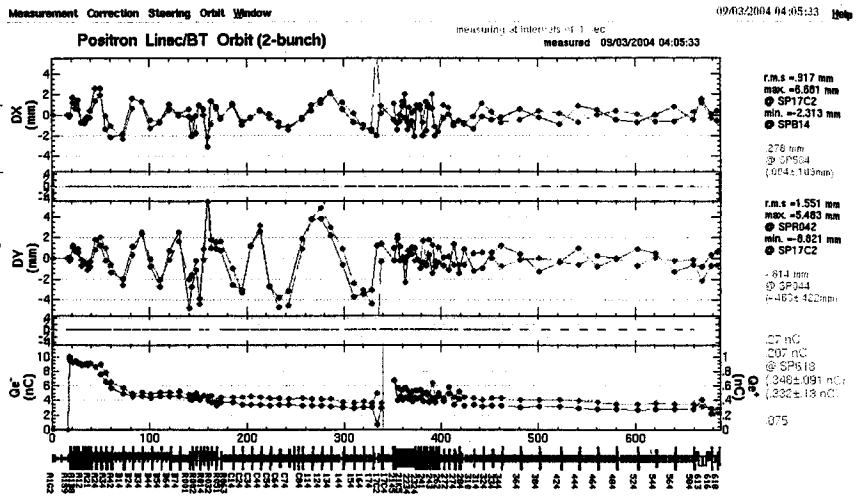
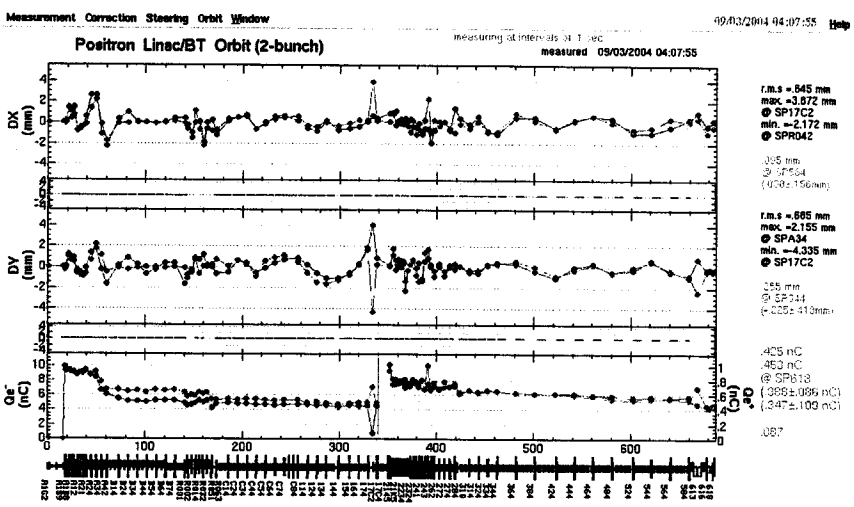
71

4:05 再度. data3794.all
を Quick Load 待.
軌道を実行させる.
(BX/Y_A1_C5, SX/Y_A3_1
で調整)

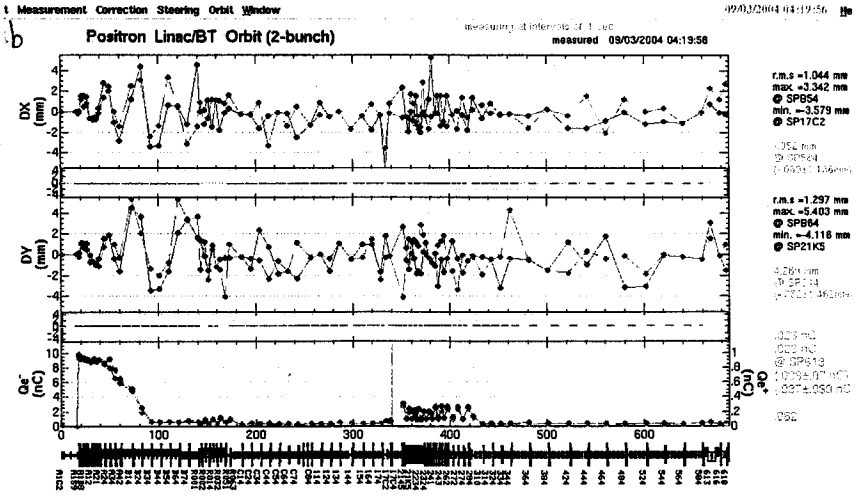


~sensha/bin/orbitcor␣a
は NG.

~sensha/bin/orbitcor␣b
は OK.

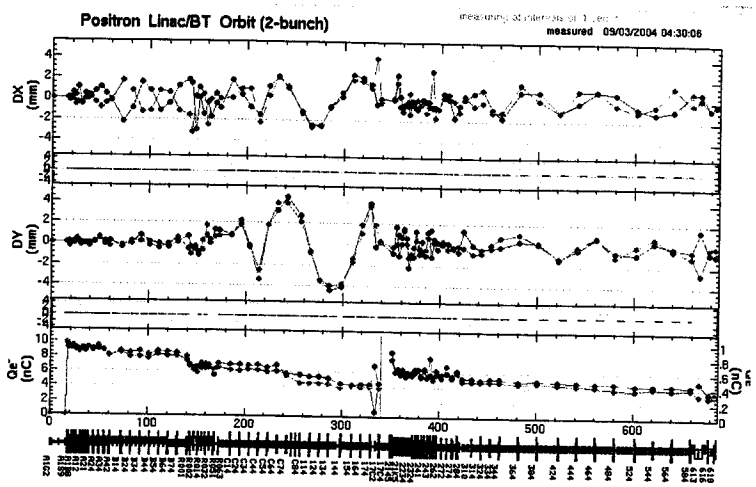


~sensha/bin/orbitcor␣-second␣b
は 実行できたが.
軌道は NG.



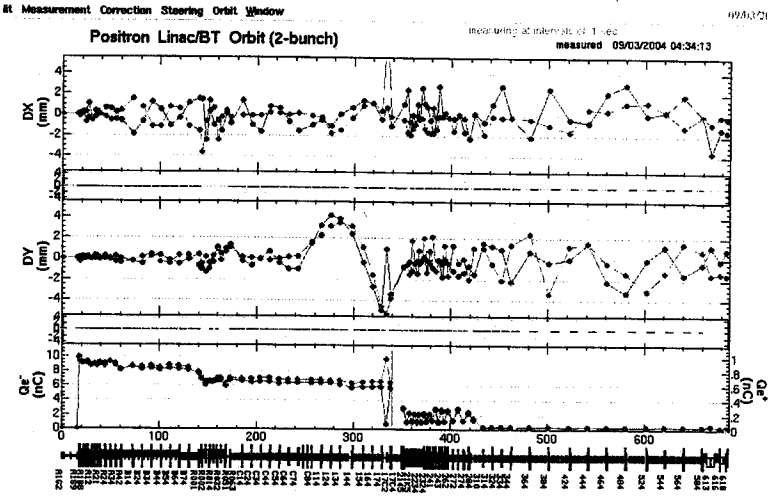
4:23 data3794.all を Quick Load.

4:30 C.1セクター
軌道を蛇行させる.
(SX/Y_C1_1, SX/Y_C4_1
SX/Y_C7_1)



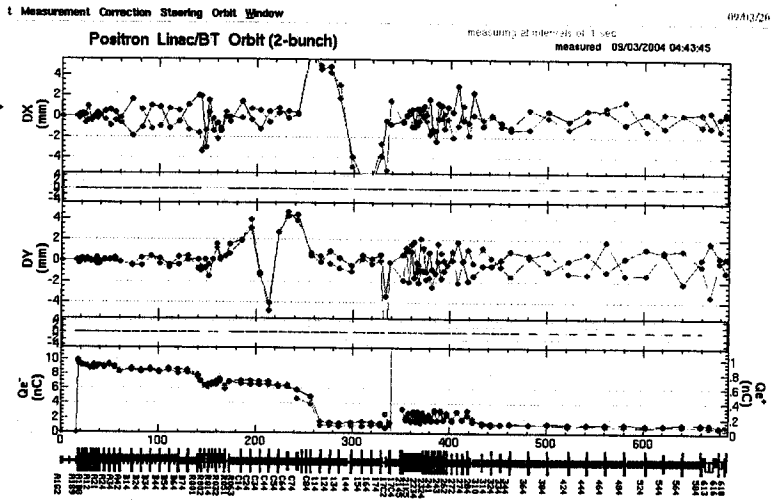
~sensha/bin/orbitcor␣C
~sensha/bin/orbitcor␣1
実施後

② Y方向のC8以降の軌道がうまくなおせていない。
Target以降もビーム減少.
(ふつうなくていいSTC等もふっていた?)



~sensha/bin/orbitcor␣e1
-second␣C
実施後

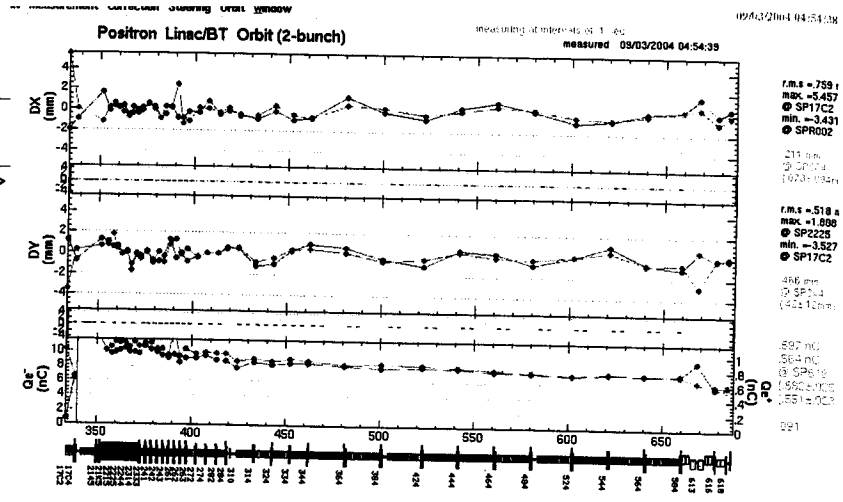
1セクターはせず.



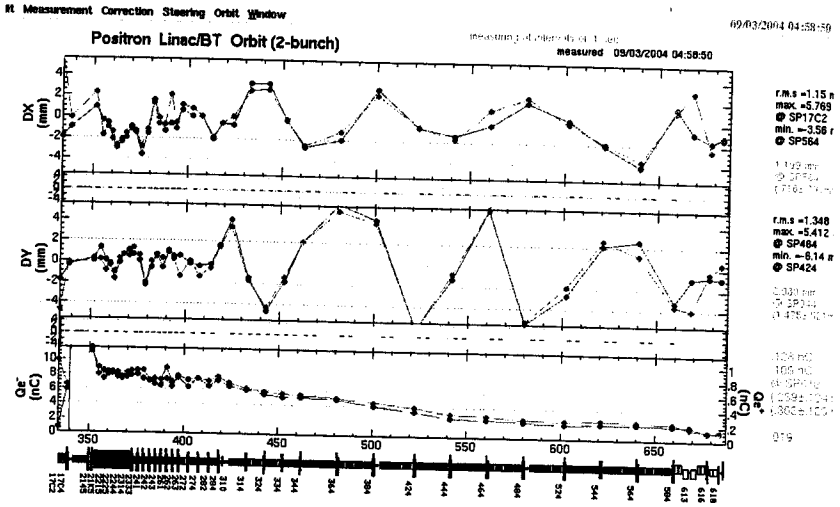
4:46 data3794.all を Quick Load.

73

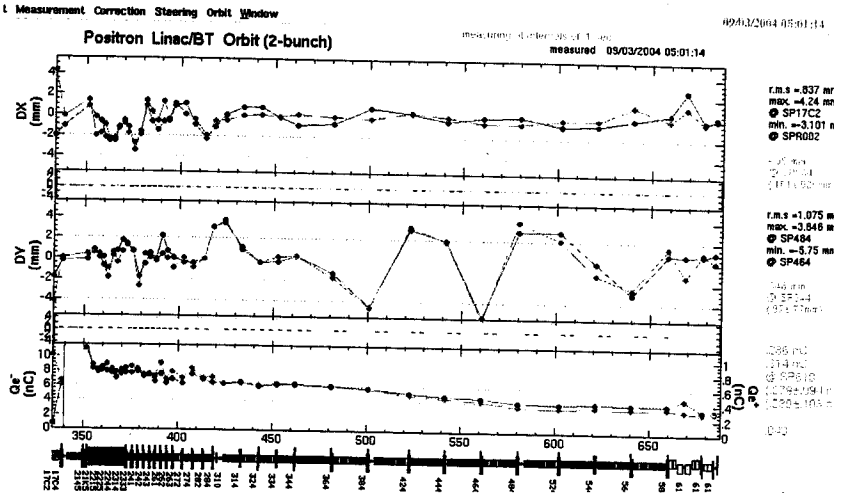
4:54 data3794.all →



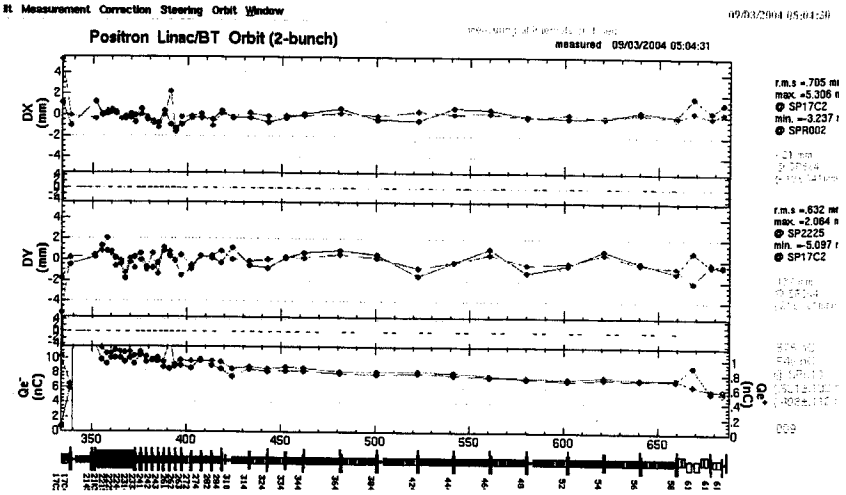
^sensha/bin/orbitcor␣2
実施後 →



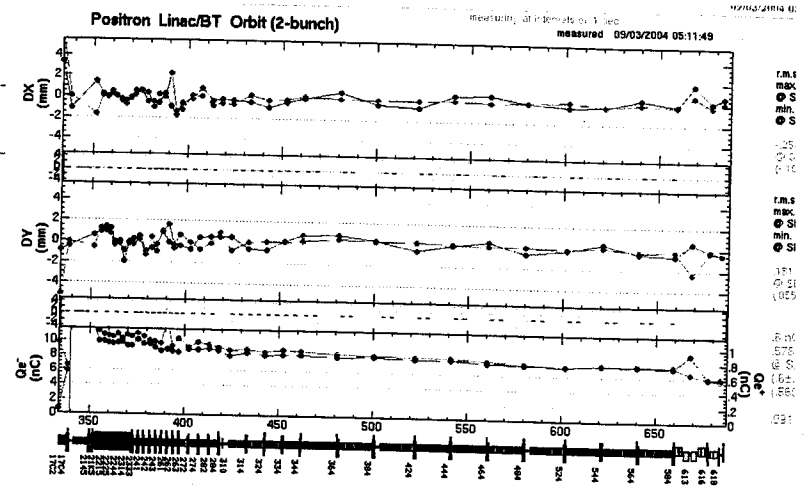
^sensha/bin/orbitcor␣2.
〃 ␣3
実施後 →



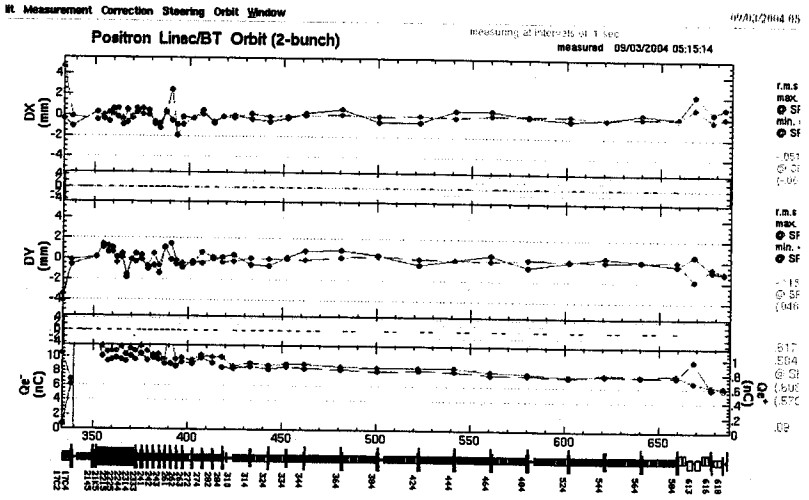
data3794.all & Quick Load.
^sensha/bin/orbitcor␣3
実施後. →



~sensha/bin/orbitcor␣4
実施後



~sensha/bin/orbitcor␣5
実施後

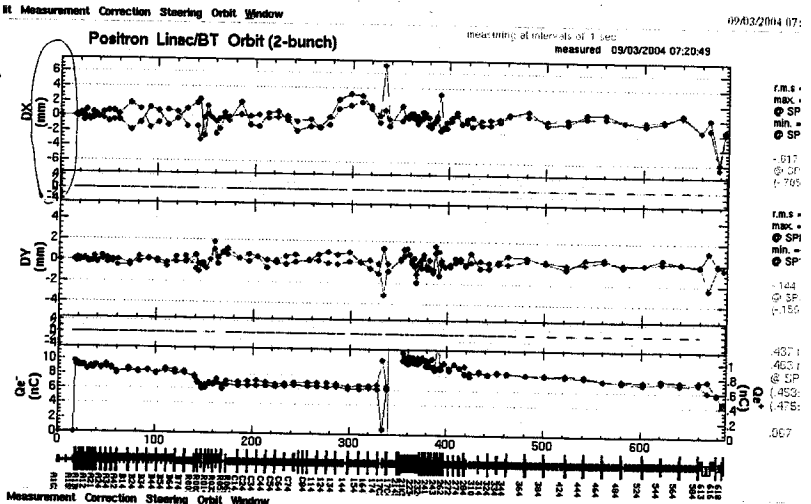


data3794.all QuickLoad.
3,4セクター STC 調整して
軌道を4mmていど だした後

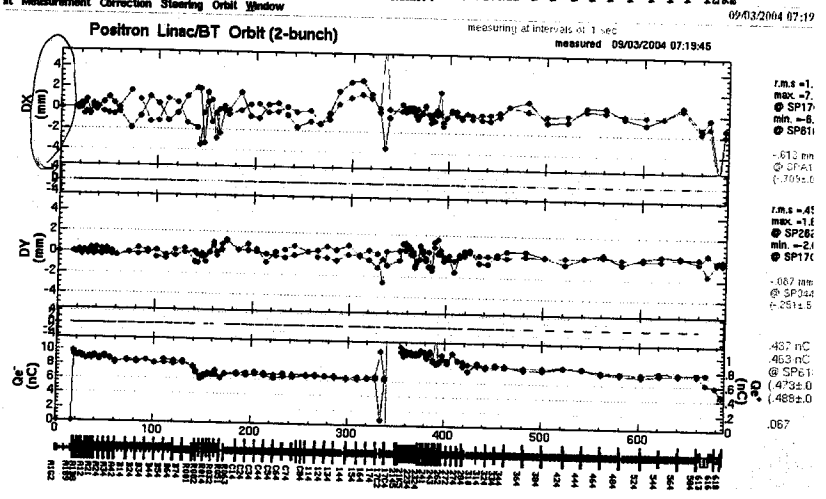
~sensha/bin/orbitcor␣345
実施.

補正後 ←Xレンジ 7mm

←Xレンジ 5mm



軌道
@ECS部が大きくなった



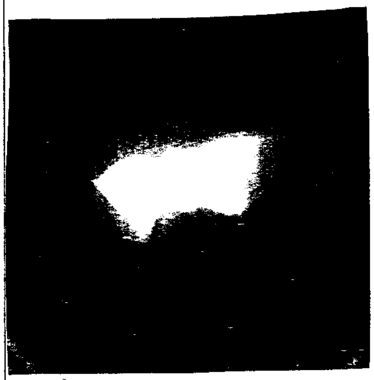
9/3(金) 昼シフト 吉田, スワダ

9:55 Magnet 初期化. — Kly 2-7 ranging

10:00 KEKB e+ ABセクターの Beam 確認 (飯谷)

セクターA セクターB 間の ビームスポットが 切れ入ってる.
→ ビームロスになってる。

10:05 将来に 下流 [illegible] を 改善予定
とりあえず 手で Matching する (飯谷他)
↳ 効果なし. 難しい。



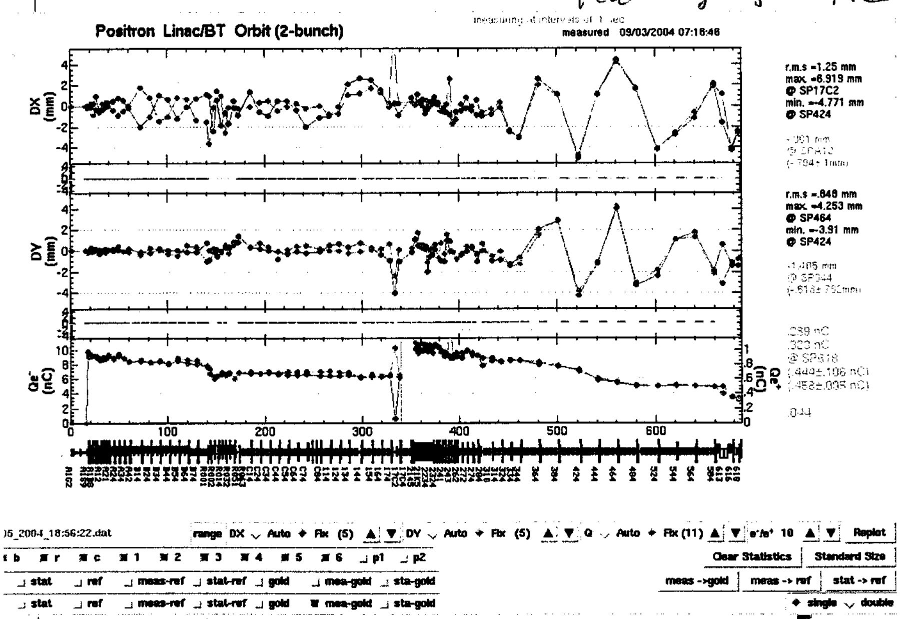
β8-2 SC

2bunch 画像.

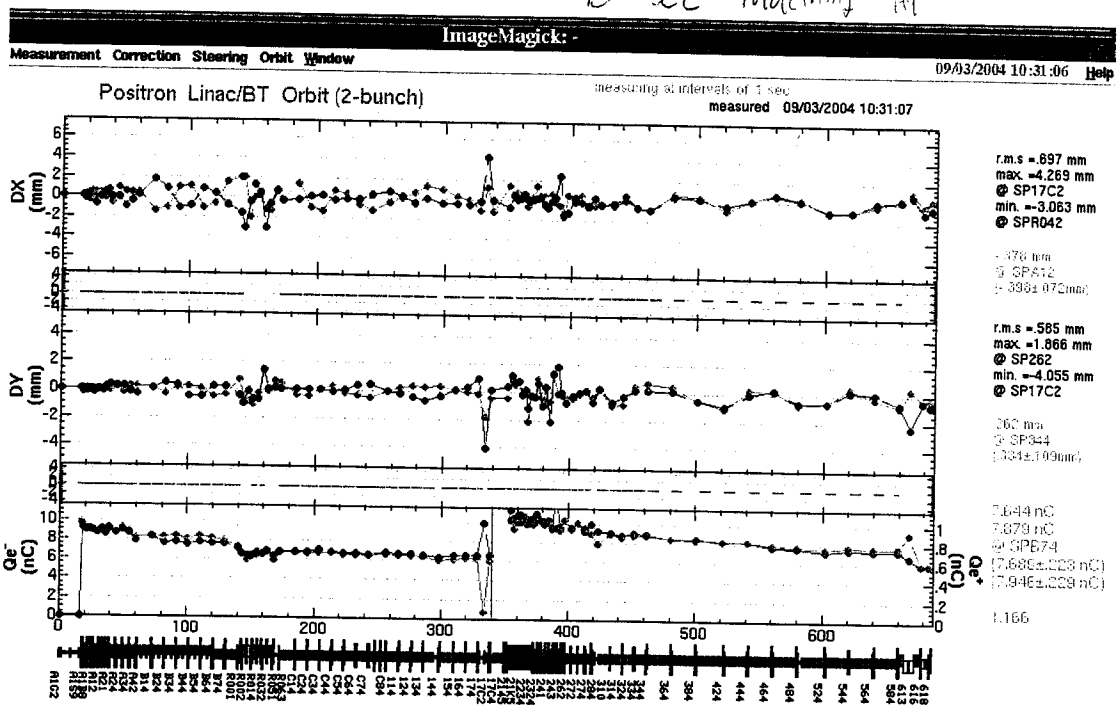
10:30 A,B 軌道補正. C,Dも orbit correction をした。

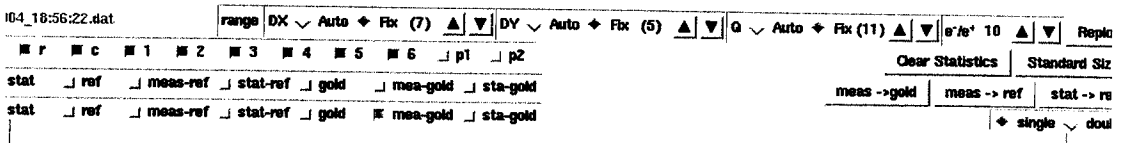
B sector Matching.

Matching前 の 軌道 (2-7 ranging 中)



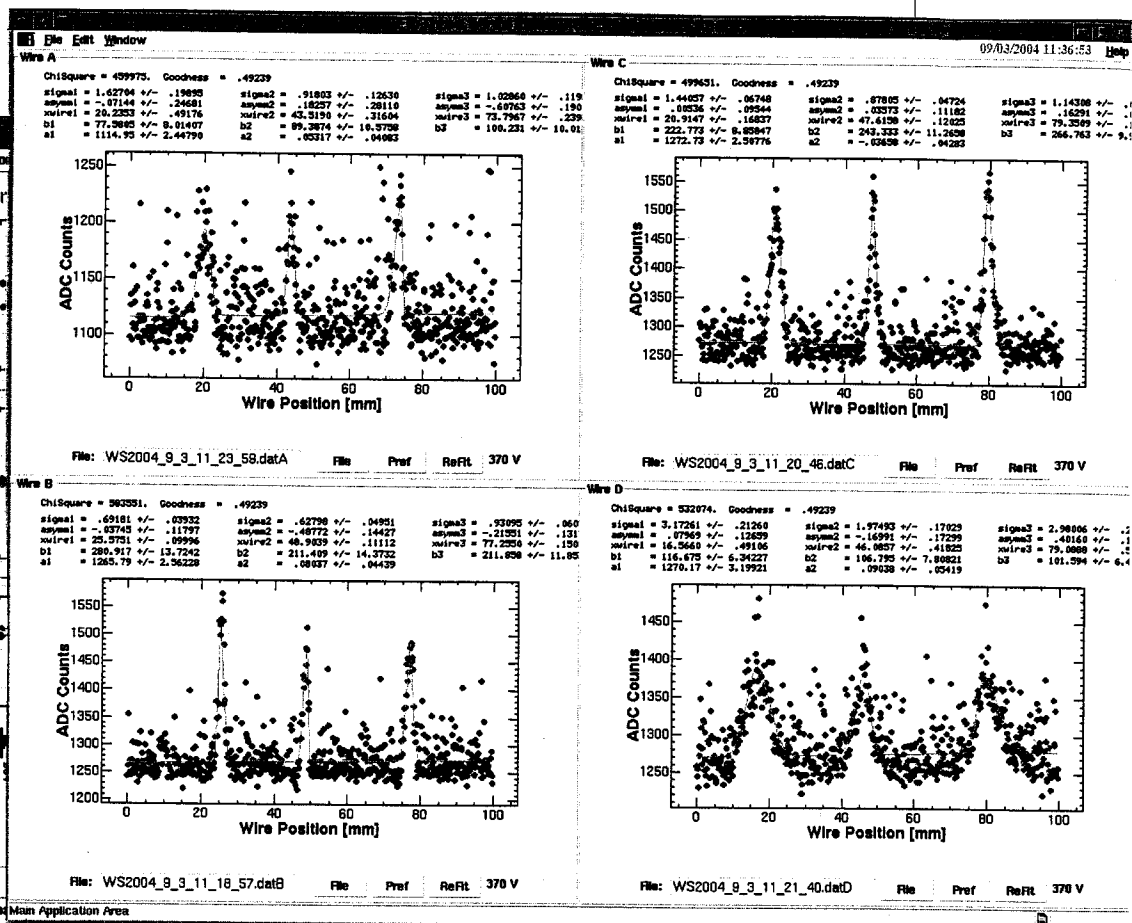
B-sec Macthing 用

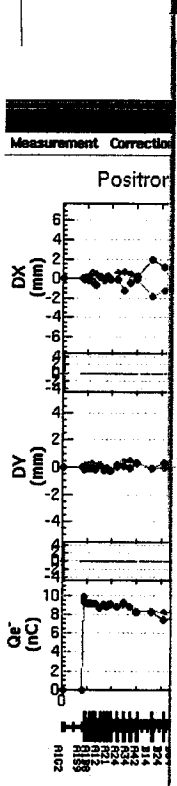




77

B sector e/e+





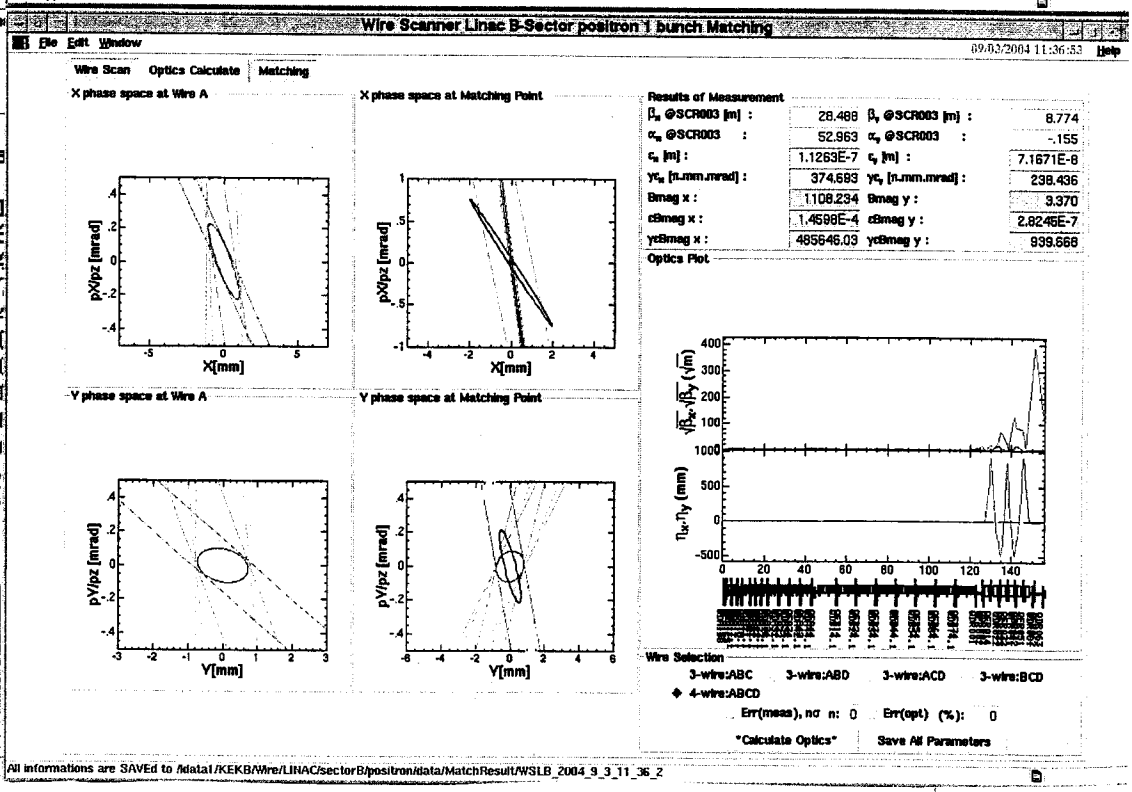
004_18:56:22.dat

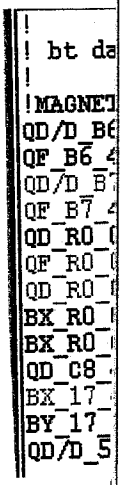
r c 1

stat ref ma

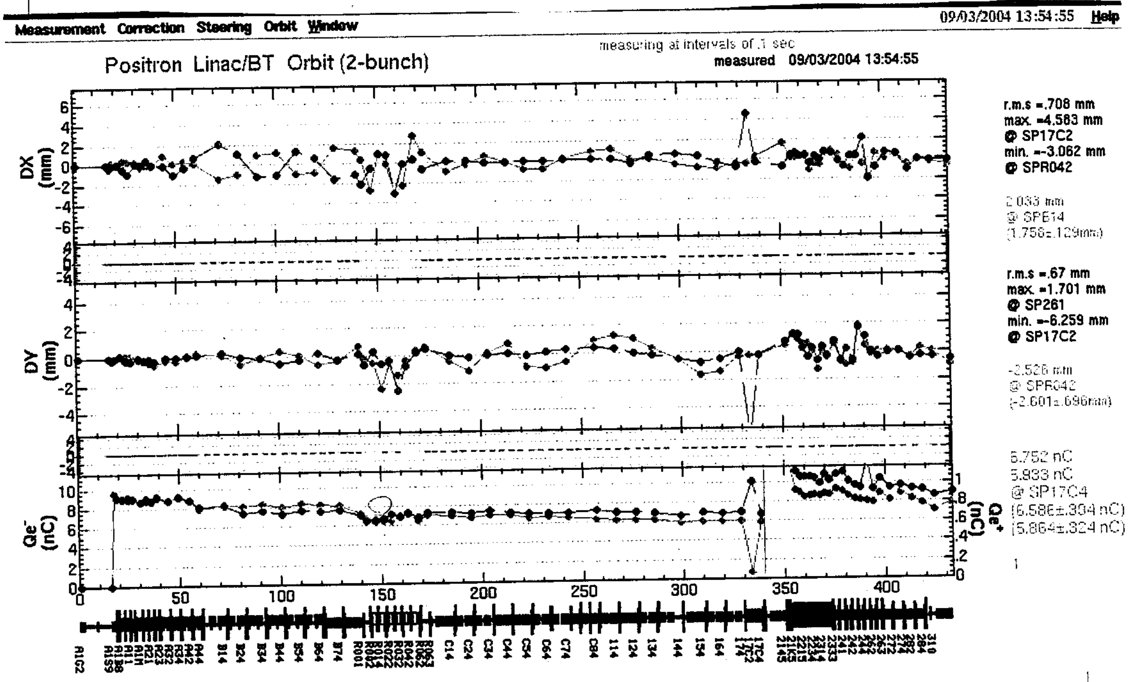
stat ref ma

Main Application Area



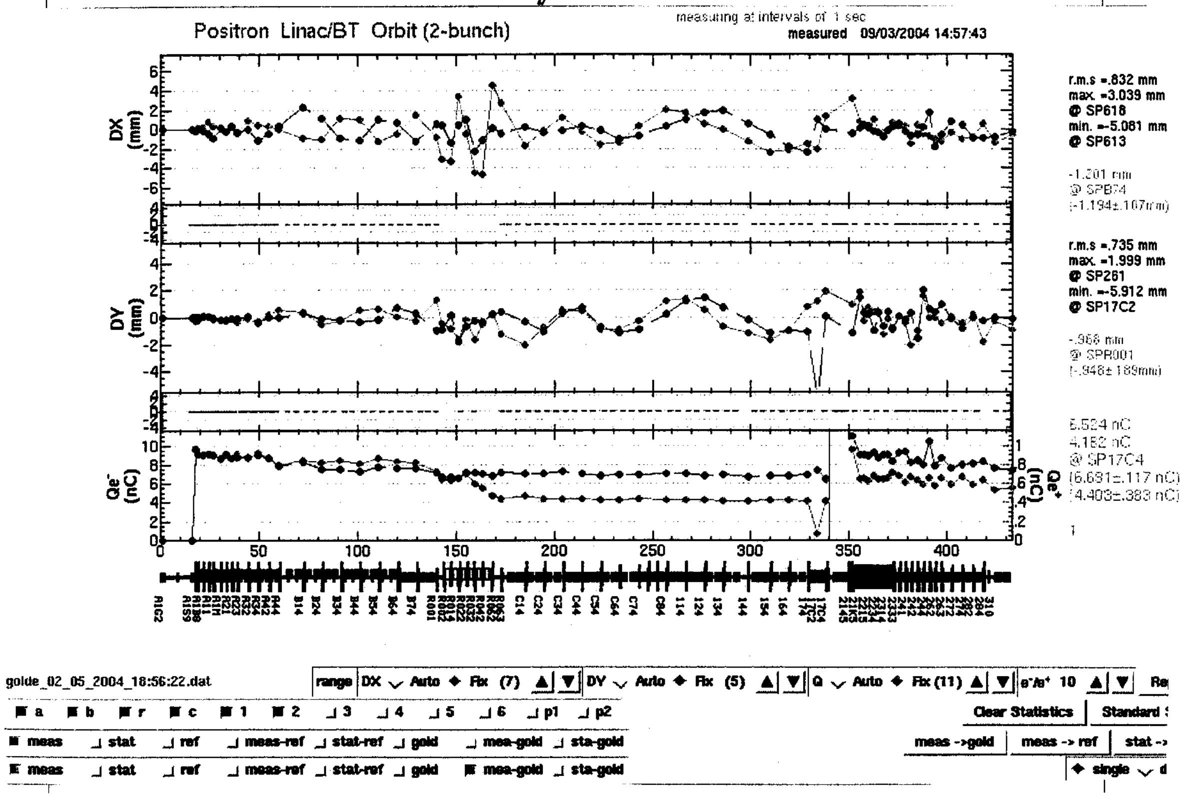


13:58 Sub A,B の Energy Spread Tune 後.



13:58 kly C-6 magnet 用 AC-… 交換

Arc部 Manual Matching 終了



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15:04 5e27 – WS 測定. KEKB e⁺ beam

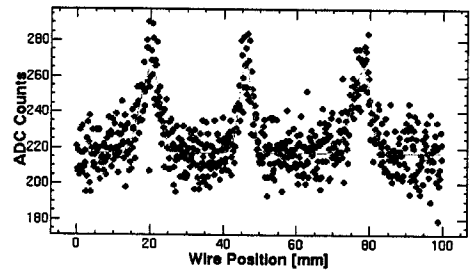
Fit Three Wires Linac 5-Sector KEKBp 1 bunch

File Edit Window 09/03/2004 15:07:40 Help

Wire A

ChiSquare = 80326.5 Goodness = .49239

sigma1 = 2.42862 +/- .16628	sigma2 = 1.71467 +/- .13179	sigma3 = 2.47248 +/- .169
asymm1 = -.17638 +/- .13254	asymm2 = -.02636 +/- .15764	asymm3 = -.28346 +/- .130
xwire1 = 20.4329 +/- .39401	xwire2 = 46.4732 +/- .32098	xwire3 = 78.4645 +/- .396
b1 = 48.7938 +/- 2.76329	b2 = 49.3578 +/- 3.24771	b3 = 47.6985 +/- 2.738
a1 = 217.312 +/- 1.10688	a2 = -.00364 +/- .01855	

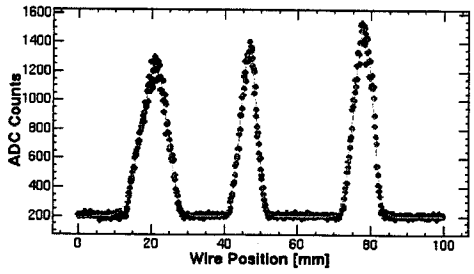


File: WS2004_9_3_15_2_50.datA File Pref ReFit -639.6875 V

Wire C

ChiSquare = 838445. Goodness = .49239

sigma1 = 3.48814 +/- .03193	sigma2 = 2.12534 +/- .02051	sigma3 = 2.49276 +/- .020
asymm1 = -.09739 +/- .01720	asymm2 = -.09014 +/- .01951	asymm3 = -.04495 +/- .019
xwire1 = 21.1439 +/- .07319	xwire2 = 46.7846 +/- .05077	xwire3 = 78.0831 +/- .046
b1 = 1027.46 +/- 7.97540	b2 = 1157.84 +/- 9.45755	b3 = 1310.29 +/- 8.812
a1 = 193.467 +/- 3.93089	a2 = .05803 +/- .06327	

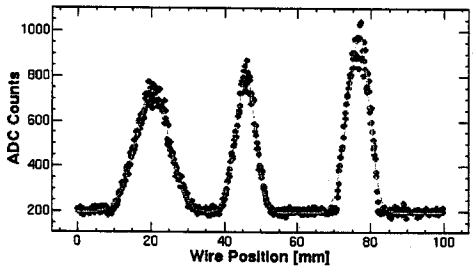


File: WS2004_9_3_15_5_29.datC File Pref ReFit -619.697265625 V

Wire B

ChiSquare = 476370. Goodness = .49239

sigma1 = 4.55766 +/- .05723	sigma2 = 2.70993 +/- .03416	sigma3 = 2.94069 +/- .027
asymm1 = -.03341 +/- .02217	asymm2 = -.04703 +/- .02591	asymm3 = -.04444 +/- .018
xwire1 = 20.5628 +/- .12315	xwire2 = 45.9218 +/- .08292	xwire3 = 76.6733 +/- .066
b1 = 929.738 +/- 5.14024	b2 = 605.394 +/- 6.36546	b3 = 784.341 +/- 6.143
a1 = 196.098 +/- 3.45062	a2 = 3.46E-4 +/- .05221	

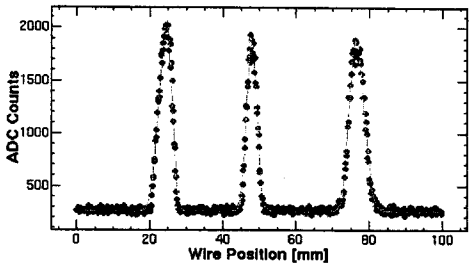


File: WS2004_9_3_15_3_59.datB File Pref ReFit -619.697265625 V

Wire D

ChiSquare = 1361845 Goodness = .49239

sigma1 = 1.72961 +/- .01513	sigma2 = 1.33405 +/- .01438	sigma3 = 1.99958 +/- .01
asymm1 = -.18947 +/- .01741	asymm2 = .03573 +/- .02194	asymm3 = .14828 +/- .01
xwire1 = 24.7004 +/- .03688	xwire2 = 47.8491 +/- .03639	xwire3 = 76.2536 +/- .044
b1 = 1806.49 +/- 13.3586	b2 = 1649.43 +/- 15.0112	b3 = 1627.74 +/- 12.48
a1 = 257.645 +/- 4.18645	a2 = .02136 +/- .07190	



File: WS2004_9_3_15_6_24.datD File Pref ReFit -679.66796875 V

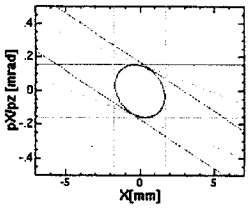
Main Application Area

Wire Scanner Linac 5-Sector KEKBp 1 bunch Matching

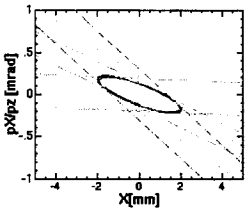
File Edit Window 09/03/2004 15:07:41 Help

Wire Scan | Optics Calculate | Matching

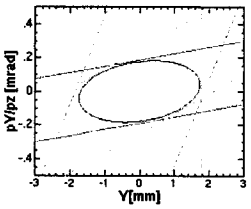
X phase space at Wire A



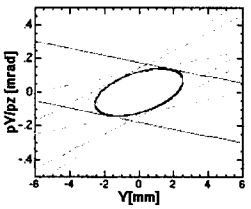
X phase space at Matching Point



Y phase space at Wire A



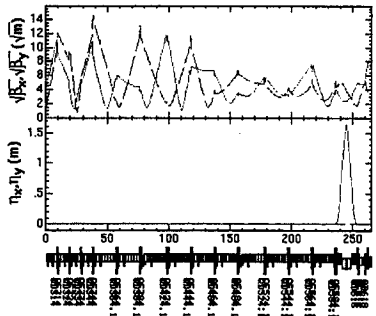
Y phase space at Matching Point



Results of Measurement

β_x @BM611 [m] :	14.716	β_y @BM611 [m] :	20.655
α_x @BM611 :	1.231	α_y @BM611 :	-.620
ε_x [m] :	2.5226E-7	ε_y [m] :	3.0983E-7
$\gamma\varepsilon_x$ [π.mm.mrad] :	1727.788	$\gamma\varepsilon_y$ [π.mm.mrad] :	2122.118
Bmag x :	1.008	Bmag y :	1.002
εBmag x :	2.7568E-7	εBmag y :	3.3650E-7
γεBmag x :	1888.305	γεBmag y :	2304.769

Optics Plot



Wire Selection

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

◆ 4-wire:ABCD

Err(meas), nσ n: 0 Err(opt) (%): 0

"Calculate Optics" Save All Parameters

All informations are SAVEd to /data1/KEKB/Wire/LINAC/sector5/KEKBp/data/MatchResult/WSL5p_2004_9_3_15_7_22

15:09 Run All Tuning

・Overall-B 49105 三値

+9ns をやってみたが良いとはいえない。Arc 透過率は変わらない。

Overall-A 49083 三値。

+6ns, −30ns を振ってみたが 透過率変化なし

15:19 B側プログラムによる orbit Correction テスト。

昼のテストではうまく行っているようだが、ここ2日間に収束する解はでないようである。

1st only Correction