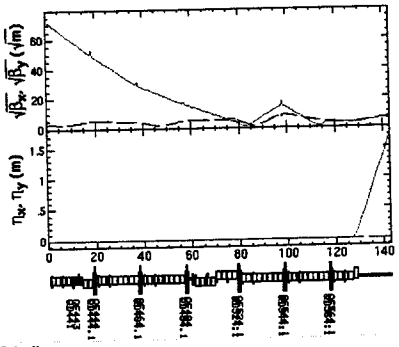
Y phase space at Matching Point



Results of Measurement

β_x @AC574+1 [m] :	11.340	β_y @AC574+1 [m] :	9.454
α_x @AC574+1 :	-.250	α_y @AC574+1 :	-.263
ε_x [m] :	1.3765E-8	ε_y [m] :	1.3608E-8
$\gamma\varepsilon_x$ [π.mm.mrad] :	67.341	$\gamma\varepsilon_y$ [π.mm.mrad] :	66.572
Bmag x :	1.043	Bmag y :	1.036
εBmag x :	1.4363E-8	εBmag y :	1.4102E-8
γεBmag x :	70.265	γεBmag y :	68.989

Optics Plot



Wire Selection

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

◆ 4-wire:ABCD

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

"Calculate Optics" Save All Parameters

ies were SAVEd to /data1/KEKB/Wire/LINAC/sector5/PF/data/Qvalue/lqname_2006_3_4_14_36_9.dat0

7

E = 2.463 元値

2.475 Max
- QF1 +9 mm
- QF3 −6 mm
- QF4 −7 mm

2.450
- QF1 −7.5
- QF3 +9
- QF4 +7.5

2.446
- QF2 −9. mm
- QF3 +11 mm
- QF4 +7.5 mm

+R入射

12:10 PFにもどってきれ　軌道がおでいるので

BX_48_4 を　−0.055 → −0.072 で まっすぐに

Octopos (S8_61_FB) で $\eta_x = 0$ になるように

~~QF61F3~~

① QF61_F1 と QD61F1 を set

	design K	$\eta_x = 0$ の K	
QF	0.211556	0.1851497	→ ×0.87514
QD	−0.198872	−0.1991424	→ ×1.00135

"pfbt_magnet_setting2006 0305-123309.dat"

② Q で kick をうけて.

- BS_61_F1　0 → −0.8 に set して.

12:45 SC_61_F2 および SP_61_F4 で φ を通るようにした

Dinamic Range

E = { 2.452 (元の値)
2.440 (~~Min~~ ~~Max~~)
2.465 (Max)

1回ずつ data をとる

12:52
2.465 から実施
2.462 (変わらず)
2.459
2.456
2.453
2.450
2.447
2.444
2.441 → 2.444 (変わらず)

KLY on phase

2.447 1 Step 下
~~2.450~~
2.453
2.456
2.459
2.462
2.465

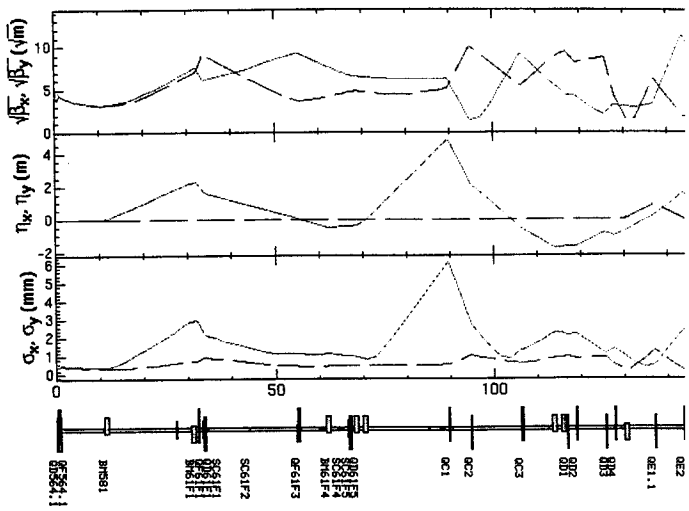
~~dd~~

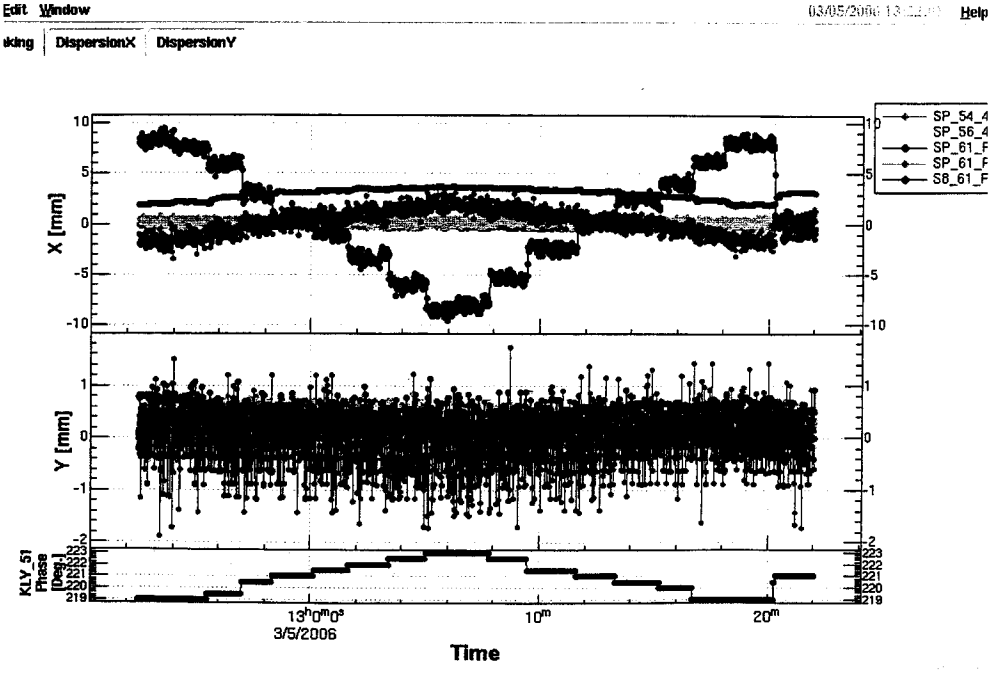
13:20 元の値に 2.452

BPMdata 20060305−125229.dat

~~0 1 2 3~~

1 1回目 (design と set) FF=1

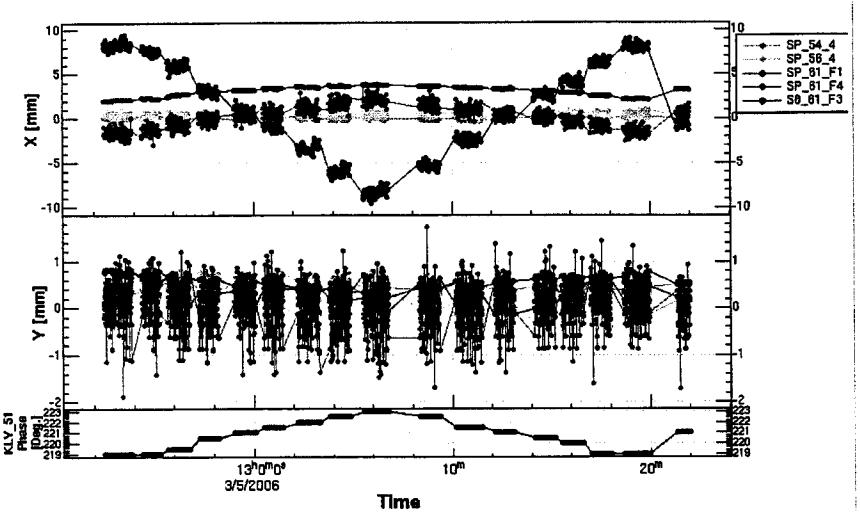




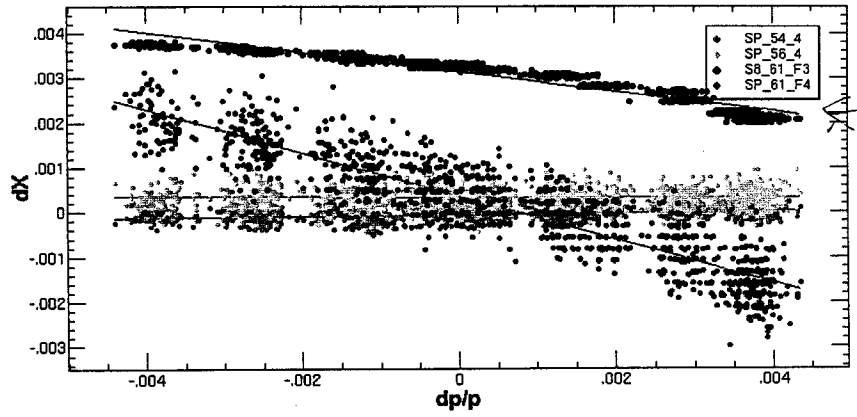
9

Edit Window 03/05/2006 13:27:46 Help

aking | DispersionX | DispersionY



η_X(54_4)=.01933 +/-.00173, η_X(56_4)=-.00301 +/-.00288
η_X(F3)=-.22056 +/-.00198, η_X(F4)=-.48215 +/-.00638

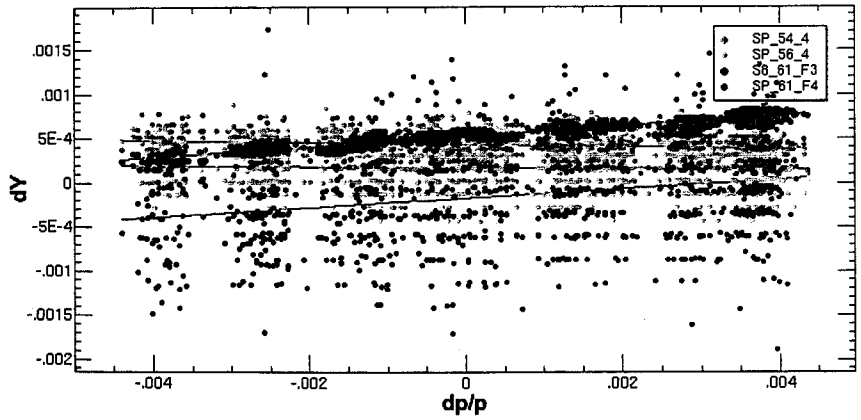


全データを使うと linearity 悪い

SP-61-F1 17. 15mm 内にする

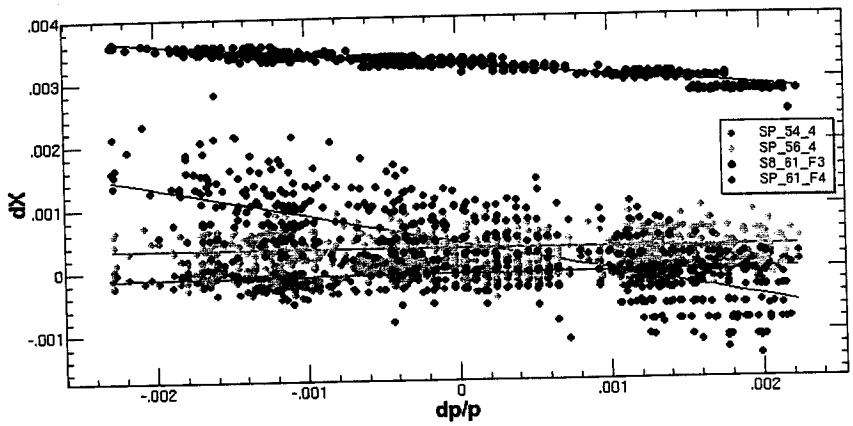
= (b+(a x))

η_X(54_4)=-.01047 +/-.00179, η_X(56_4)=-.00584 +/-.00291
η_X(F3)=.05884 +/-6.75E-4, η_X(F4)=.05393 +/-.00651

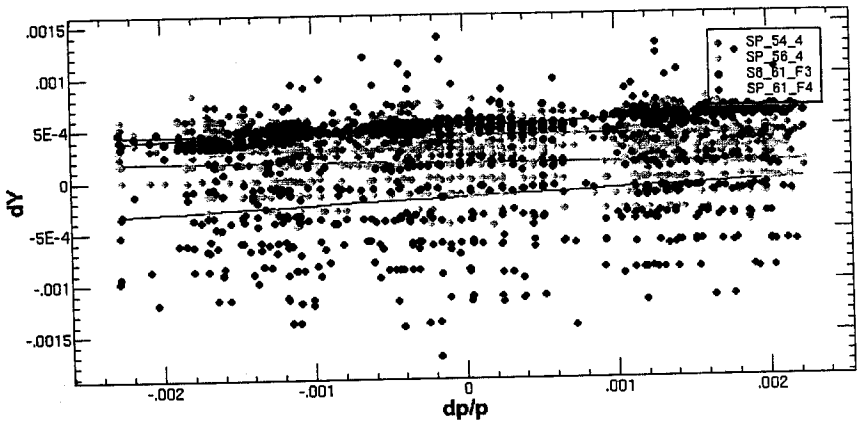


= (b+(a x))

η_X(54_4)=.02647 +/-.00491, η_X(56_4)=3.26E-4 +/-.00849
η_X(F3)=-.17795 +/-.00232, η_X(F4)=-.44022 +/-.01779



η_X(54_4)=-.00203 +/-.00505, η_X(56_4)=-.00508 +/-.00855
η_X(F3)=.0599 +/-.00171, η_X(F4)=.07252 +/-.01877



S8 で $E_x = 0$ になるようにF3のみの fit.

ff1 = 1.038847

ff1^{-1} を Fudge にして Q を set
- QF F1
- QD F1
- QF F3

2回目

~~RT_V3~~.

"pfbt_magnet_setting 20060305-142223.dat"

BS_61_F1 $-0.8 \rightarrow -1.0$