

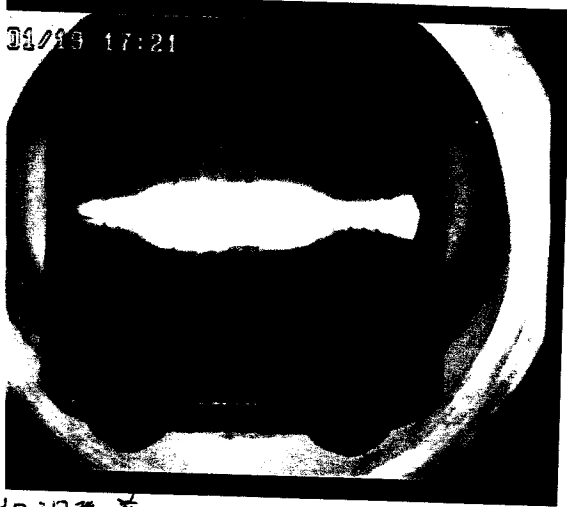
2009/1/19 17:00 -

三浦 熊野 千本

飯田

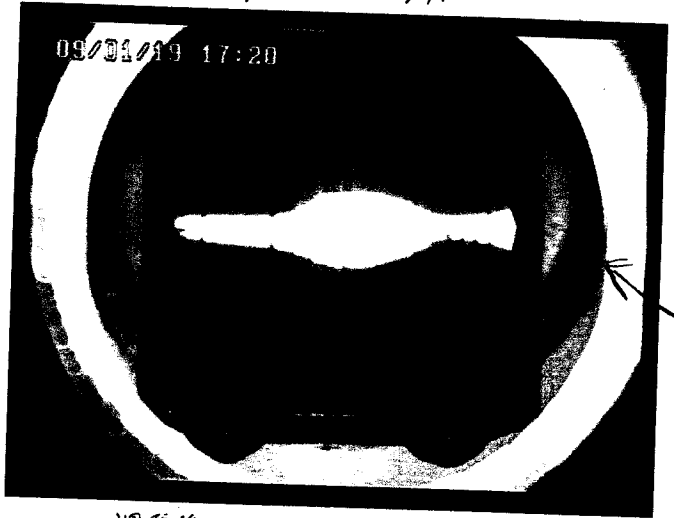
SH-A1-S1 $\phi 289.6^\circ \rightarrow 290.6^\circ$

SH-A1-S8 $\phi 98.0^\circ \rightarrow 94.0^\circ$

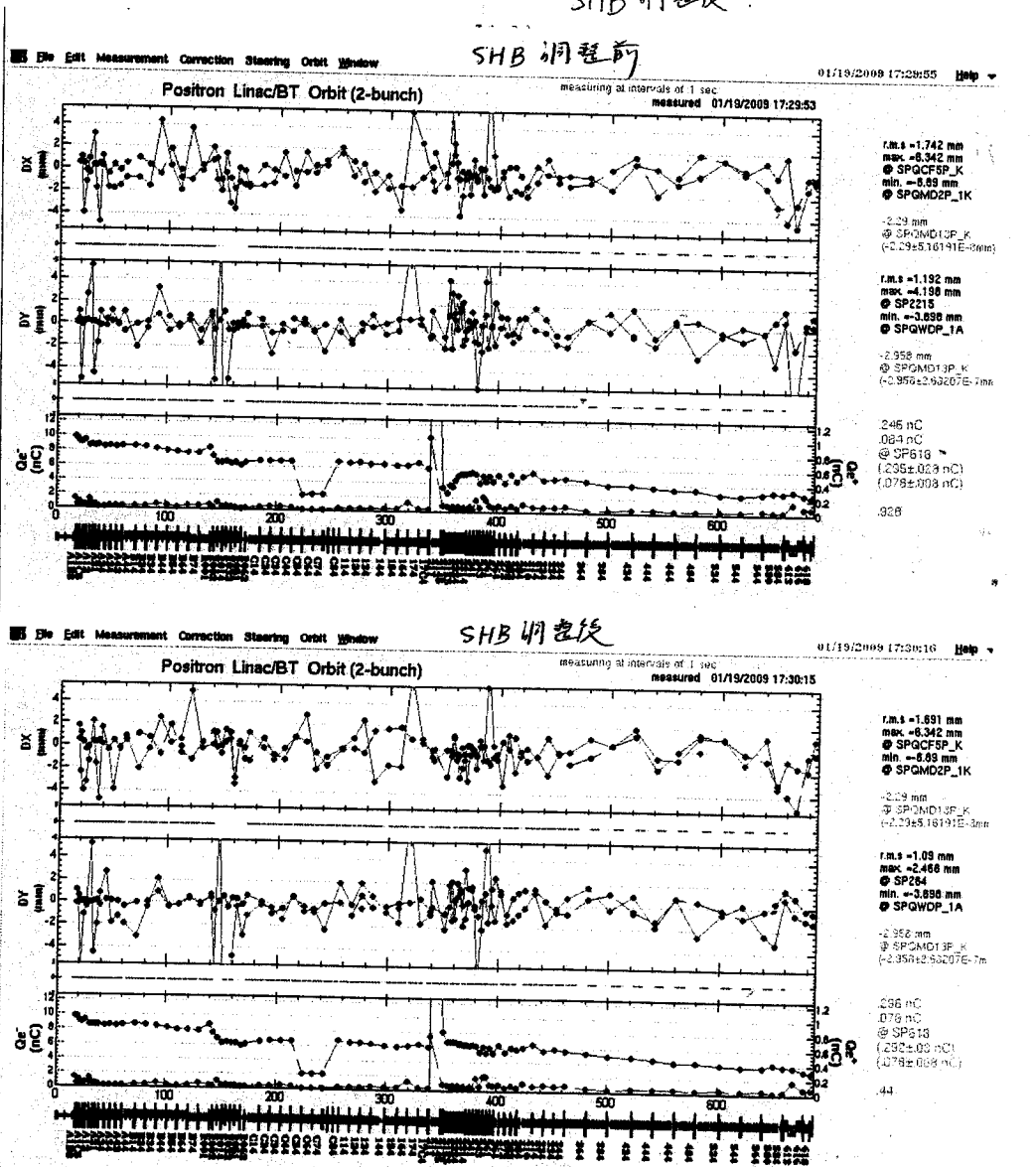


SHB調整前

SC-R0-31



SHB調整後



17:40 ~ BX-17-C5 X, Y ステータス ステータス
 (夕-夕ト入リ口)

KL-21, KL 1A ← target 位置.
 ↓ ↓
 304 → 295° π あり変化せず.

II 補正 - 高圧 方向 - 変化ありあり
 ↓
 Arc 2 Loss

Grid height NO.1 500 V → 350 V

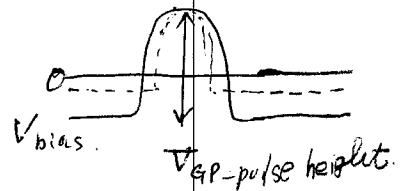
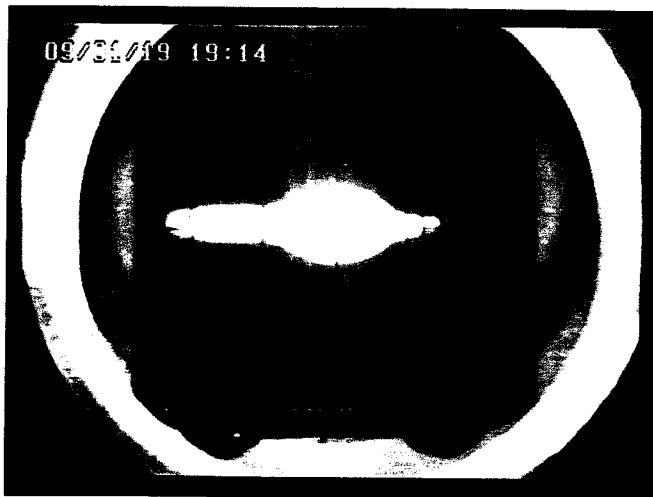
bias No.2 115 → 55 V

SP-ALB8 = charge 量 変化ありあり 調整

Grid Delay NO1 2.02 → 1.84 ns

SH-A1-S1 φ 289.6 → 288.1°

SB-B φ 91° → 86.0°

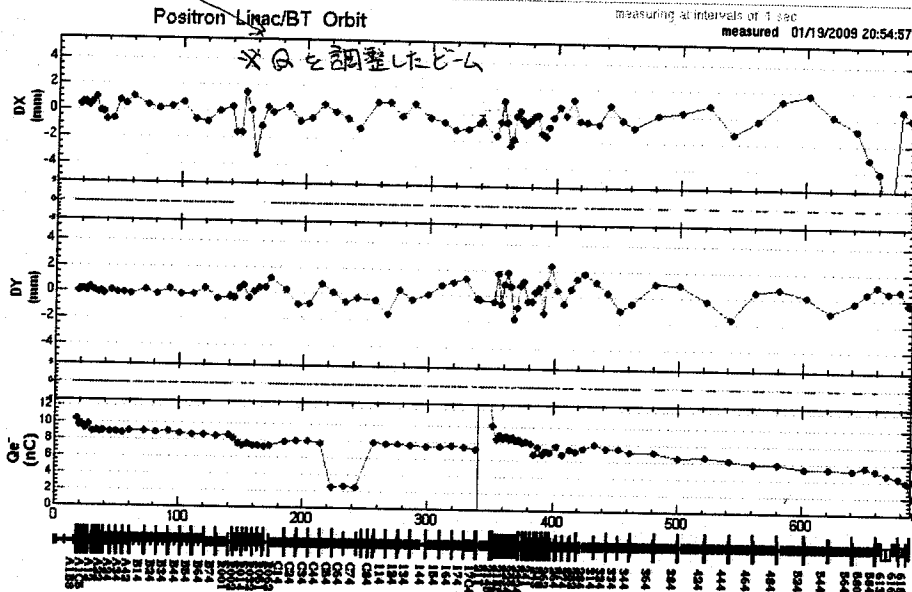


Target 直後の STC、Q-mag 調整

BY-21-K5 0.001 A → 0.201 A
 QD/A-21-45 1.650 A → 1.510 A
 QD/A-21-K5 1.400 A → 1.440 A
 QF-21-K5 1.700 A → 1.680 A

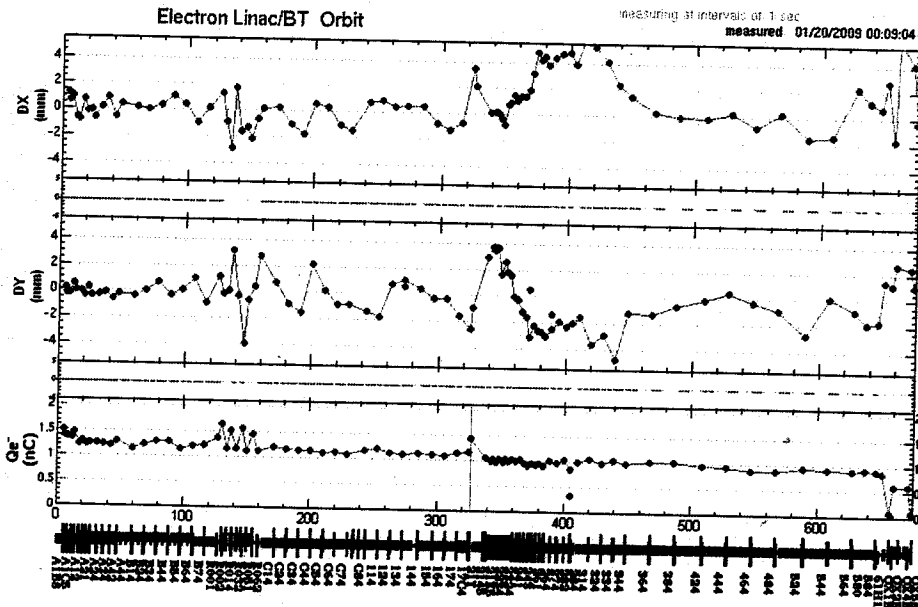
※その後、このパラメータは元に戻した。

e+



SP_A1_B8	10.304	nC	SP_22.15	0.874	nC
SP_B7.4	8.534	nC	SP_58.4	0.527	nC
SP_C8.4	7.952	nC	SP_61.8	0.407	nC
SP_17_C4	7.375	nC			

e-



※上記の
パラメータを
元に戻した。
パルス安定性
調整

SP_A1_B8	1.368	nC	SP_58.4	0.857	nC
SP_C8.4	1.119	nC	SP_QMD10E	0	nC

09, 1, 20 0:30 ~

Grid Height No.2 (KEKB e+) 450.0V (5.000V) → 300.0V (0.000V)
 Grid Delay No.2 (KEKB e+) 1.98ns (6.600V) → 1.80ns (6.000V)

← e+ 調整

SH_A1_S1φ (KEKB e+) 288.1° → 287.1°
 SH_A1_S8φ (KEKB e+) 99.0° → 101.0°

e+ 調整後
 e- ハルズ
 ステアリング
 調整
 →

PX_17_C1 6.5A → 5.5A
 PX_17_C5 3.6A → -1.0A
 PX_21_45 4.2A → 0.0A
 PY_21_45 4.9A → 元
 PX_28_4 -2.2A → -1.9A
 PY_28_4 0.2A → 1.2A
 PX_38_4 -0.2A → 0.8A
 PY_38_4 0.5A → 元
 PX_48_4 -2.4A → -1.5A
 PY_48_4 -0.3A → 0.0A

SB_2:KBPKELAY 1280 → 1273

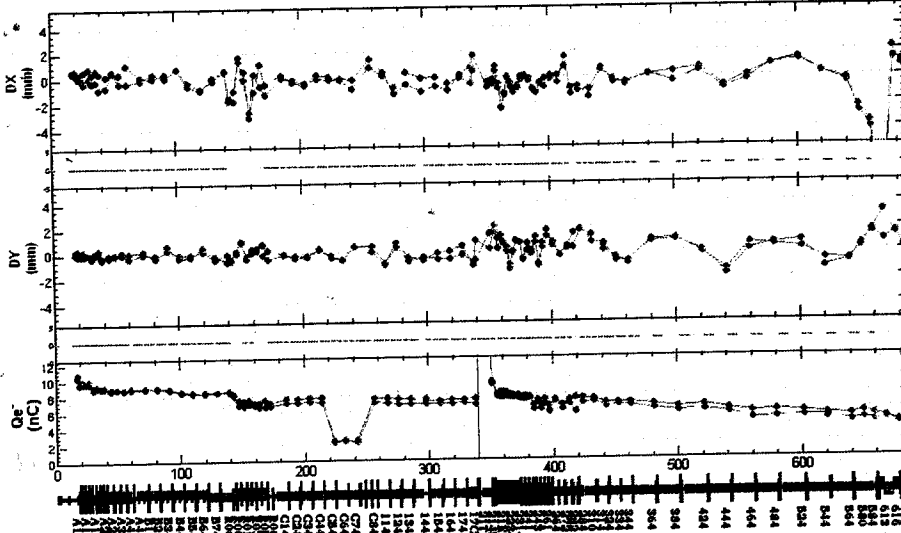
SB_Bφ (KEKB e+) 86.0° → 90.0°
 SB_2φ 271.0° → 269.0°
 SB_3φ 271.0° → 269.0°
 SB_4φ 271.0° → 269.0°

BX_17_C5 -1.548A → -1.767A
 SX_21_41 0.001A → -3.999A
 SY_21_41 0.001A → -3.000A

20090120_075025.log にセーブ

File Edit Measurement Correction Steering Orbit Window 01/20/2009 06:43:54 Help

Positron Linac/BT Orbit



r.m.s = 1.932 mm
 max = 6.342 mm
 @ SPQC5P_K
 min = -13.261 mm
 @ SP613

-481 mm
 @ SP17C4
 (-306 ± 207 mm)

r.m.s = 1.078 mm
 max = 3.081 mm
 @ SP613
 min = -3.698 mm
 @ SPQWDF_1A

1.66 nC
 @ SP2215
 (-463 ± 194 nC)

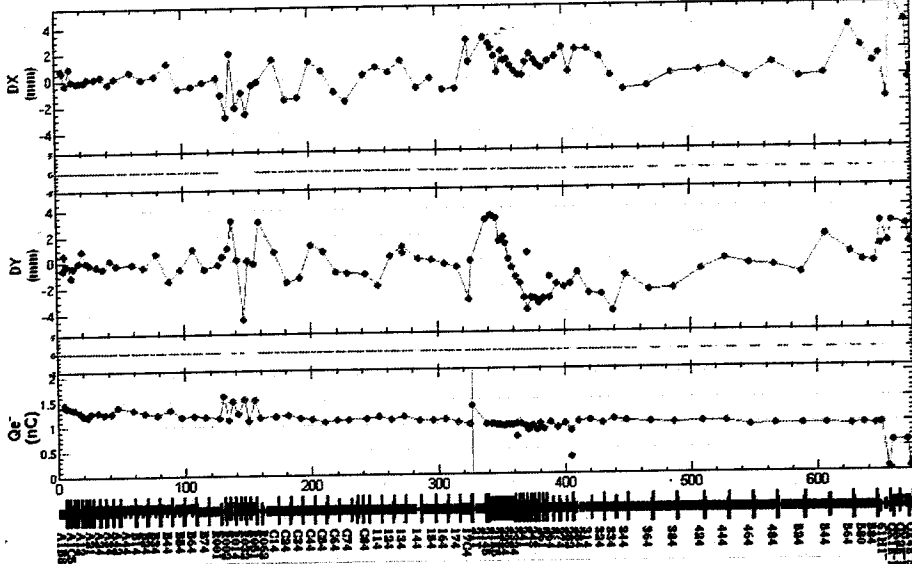
518 nC
 @ SP584
 (321 ± 102 nC)
 (-427 ± 076 nC)

544

SP_A1.B8	10.567 (11.015)	nC	SP_22.15	0.818 (0.767)	nC
SP_B7.4	8.555 (8.534)	nC	SP_58.4	0.529 (0.464)	nC
SP_C8.4	7.763 (7.321)	nC	SP_61.8	0.401 (0.379)	nC
SP_17.C4	7.858 (6.726)	nC			

File Edit Measurement Correction Steering Orbit Window 01/20/2009 07:46:29 Help

Electron Linac/BT Orbit



r.m.s = 1.953 mm
 max = 8.509 mm
 @ SPQAF7E_S
 min = -8.216 mm
 @ SPQAF5E_S

344 nC
 @ SP384
 (-66 ± 23 nC)

r.m.s = 1.064 mm
 max = 5.123 mm
 @ SPQMD10E_M
 min = -4.398 mm
 @ SPR042

-481 mm
 @ SP3MD10E_M
 (-481 ± 23642E-6)

839 nC
 @ SP584
 (309 ± 142 nC)

927

SP_A1.B8	1.434	nC	SP_58.4	0.963	nC
SP_C8.4	1.144	nC	SP_QMD10E	0	nC
SP_17.C4	1.167	nC			

e+

Target In
 ↳

(ARP) →

x e-
 ↑

~~AR のT...
 7-9pt
 ...~~

15

(P/P)

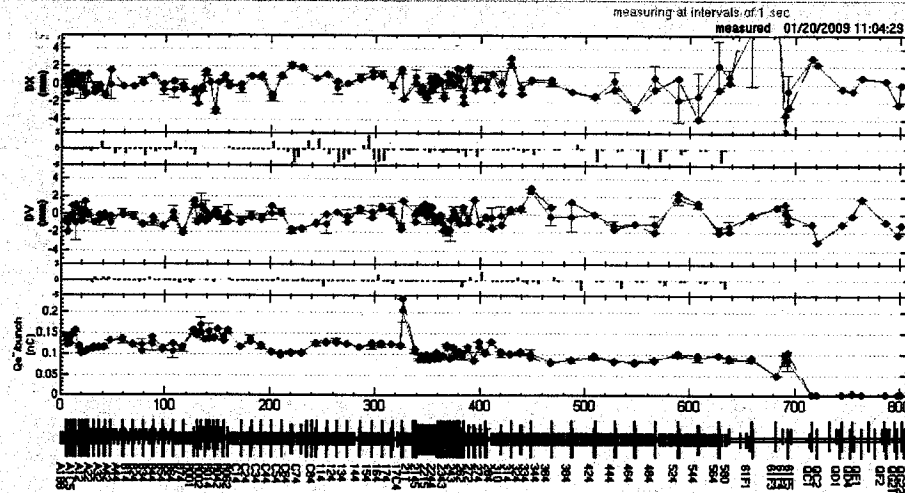
09/1/20

3 ring 共通 Optics
✓ PF 運転 パラメータ (HER & Compatible)

KEKB
HER
LER
共通 Optics
パラメータ
load前

File Edit Measurement Correction Steering Orbit Window

01/20/2009 11:04:30 Help



r.m.s. = 1.999 mm
max = 12.283 mm
@ SP61F1
min. = -3.931 mm
@ SP544
5.136 mm
@ SP61F3
(0.126±1.13209E-7)

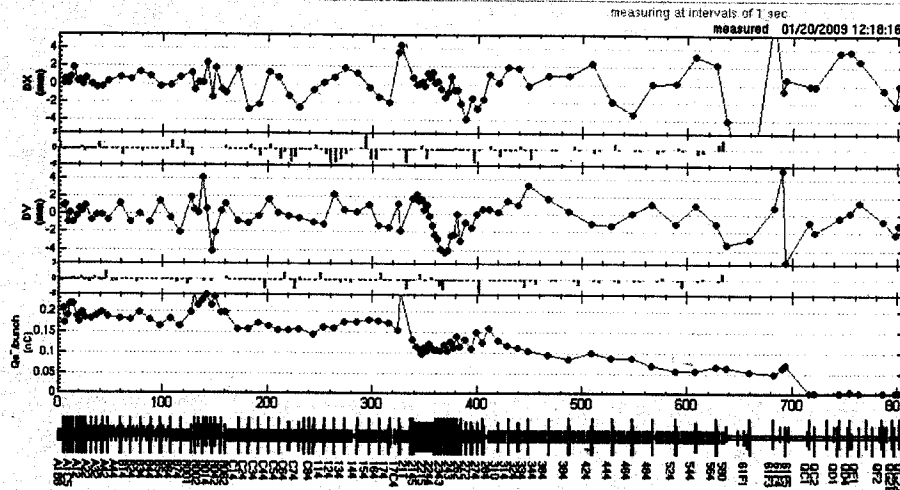
r.m.s. = 1.119 mm
max = 2.937 mm
@ SP344
min. = -2.951 mm
@ SPQC2
-1.189 mm
@ SP3G22
(-1.188±1.49012E-)

.002 nC
@ SPQF2
(.003±1.77988E-)

1.99

File Edit Measurement Correction Steering Orbit Window

01/20/2009 12:19:16 Help



r.m.s. = 2.215 mm
max = 8.136 mm
@ SP61F3
min. = -12.549 mm
@ SP61F1
5.136 mm
@ SP61F3
(0.106±3.15038E-7)

r.m.s. = 1.77 mm
max = 5.031 mm
@ SP61F4
min. = -5.344 mm
@ SP61F5
59 mm
@ SP234
(.455±.05mm)

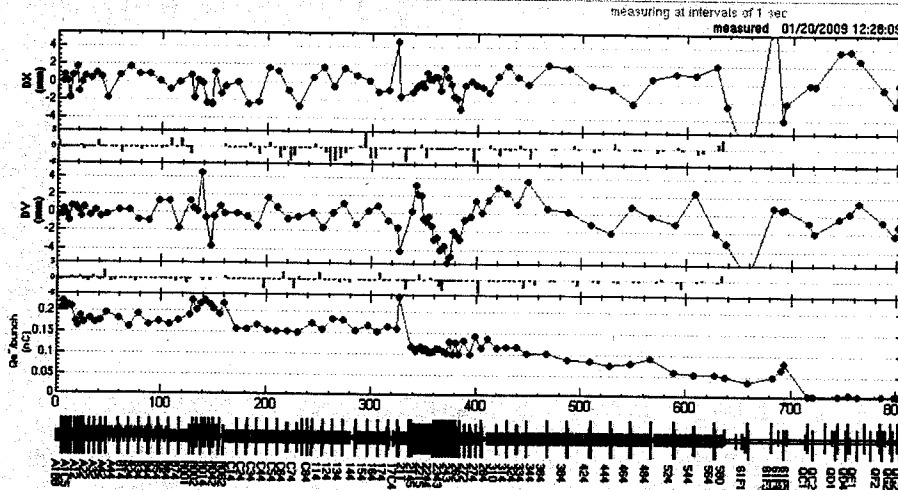
.085 nC
@ SP364
(.092±.016 nC)

100

HER/LER
共通 Optics の
DC Mag.
Load
+
DC steering
軌道調整
+
Target out

File Edit Measurement Correction Steering Orbit Window

01/20/2009 12:28:09 Help



r.m.s. = 1.997 mm
max = 8.136 mm
@ SP61F3
min. = -9.448 mm
@ SP61F1
5.136 mm
@ SP61F3
(0.126±1.15396E-7)

r.m.s. = 1.894 mm
max = 4.455 mm
@ SPR022
min. = -6.813 mm
@ SP61F1
036 mm
@ SP234
(.238±.753mm)

.101 nC
@ SP364
(.096±.01 nC)

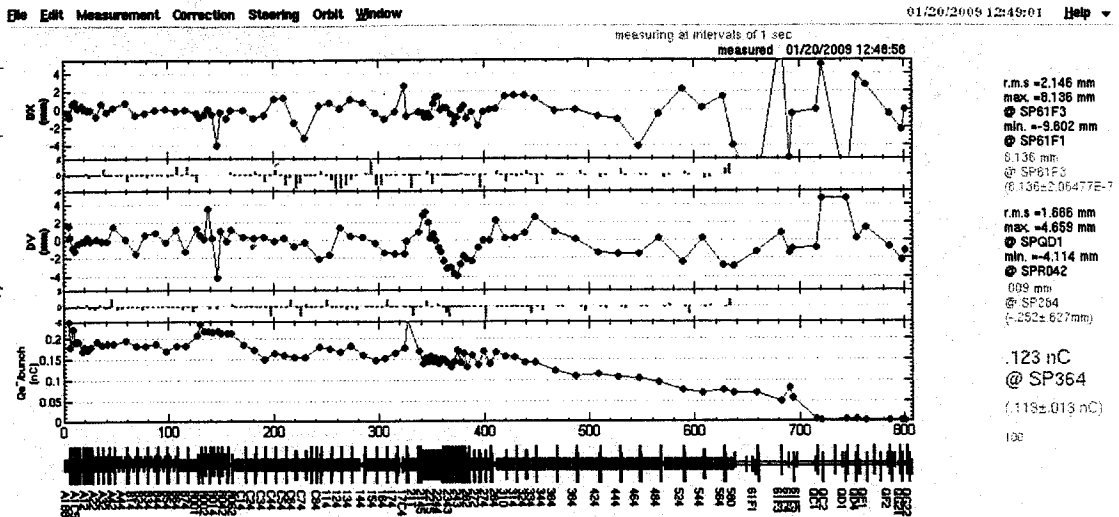
100

Target In
+
Pulse St. i
軌道 L,

(PF)

Pulse St.
調整

3秒の一回降
電荷量が
5555減少

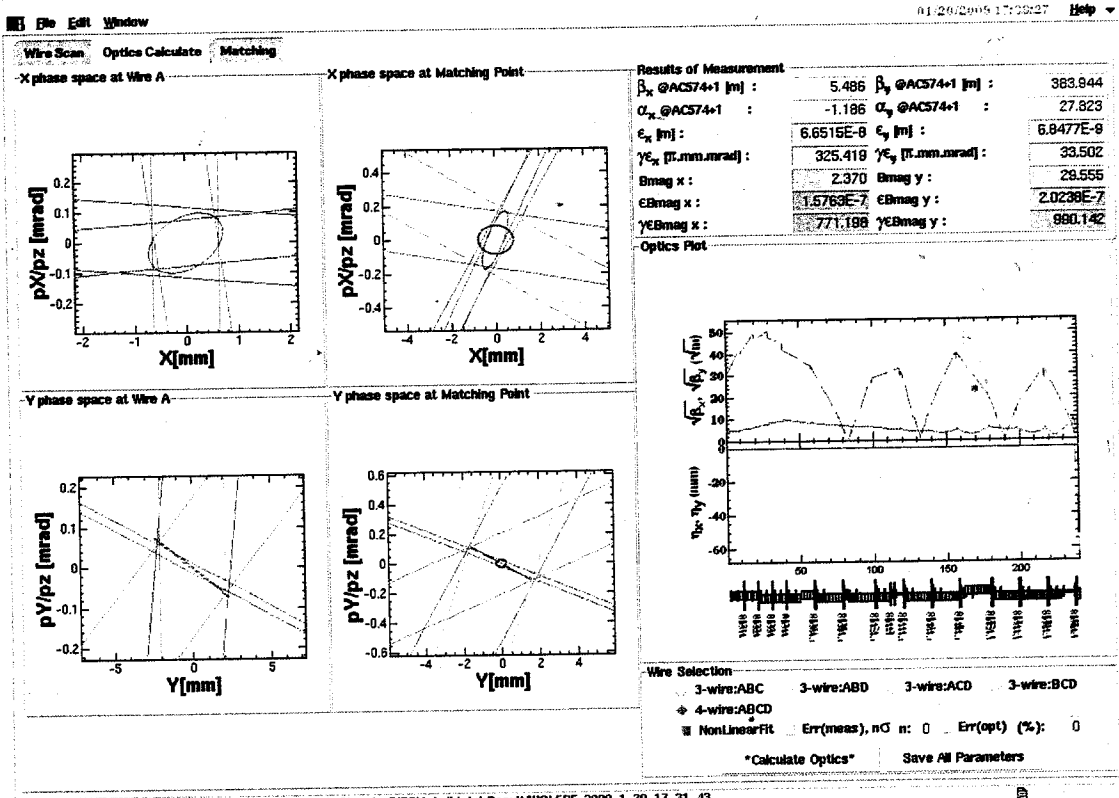
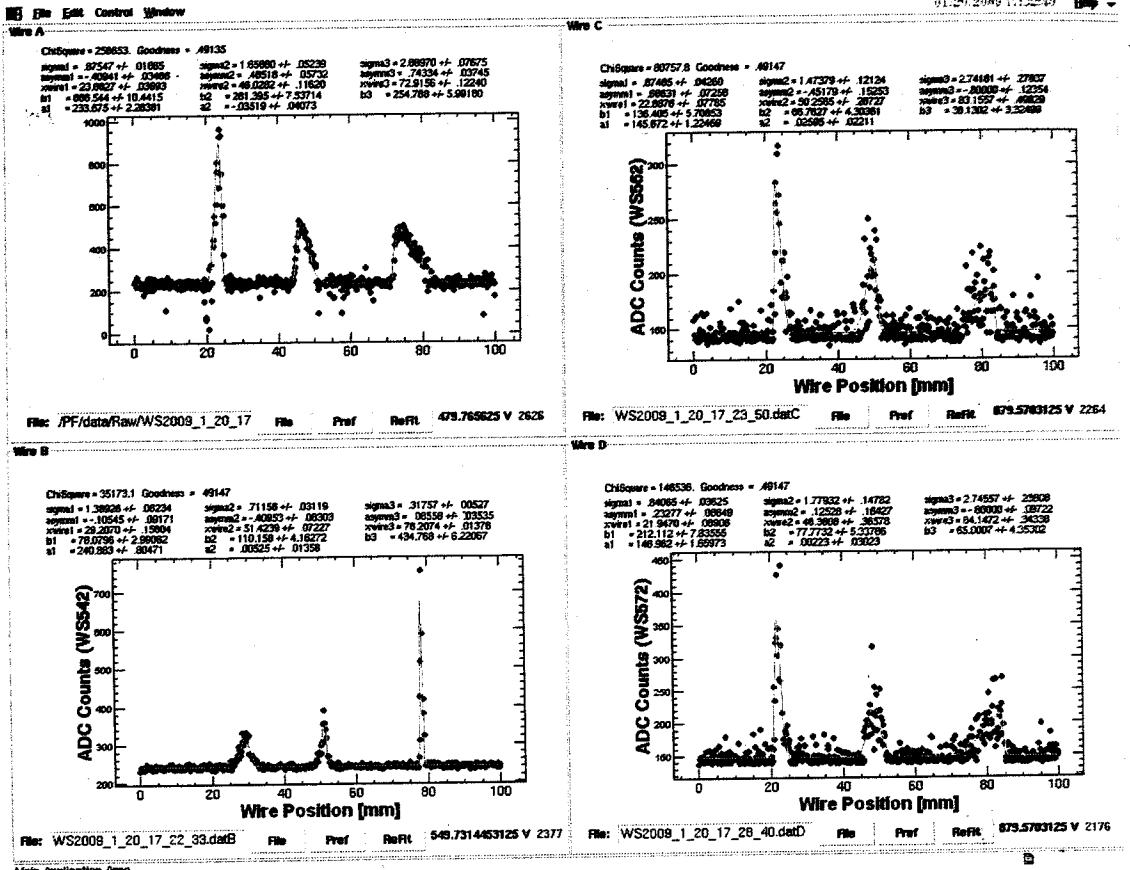


Qmag. ST E save

{ Q: skbez0090120-13:38:12
ST: " " 14

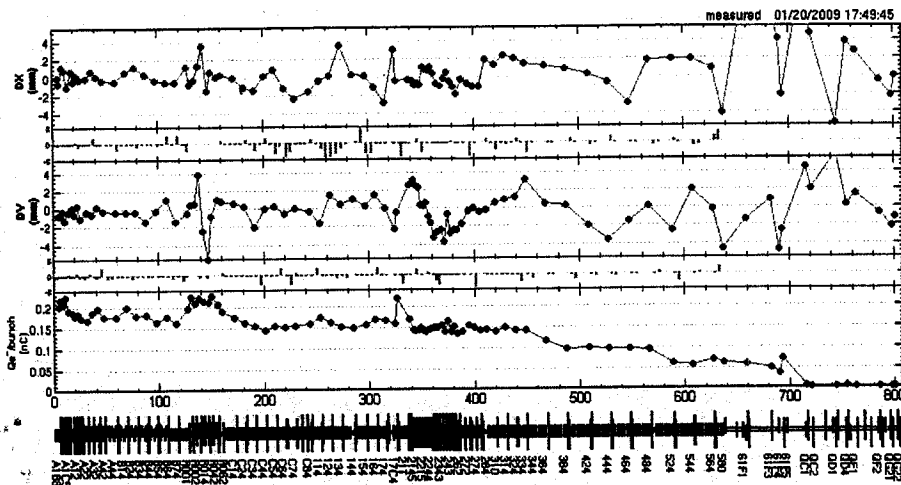
ⓐ ele pos compatible PF A. 1 = 70% → ⓐ 15:00

5779-
777-267



All informations are SAVED to Adata1/KEKB/Wire/LINACsector5/PF/Adata/MatchResult/WSL5PF_2009_1_20_17_31_43

軌道調整後



r.m.s = 2.459 mm
 max = 12.662 mm
 @ SPQC1
 min. = -5.256 mm
 @ SPQD1
 315 mm
 @ SP564
 (1.781 ± 95.3mm)

r.m.s = 1.892 mm
 max = 5.909 mm
 @ SPQD1
 min. = -5.568 mm
 @ SPR042
 3.106 mm
 @ SP344
 (2.709 ± 76mm)

.062 nC
 @ SP580
 (.064 ± .009 nC)
 100

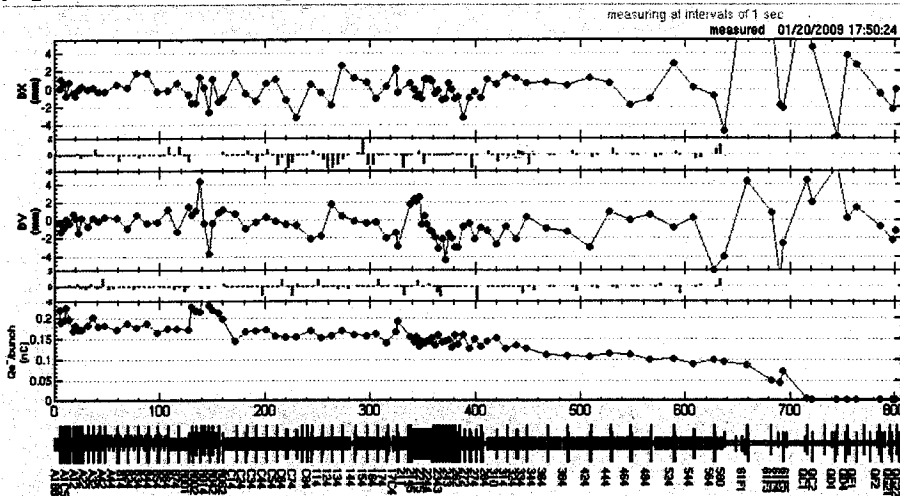
Q mag ST: 17.

Q SKR 20090120-13:38:12 ← HER/LER 共通
 ST " " " " ← 軌道調整

その後、charge量が増加して83nC Qmag調整。
 その後 STで軌道調整

Edit Measurement Correction Steering Orbit Window

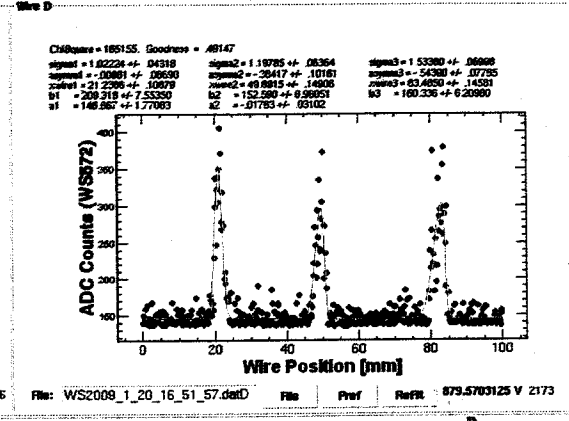
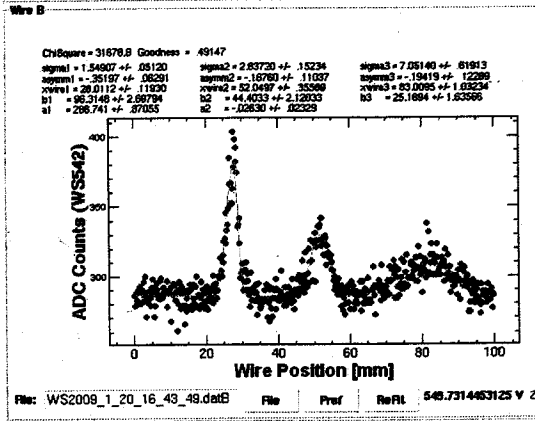
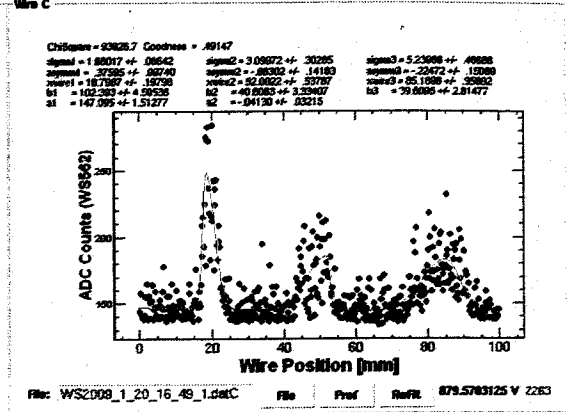
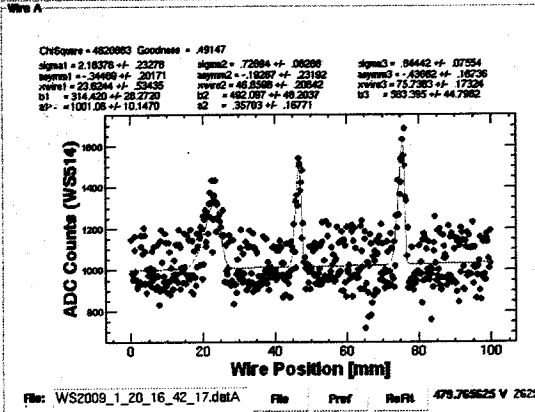
01/20/2009 17:50:27 Help



r.m.s = 2.564 mm
 max = 13.237 mm
 @ SP61F1
 min. = -5.258 mm
 @ SPQD1
 756 mm
 @ SP564
 (1.603 ± 1197mm)

r.m.s = 1.986 mm
 max = 5.909 mm
 @ SPQD1
 min. = -6.463 mm
 @ SP61F4
 419 mm
 @ SP344
 (2.511 ± 1.05mm)

.094 nC
 @ SP580
 (.066 ± .012 nC)
 100



Main Application Area

Wire Scan Optics Calculate Matching

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

Results of Measurement

β_x @AC574+1 [m] :	7.837	β_y @AC574+1 [m] :	3.570
α_x @AC574+1 :	-2.027	α_y @AC574+1 :	-1.247
ϵ_x [m] :	1.1817E-7	ϵ_y [m] :	2.2160E-7
γ_{ϵ_x} [r.mm.mrad] :	583.005	γ_{ϵ_y} [r.mm.mrad] :	1084.160
Bmag x :	3.505	Bmag y :	3.636
EBmag x :	4.1768E-7	EBmag y :	8.0575E-7
$\gamma_{EBmag x}$:	2043.356	$\gamma_{EBmag y}$:	3842.052

Optics Plot

Wire Selection

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

4-wire:ABCD

NonLinearFit: Err(mess), nG n: 0 Err(opt) (%): 0

Calculate Optics Save All Parameters

Omeg values were SAVED to /data1/KEKB/Wire/LINAC/sectors5/PF/data/Qvalue/qname_2009_1_20_16_33_1.datD

Q-mag 調整後

2009/01/20 B shift 5-Sec e- 10Hz 1st 牛本

File Edit Window 01/20/2009 18:04:30 Help

Quad	Read (I/B')	File (I/B')	Steering	Read (I)	File (I)
QF_32_4	3.849	13.8035	SX_45_3	.001	.001
QD_33_4	4.352	15.5649	SY_45_3	.001	.001
QF_33_4	4.239	15.2445	SX_47_1	1.801	1.801
QD_34_4	4.860	17.4699	SY_47_1	-.800	-.800
QF_34_4	5.079	18.2079	SX_47_3	-.199	-.199
QD/D_36_4	5.963	11.7306	SY_47_3	-.077	-.077
QF_36_4	6.037	11.6676	BX_48_4	.189	-.150
QD/D_38_4	10.066	19.5180	BY_48_4	.050	-.350
QF_38_4	9.912	19.3498	SX_51_3	.001	.001
QD/D_42_4	10.733	20.9446	SY_51_3	.001	.001
QF_42_4	10.740	20.9570	SX_53_1	-3.713	-1.012
QD/D_44_4	10.645	20.6923	SY_53_1	.600	.600
QF_44_4	10.549	20.5958	SX_53_3	.001	.001
QD_44_1	.000	.0000	SY_53_3	.001	.001
QF_44_3	.000	.0000	SX_55_1	.099	.700
QD/D_46_4	10.659	20.8210	SY_55_1	-2.238	-2.238
QF_46_4	10.945	21.3658	SX_55_3	.001	.001
QD/D_48_4	14.095	27.5205	SY_55_3	.001	.001
QF_48_4	14.681	28.7264	SX_57_1	-3.999	-1.200
QD/D_52_4	18.418	19.7365	SY_57_1	.233	.233
QF_52_4	18.857	20.0921	SX_57_3	-.700	-.700
QD/D_54_4	18.198	19.4215	SY_57_3	.001	.001
QF_54_4	18.330	19.6040	BX_58_4	1.734	1.734
QD/D_56_4	21.919	23.4190	BY_58_4	2.007	2.007
QF_56_4	23.048	24.5304	BX_61_6	3.166	3.166
QD/D_58_4	28.366	30.1102	BY_61_6	2.306	2.306
QF_58_4	27.385	29.0918	BX_61_8	2.556	2.556
QD_61_6	9.499	3.3348	BY_61_8	1.103	1.103
QF_61_6	1.355	.5316	SY_61_A1	.001	.001
QD_61_8	19.976	6.9135	SY_61_A2	1.000	1.000

Read Save File DIFF Read Save File DIFF

Select Clear Set Magnet Select Clear Set Magnet

Amnt\data1\b\data\LINAC\CG\magnet\2009\01\kbe20090120-13:38:12 Amnt\data1\b\data\LINAC\CG\magnet\2009\01\kbe20090120-13:38

Amnt\data1\b\data\LINAC\CG\magnet\2009\01\kbe20090120-17:58:30 Amnt\data1\b\data\LINAC\CG\magnet\2009\01\kbe20090120-17:58

Save file to Adata\LINAC\CG\magnet\2009\01\kbe20090120-17:58:33

Q. ST 調整後

QM: qkbe20090120-17:58:30
 " " " 33
 SA

18=45
 準備 LCG
 吉田

10=44
 ZT34の
 Load L2
 Positron の
 調整後

