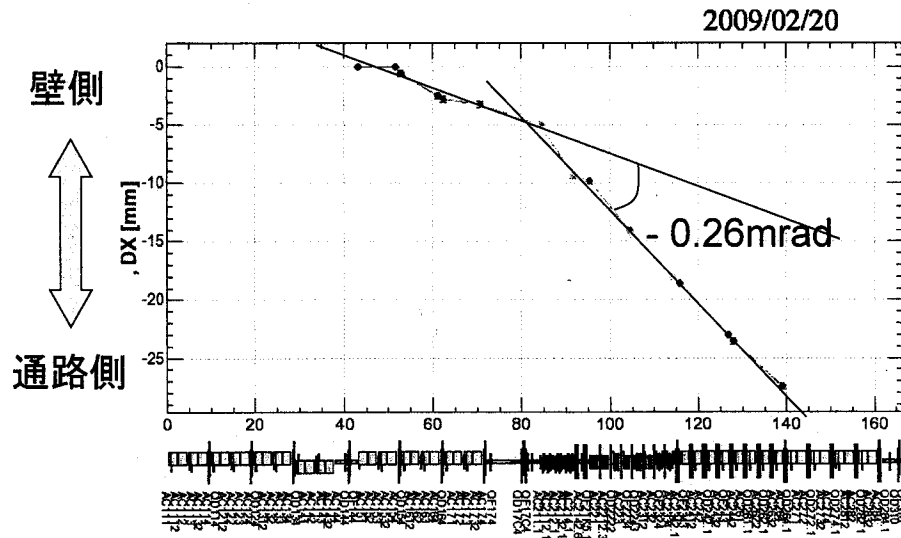


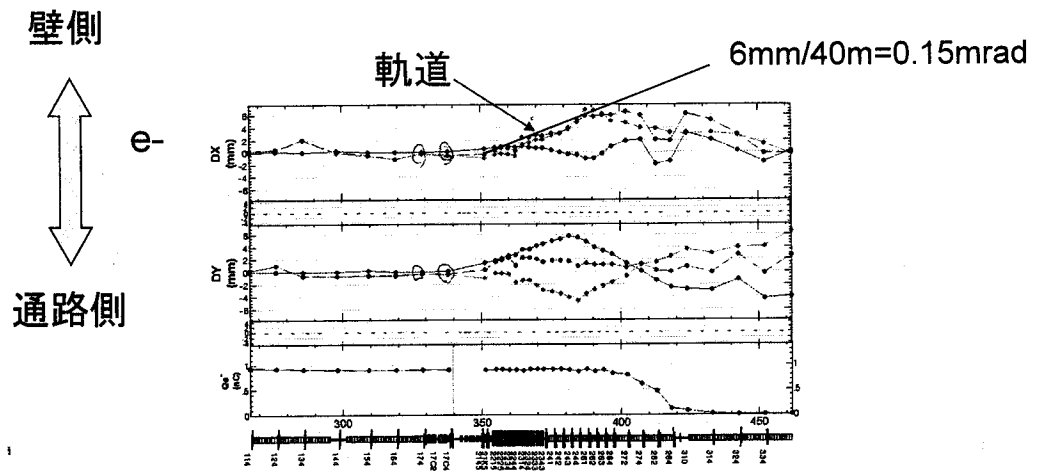
水平位置測量結果



KEKB(e-/e+) 同時入射

LCGprime_080707

軌道調整

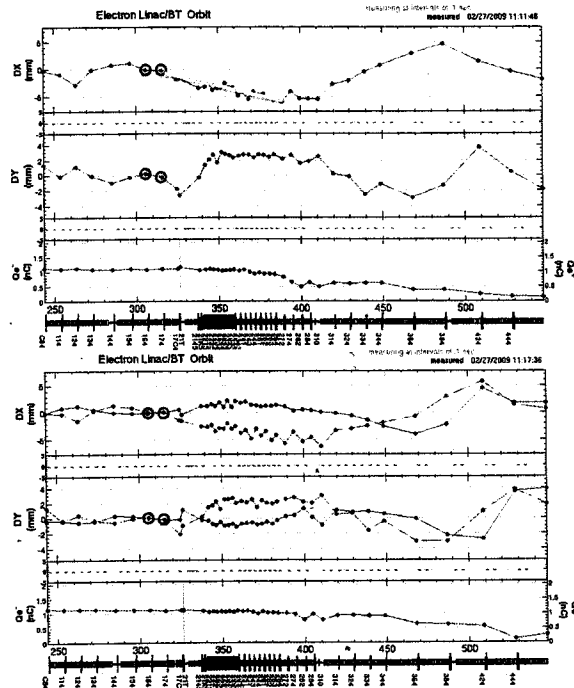


ビームを使った測定と方向が逆である。

2 Sector全てのQ、StをOffしたが、Target下流で軌道が発生する。これを収めるには、BX_23_12を、 $0 \rightarrow -2.0A$ が必要となる。

結果

1. 2セクターBallistic orbit測定



164-174を
Referenceに
した。

青：~2.8GeV beam
5mm/70m=-0.07mrad

水平：測量結果と方向は合う
垂直：2セクターは2~3mm
下がっている？

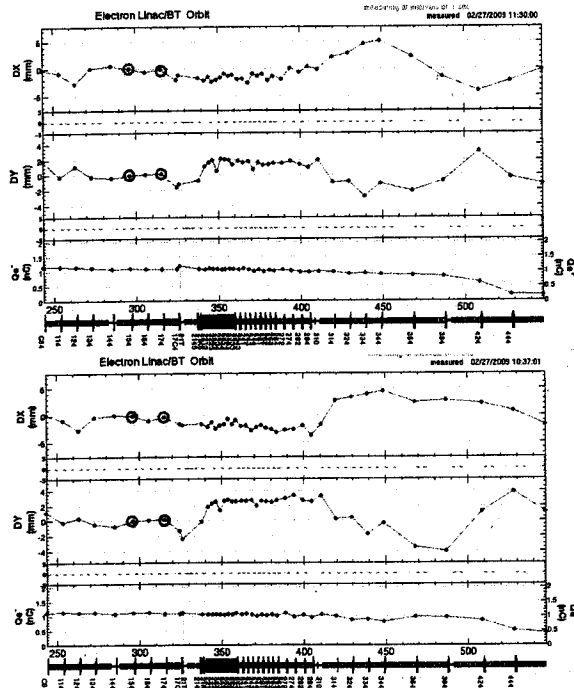
青：~4.0GeV beam
赤：~4.0GeV - 2.8GeV

energyでは変わらない

2

結果

1. 2セクターBallistic orbit測定



青：~2.8GeV beam

154-174を
Referenceに
すると、
傾きは小さい。

青：~4.0GeV beam

3

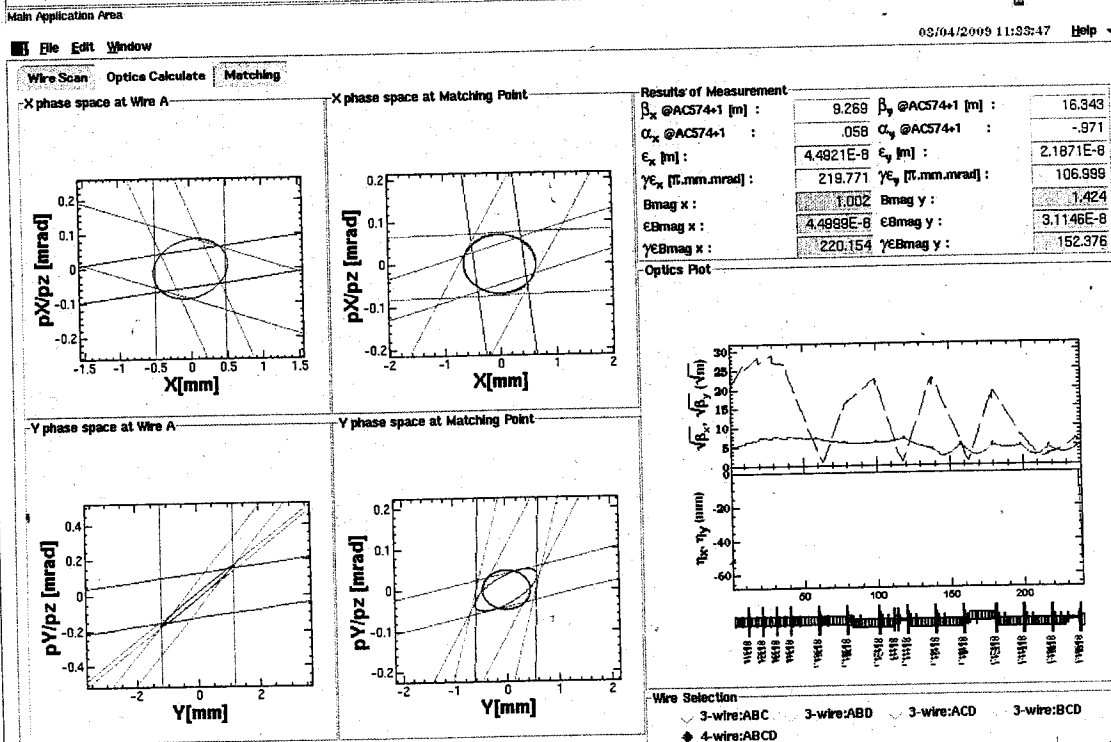
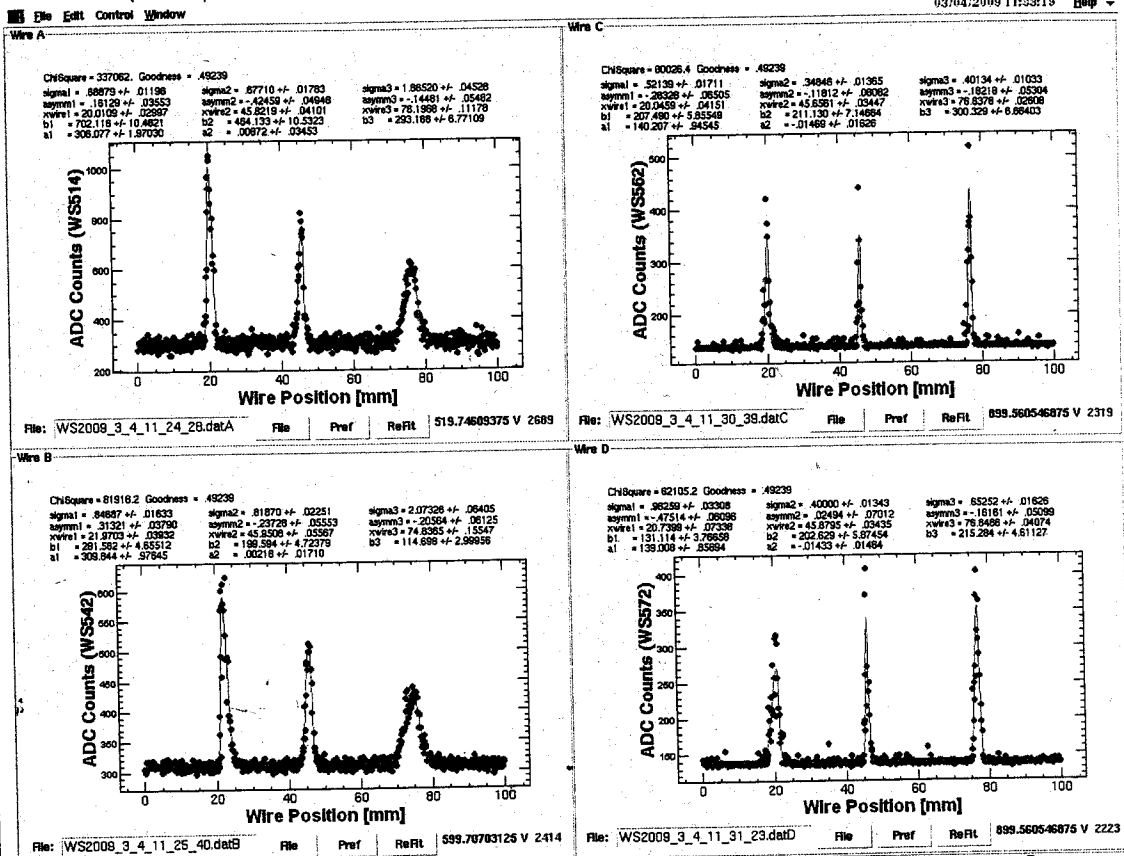
'09/3/4

11:25

347 Twiss Parameter 測定 @ 5e74 -

① PF-A1

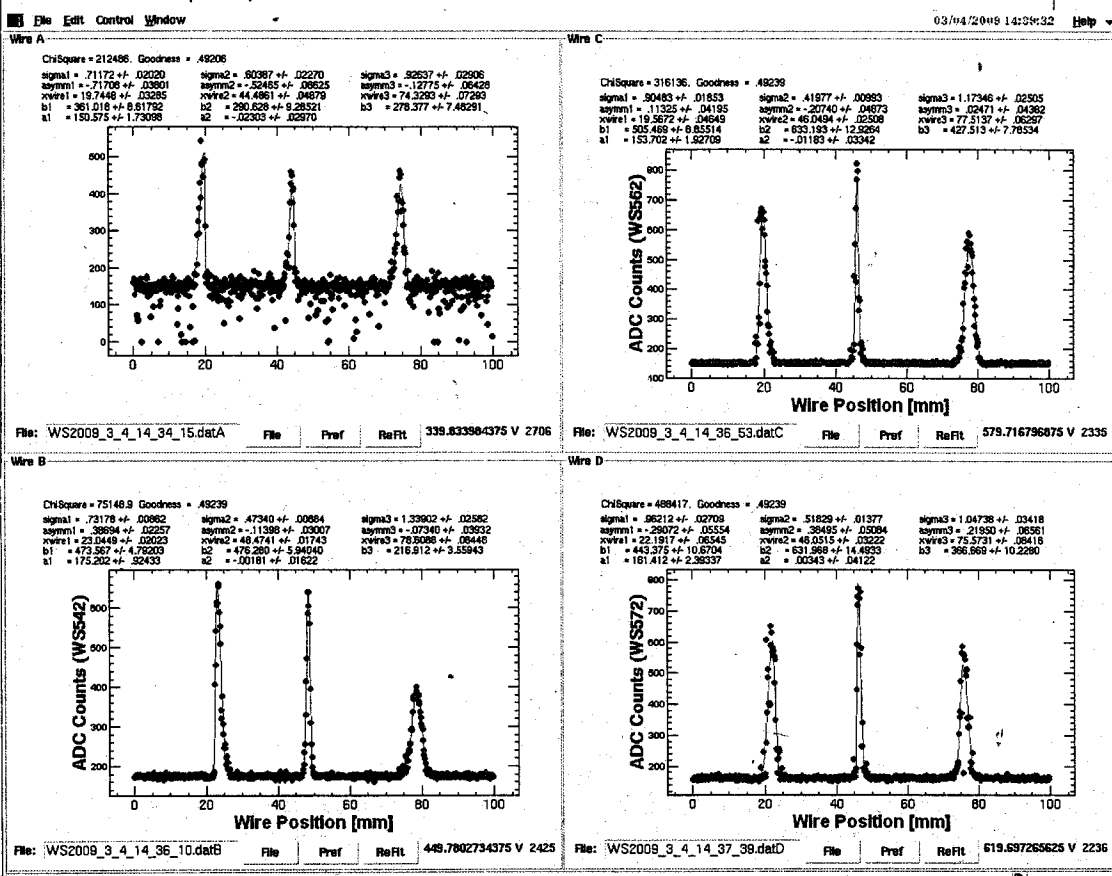
SABOT: "03/04/2009 11:20:19"



2009/03/04 A shift 5-Sec e- 25Hz 1st 豊富

11:

② HPR
 SABOT: '03/04/2009 14:35:22
~~11.38.18~~



Main Application Area

File Edit Window 03/04/2009 14:38:55 Help

Wire Scan Optics Calculators Matching

X phase space at Wire A X phase space at Matching Point

Results of Measurement

β_x @BM611E [m] :	25.104	β_y @BM611E [m] :	28.462
α_x @BM611E :	.908	α_y @BM611E :	.060
ξ_x [m] :	1.0871E-8	ξ_y [m] :	1.6880E-8
γ_{ξ_x} [r.mm.mrad] :	170.116	γ_{ξ_y} [r.mm.mrad] :	265.406
Bmag x :	1.000	Bmag y :	1.015
EBmag x :	1.0871E-8	EBmag y :	1.722DE-8
$\gamma_{EBmag x}$:	170.116	$\gamma_{EBmag y}$:	268.477

Optics Plot

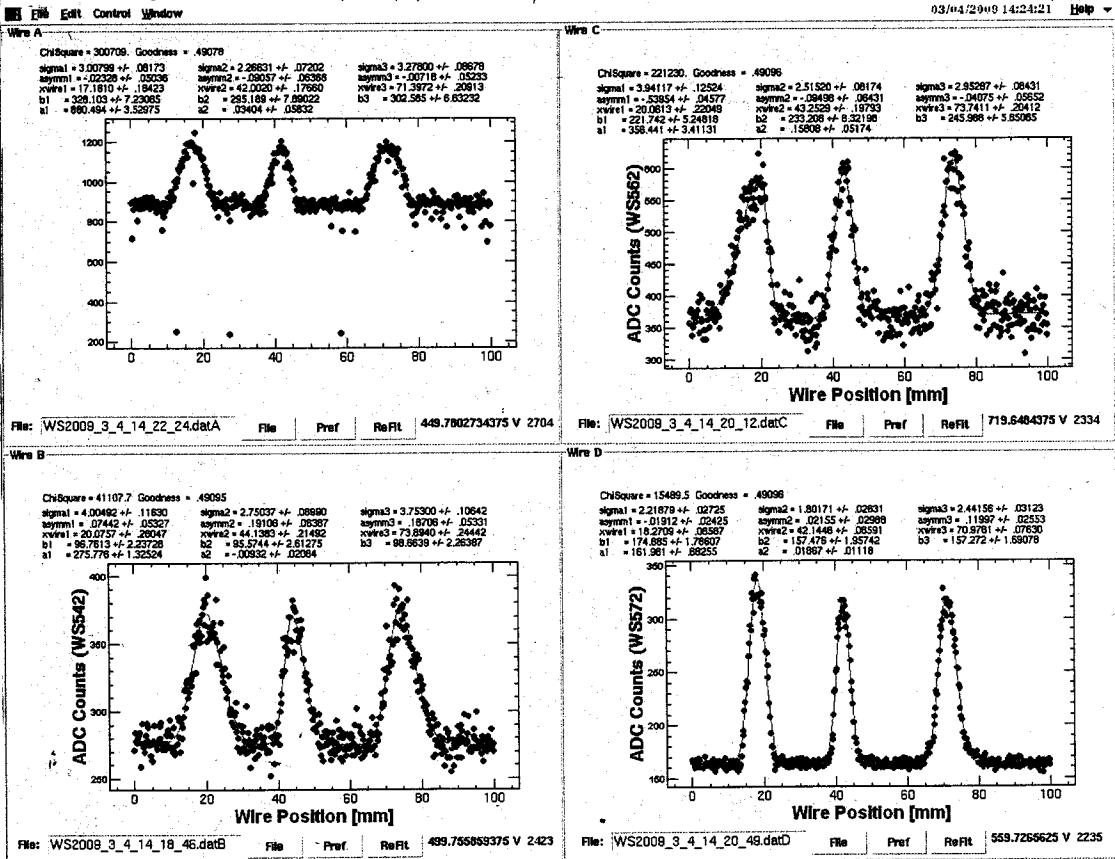
Wire Selection

3-wire:ABC 3-wire:ABD 3-wire:ACD 3-wire:BCD
 4-wire:ABCD
 NonLinearFit Err(mess), nC n: 0 Err(opt) (%) : 0

Calculate Optics Save All Parameters

All informations are SAVED to Adata1\KEKB\Wire\LINAC\arc\me5\KFKR\data\MatchResult\WSL5e 2009 3 4 14 38 43

③ LER
 Sabot: 03/04/2009 14:19:44



Main Application Area

File Edit Window 03/04/2009 14:24:55 Help

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

β_x @BM611P [m] :	24.782	β_y @BM611P [m] :	17.178
α_x @BM611P :	1.899	α_y @BM611P :	.023
ϵ_x [m] :	2.3780E-7	ϵ_y [m] :	2.3846E-7
γ_{ϵ_x} [T.mm.mrad] :	1628.047	γ_{ϵ_y} [T.mm.mrad] :	1632.588
Bmag x :	1.135	Bmag y :	1.154
ϵ Bmag x :	2.6988E-7	ϵ Bmag y :	2.7525E-7
γ_{ϵ} Bmag x :	1847.707	γ_{ϵ} Bmag y :	1884.443

Optics Plot

Wire Selection
 3-wire:ABC 3-wire:ABD 3-wire:ACD 3-wire:BCD
 4-wire:ABCD
 NonLinearFit Err(meas), n: 0 n: 0 Err(opt) (%): 0

Calculate Optics Save All Parameters

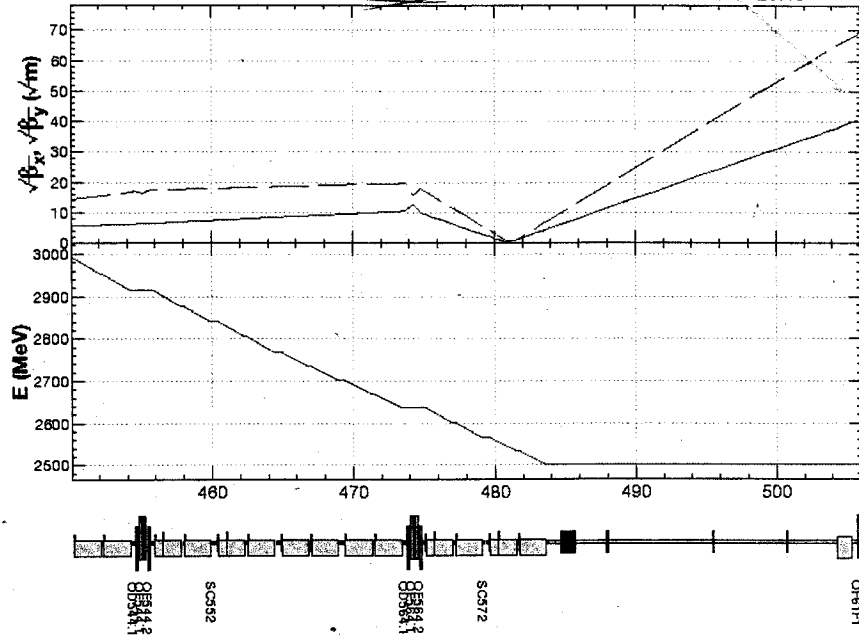
All informations are saved to /data1/KEKB/Wire/LINAC/sectors/KEKBp/data/MatchResult/WSP_2009_3_4_14_23_22

2009/03/04 A shift. 5-Sec e+ 25Hz 1st 豊富

e+ 5セクターマッチング後の2.5 GeV PFビーム

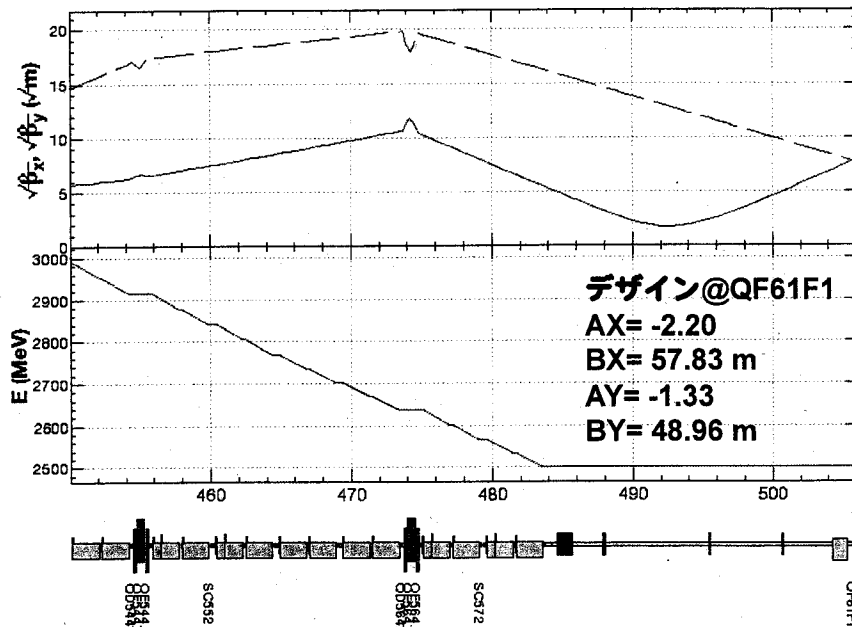
QF61F1での
ベータが巨大!

BX=1.6 km/BY=4.9 km
SABOT 03/04/2009 11:20:19



**Q(DF)564を調整して、
BX、BY@QF61F1を60 mに。**

後は、PFBTでマッチング!



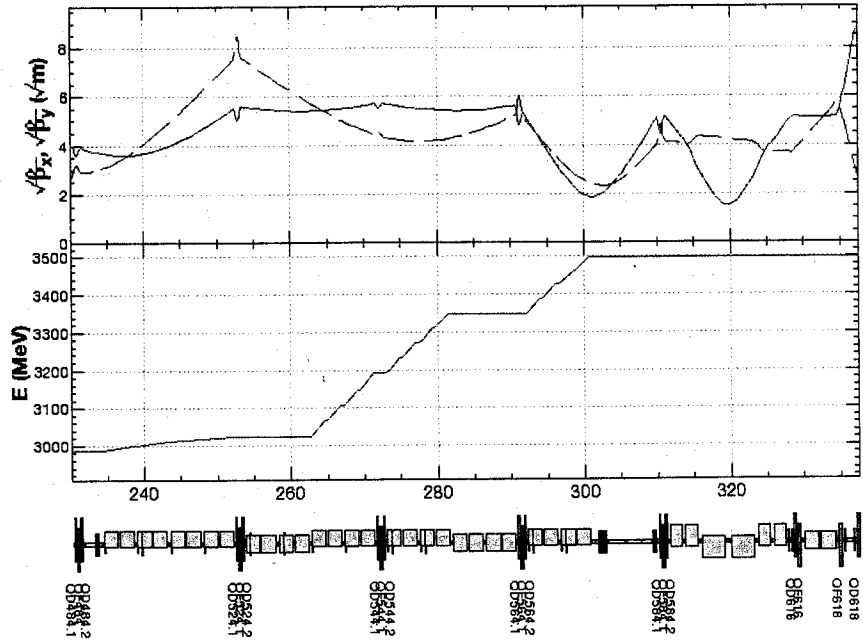
デザイン@QF61F1

**AX= -2.20
BX= 57.83 m
AY= -1.33
BY= 48.96 m**

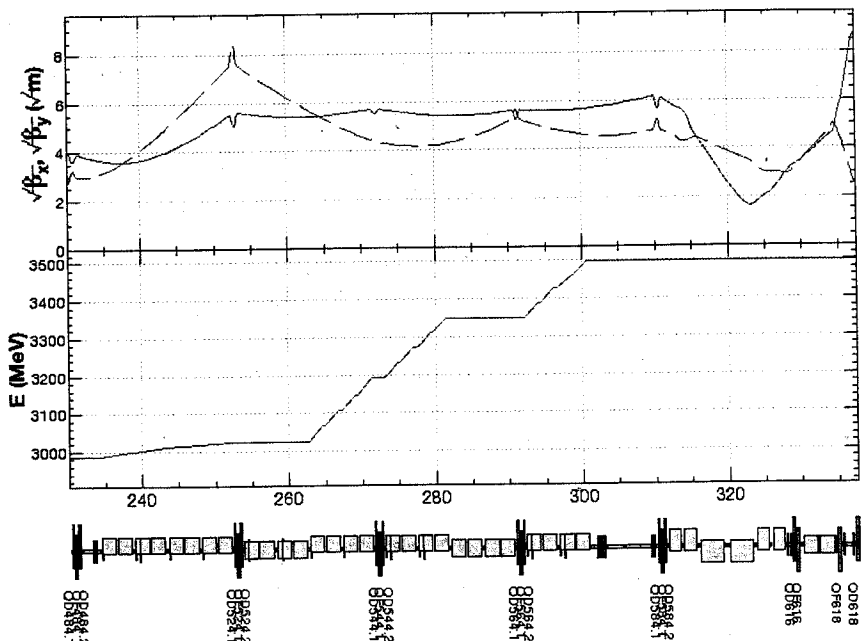
QD564 => 0.532倍、 QF564 => 0.556倍

e⁺ 5セクターマッチング後の3.5 GeV e⁺ ビーム

SABOT 03/04/2009 14:19:44

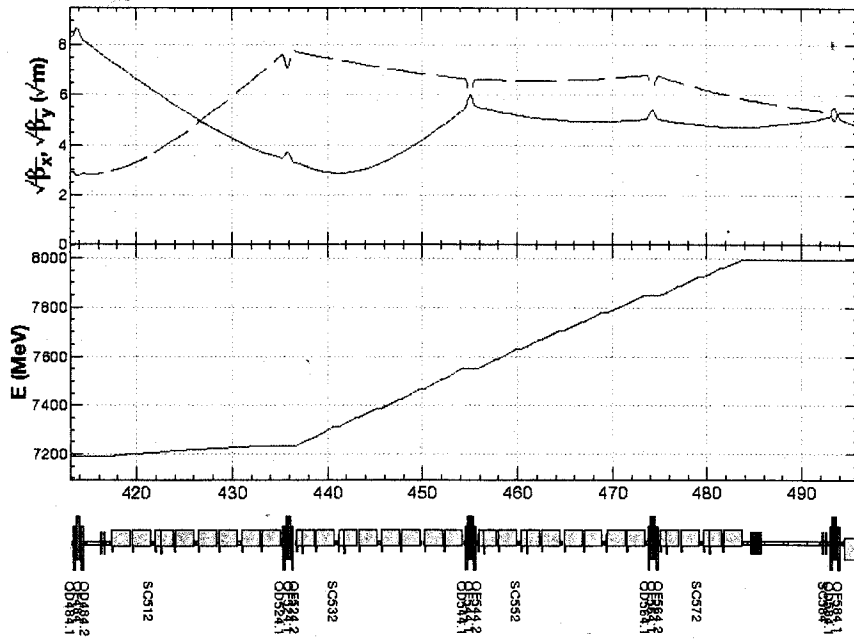


e⁺ 5セクターマッチング後の
 e⁺ ビーム+Q{DF}564, Q{DF}584調整 後は、e⁺ BTで
 マッチング!



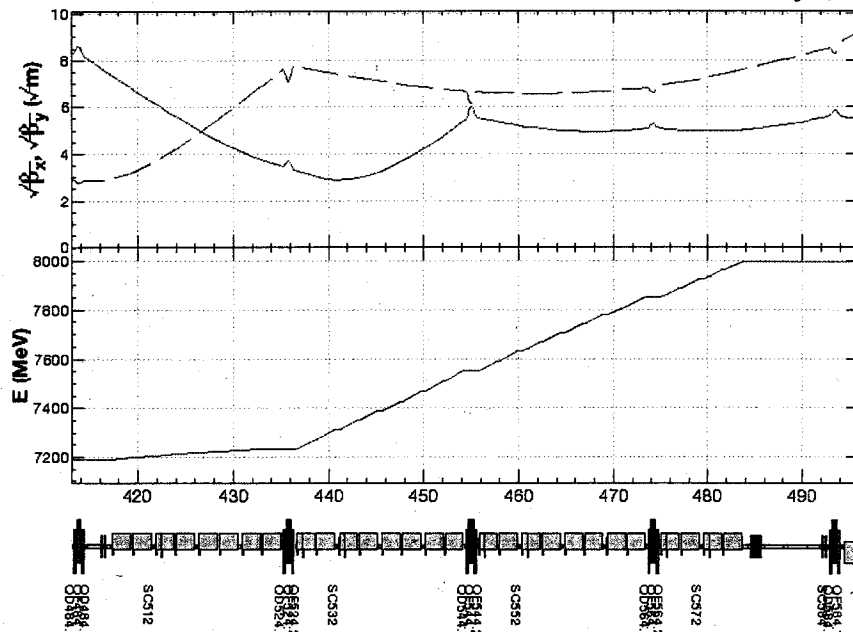
QD564, QD584 => 0.532倍、QF564, QF584 => 0.556倍

e⁺ 5セクターマッチング後の8 GeV e⁻ ビーム



e⁺ 5セクターマッチング後の 8 GeV e⁻ ビーム+Q{DF}564, Q{DF}584調整

後は、e⁻BTで
マッチング!



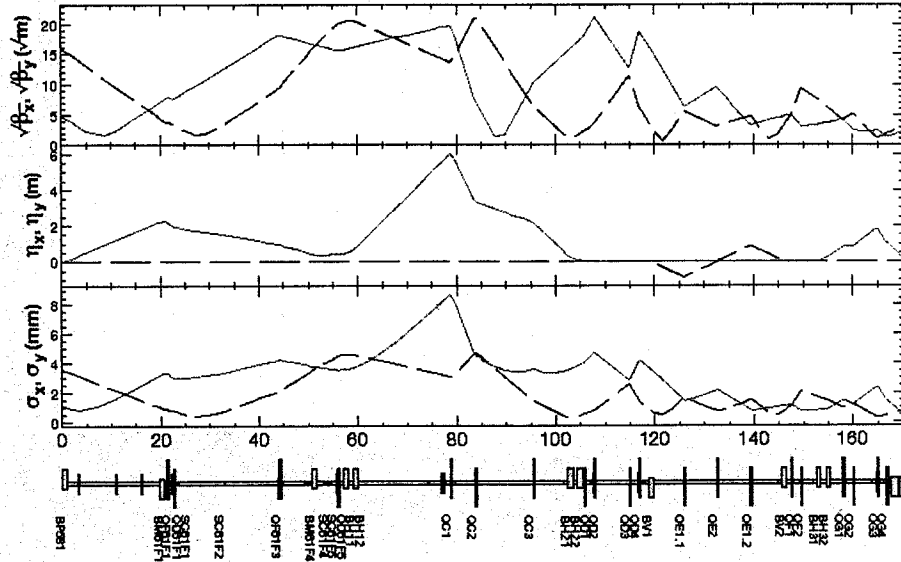
(QD564, QD584 => 0.532倍、QF564, QF584 => 0.556倍)
(13.5A, 76.5A)

P.136 下図の条件で, PF/BT を Matching.

$$R_{56} = 0.1047$$

now

03/04/2009 21:54:11



(/users/aida/kekl/bt/pf/v4-0-rd.sad)

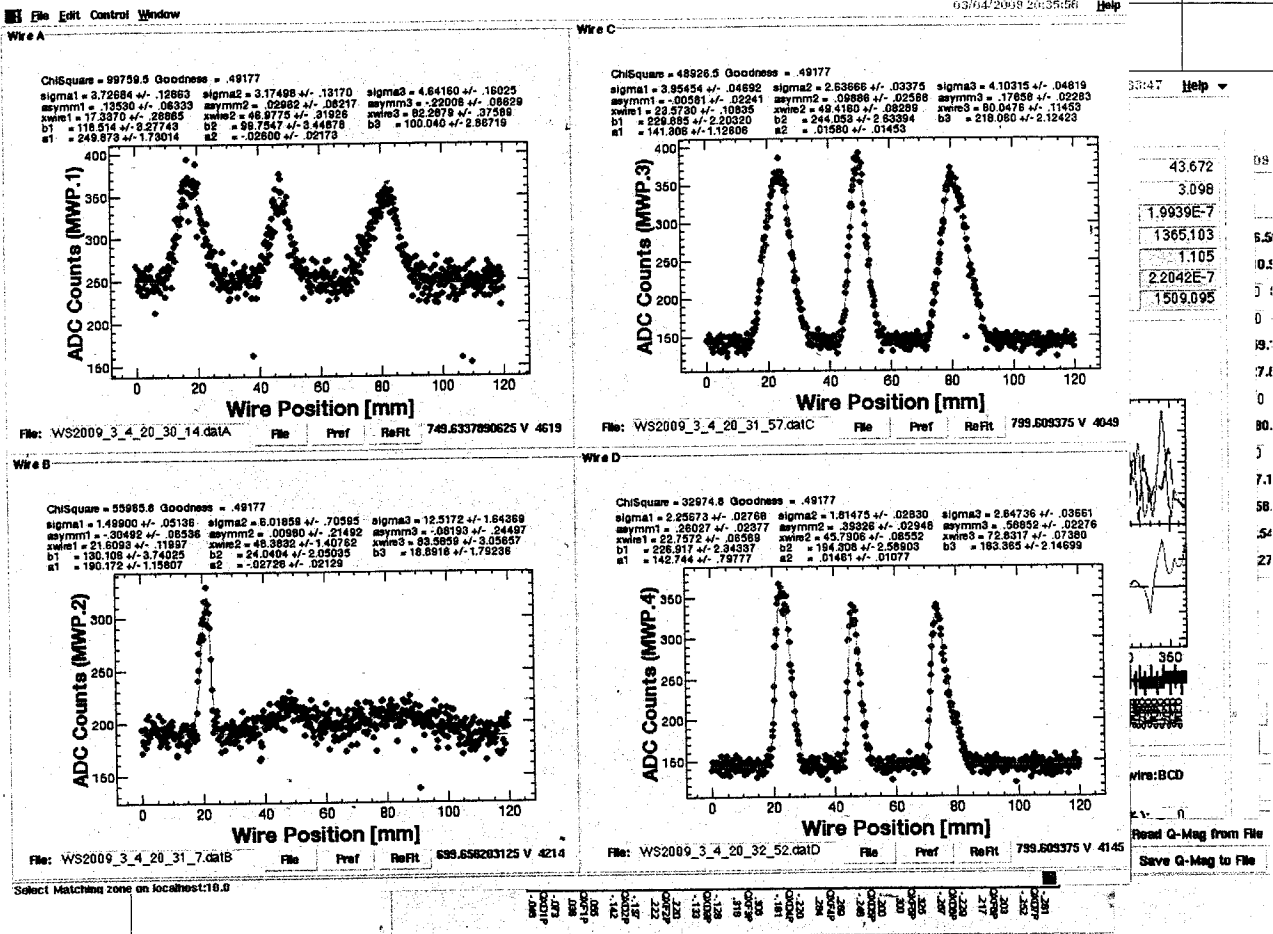
axi 2.69 bxi 24.699 ayi 6.105 byi 251.72;
EMITX=5e-8;EMITY=5e-8;

Variable	Keyword	Now	Previous	Saved	Minimum	Maximum	Couple	Coefficient
QF61F1	K1	.099259109914	!.148600745	.211859143	-1.00000E10	1.000000E10	<--	1.00000000
QD61F1	K1	-.090276871219	!-.155863244	-.198911475	-1.00000E10	1.000000E10	<--	1.00000000
QF61F3	K1	.039502931402	!.023287639	.044162729	-1.00000E10	1.000000E10	<--	1.00000000
QD61F5	K1	-.025800619406	!-.038083024	-.022365793	-1.00000E10	1.000000E10	<--	1.00000000
QC1	K1	.136563463747	!.129180435	.166467051	-1.00000E10	1.000000E10	<--	1.00000000
QC2	K1	-.133021809283	!-.103210543	-.139724548	-1.00000E10	1.000000E10	<--	1.00000000
QC3	K1	.074927800925	!.056794093	.147092175	-1.00000E10	1.000000E10	<--	1.00000000
QD1	K1	-.046555539811	!-.038636677	-.088100100	-1.00000E10	1.000000E10	<--	1.00000000
QD2	K1	.134184846429	!.144512927	.093673700	-1.00000E10	1.000000E10	<--	1.00000000
QD3	K1	-.339304055409	!-.318497080	-.261179200	-1.00000E10	1.000000E10	<--	1.00000000
QD4	K1	.231136798625	!.228242092	.221346800	-1.00000E10	1.000000E10	<--	1.00000000
QE1	K1	-.303022414200	!-.303020754	-.303025100	-1.00000E10	1.000000E10	<--	1.00000000
QE2	K1	.151384945303	!.131893216	.182996200	-1.00000E10	1.000000E10	<--	1.00000000
QF1	K1	.233054602440	!.218015448	.284049000	-1.00000E10	1.000000E10	<--	1.00000000
QF2	K1	-.304389068605	!-.299009110	-.319426400	-1.00000E10	1.000000E10	<--	1.00000000
QG1	K1	.270333300000	!.270333300	.270333300	-1.00000E10	1.000000E10	<--	1.00000000
QG2	K1	-.270435800000	!-.270435800	-.270435800	-1.00000E10	1.000000E10	<--	1.00000000
QG3	K1	.345533600000	!.345533600	.345533600	-1.00000E10	1.000000E10	<--	1.00000000
QG4	K1	-.185361100000	!-.185361100	-.185361100	-1.00000E10	1.000000E10	<--	1.00000000

"pfbt-magnet-setting-3.rings.dat"

KEKB/BT e+ line Matching

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33:47 Help

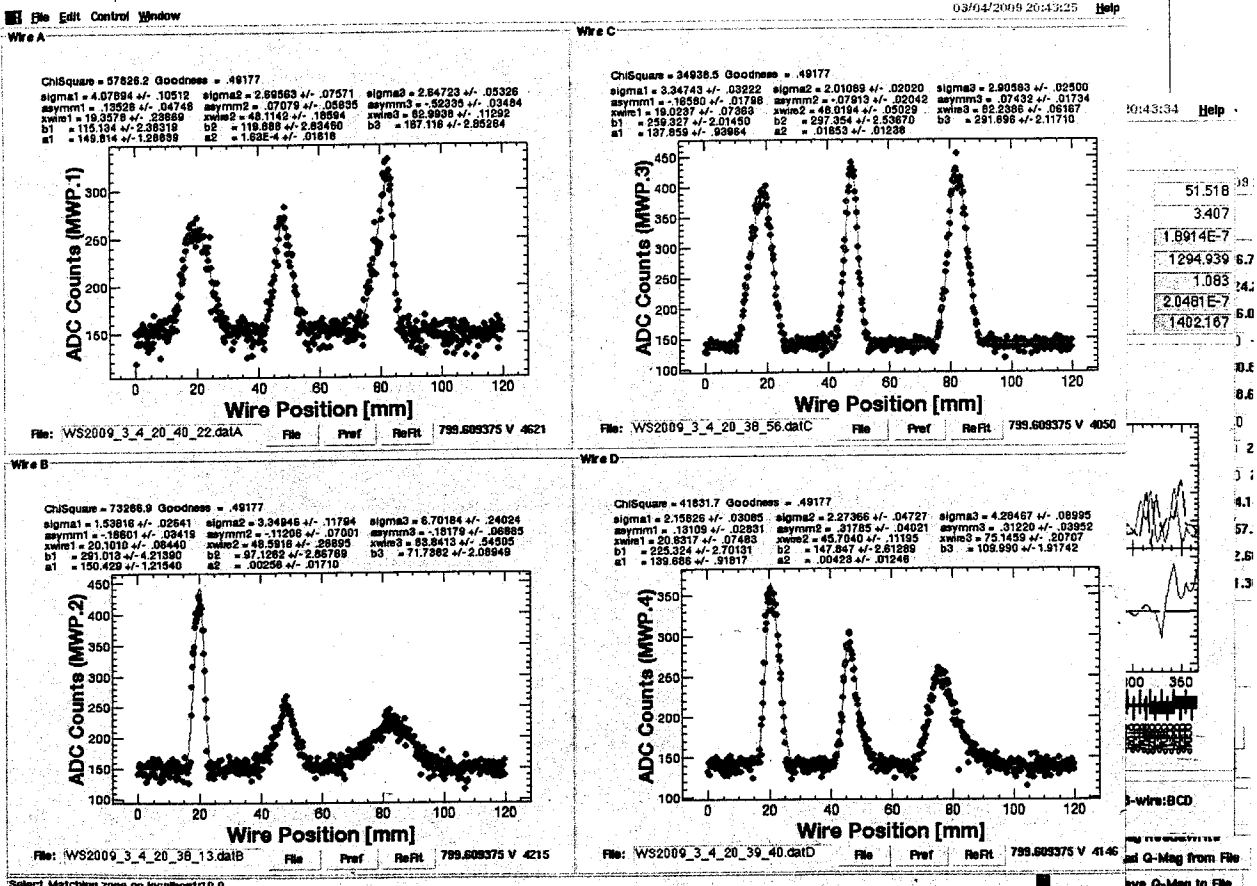
43.672	09
3.098	
1.9939E-7	
1365.103	6.5
1.105	10.1
2.2042E-7	
1509.095	

360

wire:BCD

Read Q-Mag from File

Save Q-Mag to File



30:43:34 Help

51.518	39
3.407	
1.6914E-7	
1294.939	6.7
1.063	14.1
2.0481E-7	
1402.167	

360

wire:BCD

Read Q-Mag from File

Save Q-Mag to File

Select Matching zone on localhost:10.0

03/04/2009 20:43:25 Help

03/04/2009 20:35:56 Help

03/04/2009 20:43:25 Help

03/04/2009 20:35:56 Help