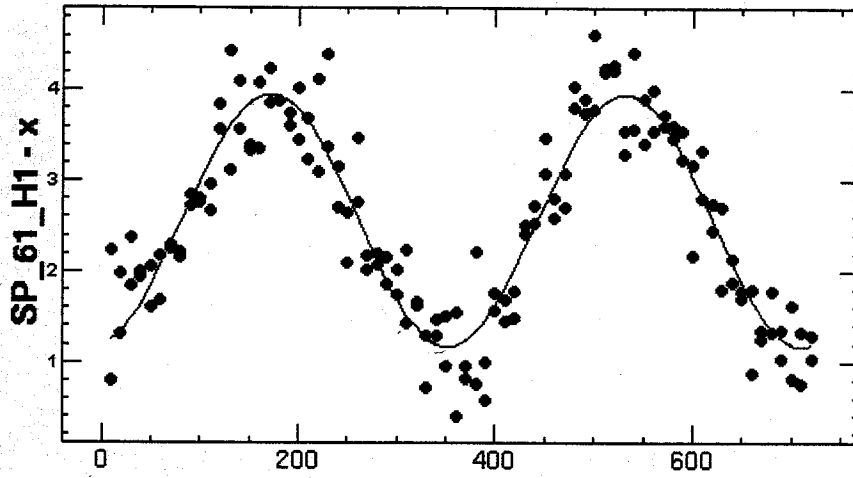


ChiSquare = 22.5951 Goodness = .46416  
a = -1.3904 +/- .04718 c = 171.236 +/- 1.94401 d = 2.55831 +/- .03336

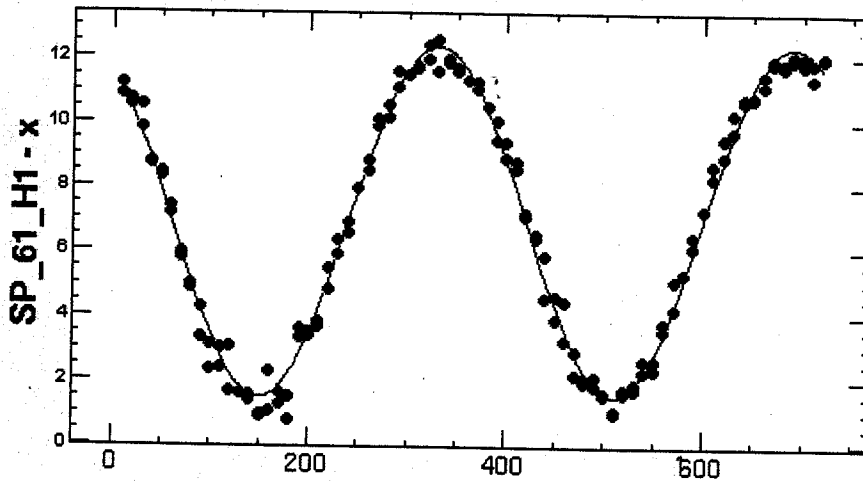


Function = (d+(a Cos[(.0174532925 (-180+x+(-c))])))  
KL\_18 - phase

KL\_18vsSP\_61\_H1 on 172.19.66.32:0.0

reference KL-22 a gain 在 20 左右

ChiSquare = 25.6904 Goodness = .46416  
a = 5.44010 +/- .05030 c = 150.019 +/- .52993 d = 6.92690 +/- .03557



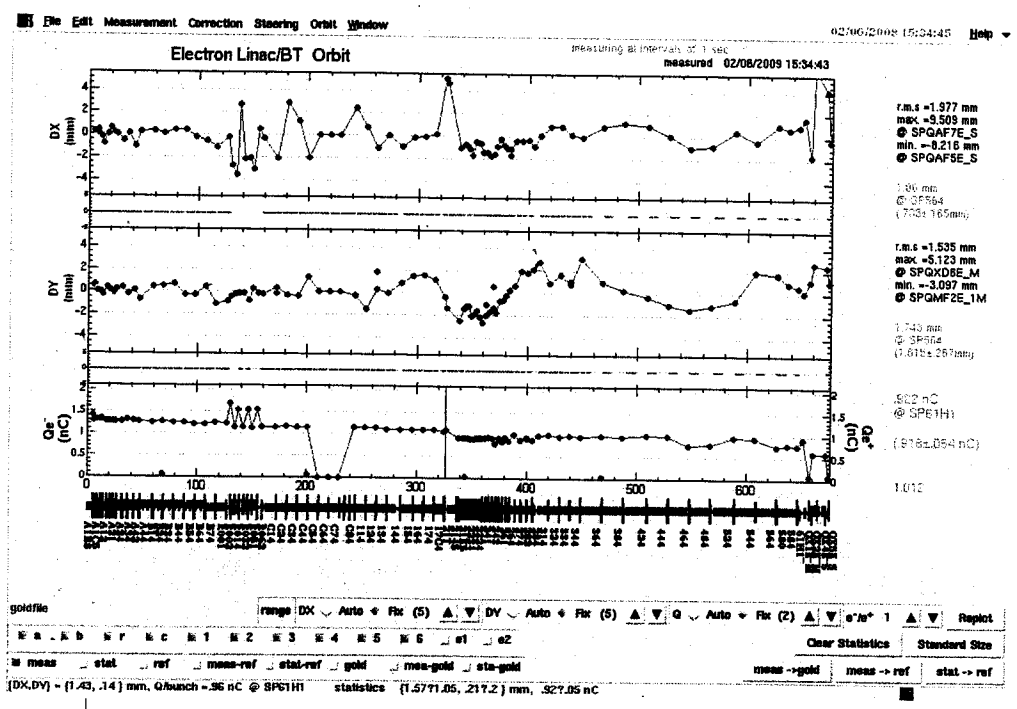
Function = (d+(a Cos[(.0174532925 (-180+x+(-c))])))  
KL\_22 - phase

KL\_22vsSP\_61\_H1 on 172.19.66.32:0.0

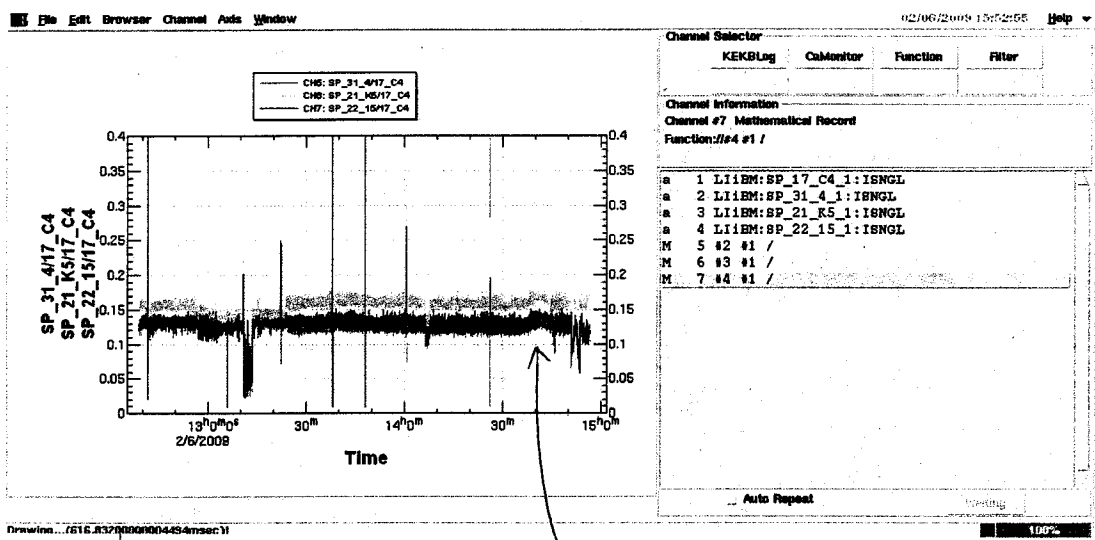
KL-22が160 MeVの時

$$160 \times \frac{1.39}{5.44} = 40.9 \text{ MeV}$$

10/24の測定は20と増310032



この測定は Energy 測定



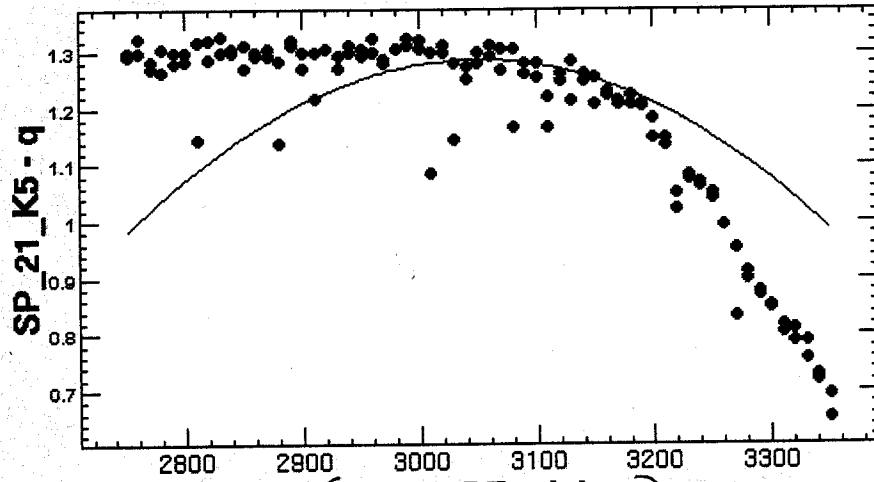
KL-18 110/24 1us 12 左の時

ChiSquare = 2.68844 Goodness = .48276

a = -3.4E-6 +/- 4.91E-7

b = 3049.99 +/- 11.4637

c = 1.28699 +/- .02042



Function = (c+(a\*((x+(-b))^2)))

KL\_21\_RF - delay

KL-18-RF Timing

KL\_21\_RFvsSP\_21\_K5 on 172.19.66.32:0.0

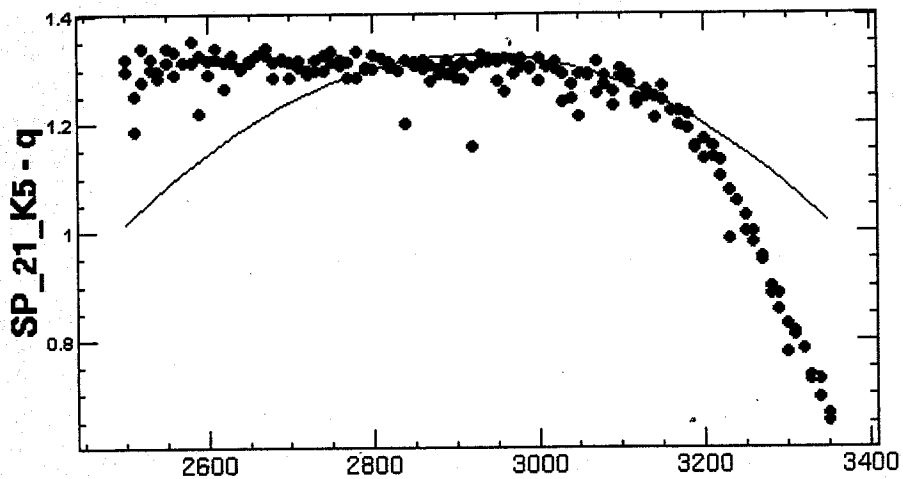
KL-18. RF ± 300 ns scan

ChiSquare = 3.02891 Goodness = .48553

a = -1.7E-6 +/- 1.85E-7

b = 2925.00 +/- 11.8725

c = 1.32911 +/- .01531



Function = (c+(a\*((x+(-b))^2)))

KL\_21\_RF - delay

↑  
18

KL\_21\_RFvsSP\_21\_K5 on 172.19.66.32:0.0

KL-18, 21 の  $\phi$  E 同時に 15 deg ずつ Scan L2.

SP-22-15 の生成効率を調査

def. KL-18  $\theta = 165.5$

KL-21  $\theta = 305.2$

$\Delta\theta = 0^\circ$  sp 22-15 14%

$\Delta\theta = +15^\circ$  13%

30° 10% 270° 7.8%

45° 5.3% 285° 8.2%

60° 0% 300° 10.6%

75° 3.9% 315° 11.7%

90° 6.9% 330° 13.7%

105° 5.7% 345° 14.3%

120° 5.0% 360° 14%

135° 5.7%

150° 8.0%

165° 11%

180° 10.5%

195° 9.0%

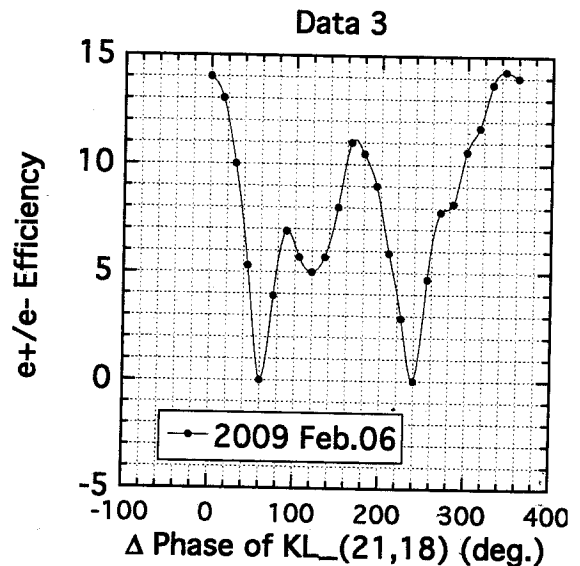
210° 5.9%

225° 2.9%

240° 0%

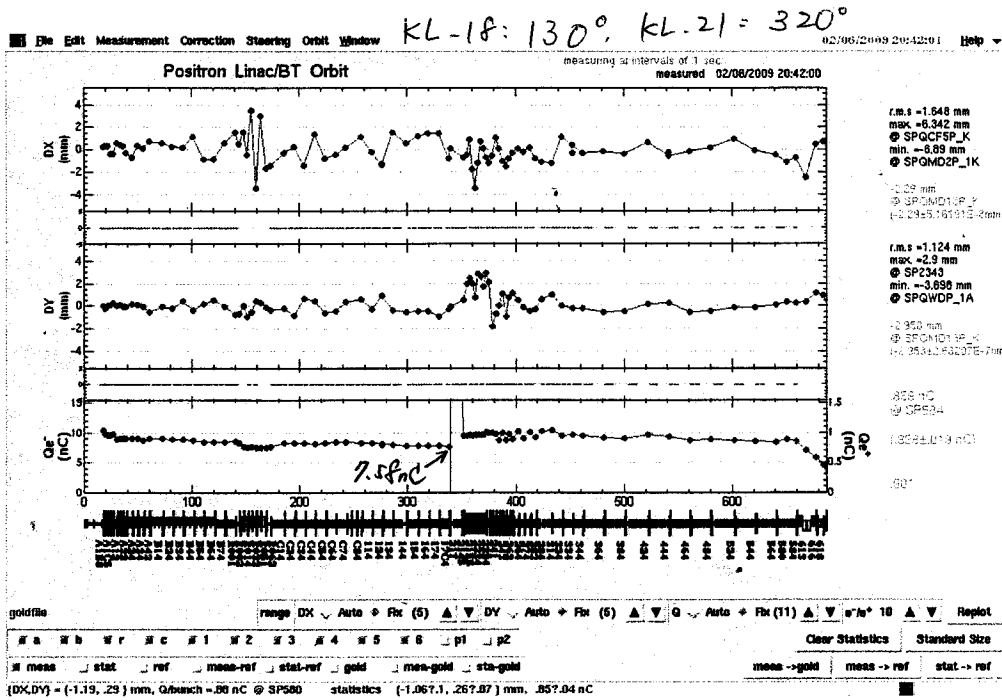
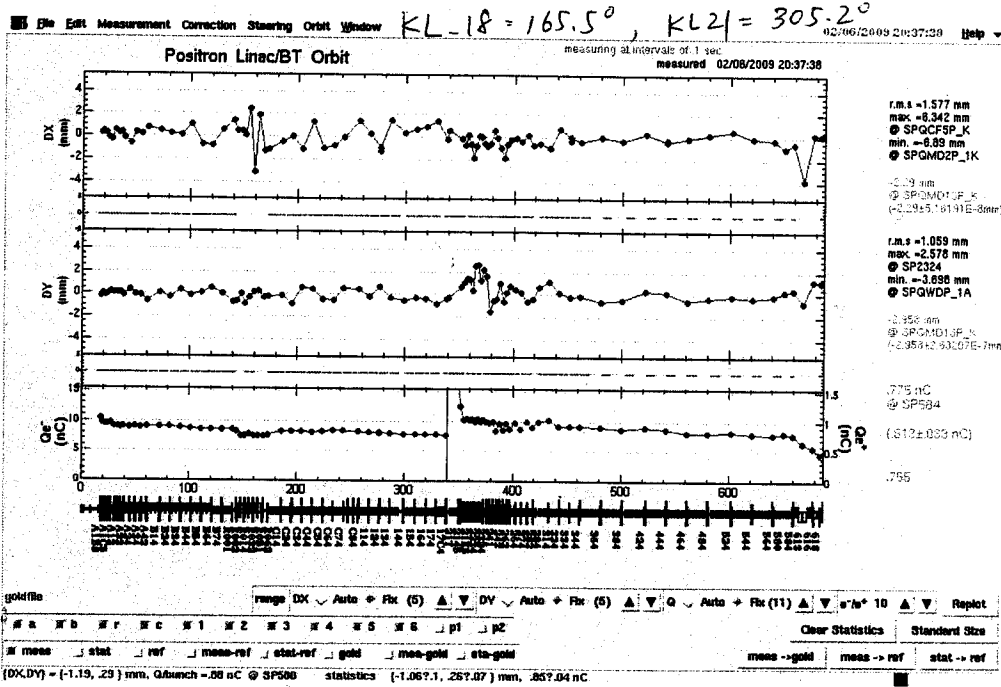
255° 4.7%

241 = 72, 243  $\Rightarrow$  110 162 210 の極性  
まちがっている!



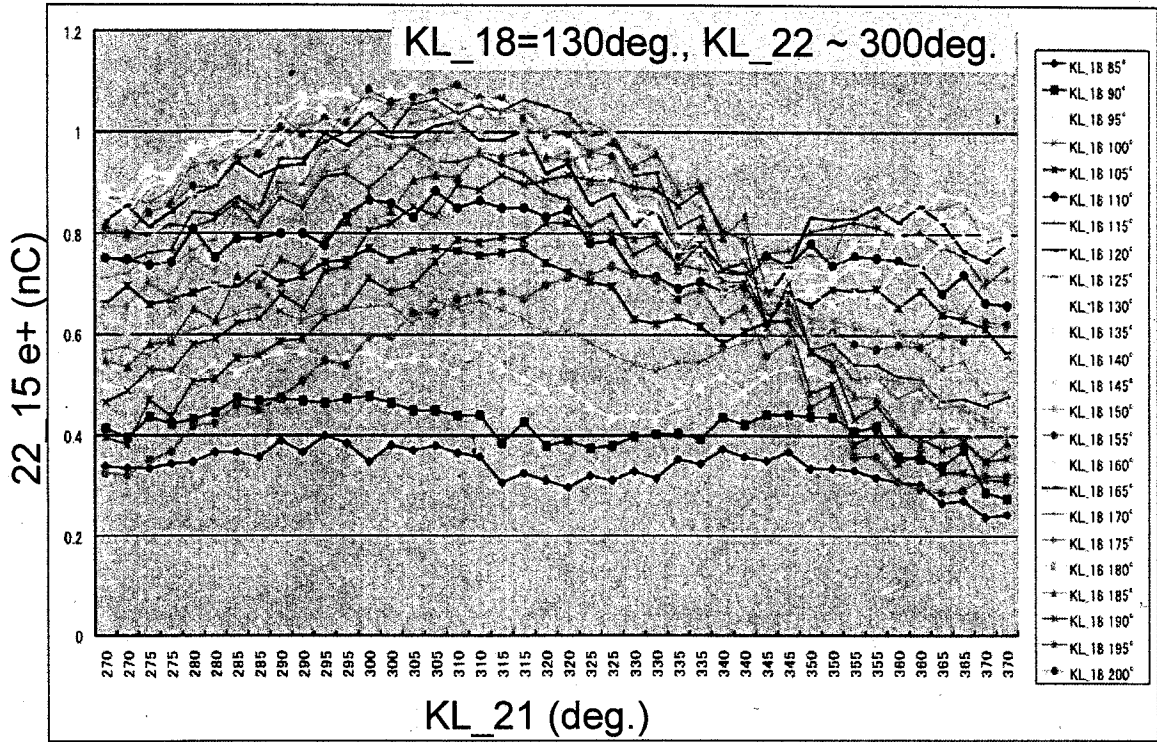
7-9-11 7.58 nC

KL-18, 21 phase scan



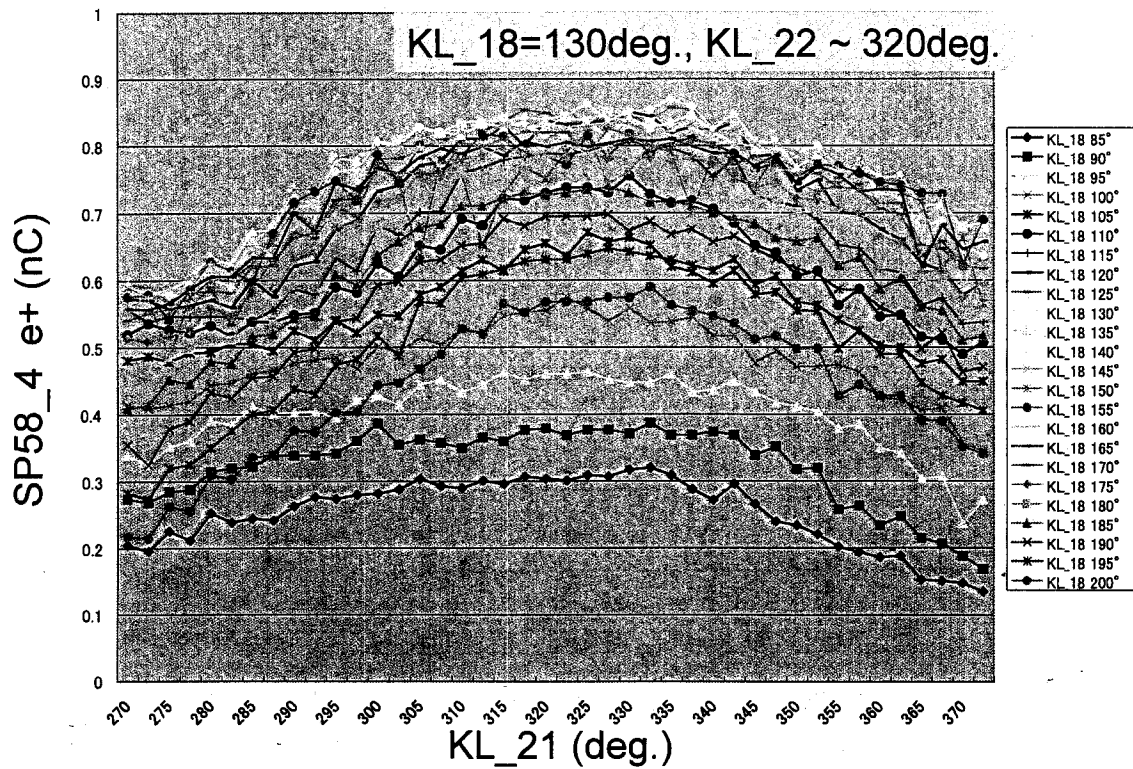
Phase Scan

7.58 nC @Target直前



Phase Scan

7.58 nC @Target直前



09/2/12

① BT/BPM Pulse-to-pulse 仕様でのオシロで data どり

② ARS の BPM に trigger がいかずに 問題はあった (未決)

③ 12 箇所に E/O モジュールが二かかっているのを交換  
CBI. ~~ARW~~ ARS ARW 全てのオシロでの  
Trigger Timing を調整し直す必要があった

ARS ... 4-フィル 2ms とトリガーに足した

ARW ... ~~オシロ~~ オシロの Trigger を ② 6.400 $\mu$ s  $\rightarrow$  6.396 $\mu$ s

(Beam?)  
e- は 確認済み  
e+ は 未確認。  
③ 6.452 $\mu$ s  $\rightarrow$  6.448 $\mu$ s

③ 何故か、BT/BPM のトリガーが出なくなっている。  
明日要調査

'08/2/13

11:40

結局

① E/O の入っている NIM 電源の故障

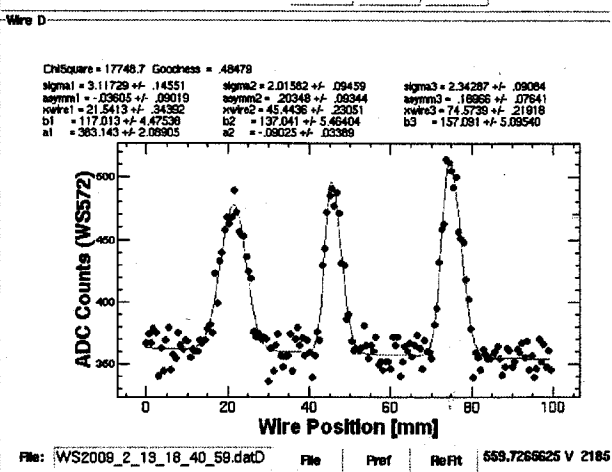
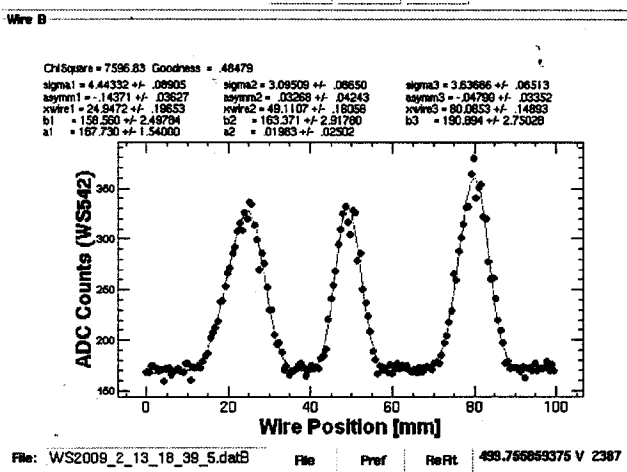
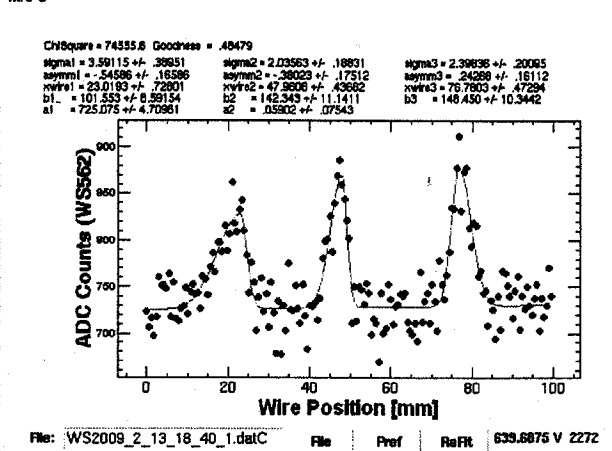
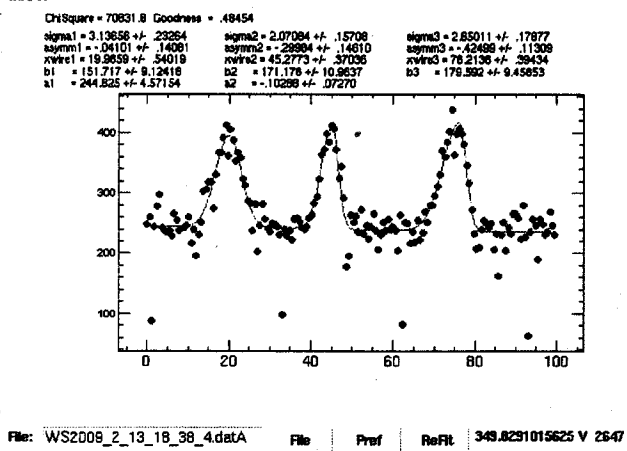
② Optical 4-フィルのコネクターがゆるんでいた

③ ARS に送った E/O のレーザーダイオードが 1ch 死んで  
いた。

18:40

④ ARS に送った E/O " " E/O に  
1ch " "

# eye # 通 Optics 2: et 5079 - Matching



Select Matching zone on 172.19.66.32:0

File Edit Window 02/13/2009 18:42:23 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**

$\beta_x$ @BMS11P [m] :	18.592	$\beta_y$ @BMS11P [m] :	26.190
$\alpha_x$ @BMS11P :	1.787	$\alpha_y$ @BMS11P :	-.092
$\epsilon_x$ [m] :	2.4173E-7	$\epsilon_y$ [m] :	2.7788E-7
$\gamma\epsilon_x$ [t.mm.mrad] :	1654.838	$\gamma\epsilon_y$ [t.mm.mrad] :	1903.014
Bmag x :	1.016	Bmag y :	1.175
$\epsilon$ Bmag x :	2.4571E-7	$\epsilon$ Bmag y :	3.2648E-7
$\gamma\epsilon$ Bmag x :	1682.198	$\gamma\epsilon$ Bmag y :	2235.177

**Optics Plot**

**Wire Selection**

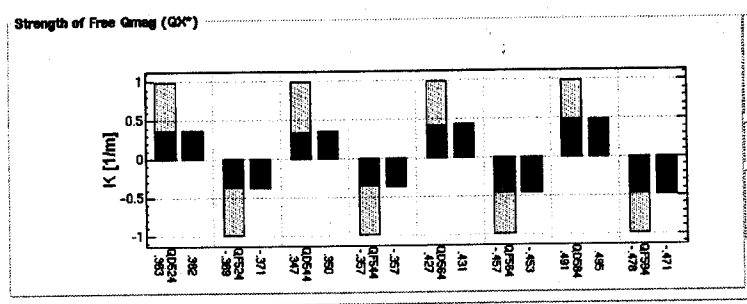
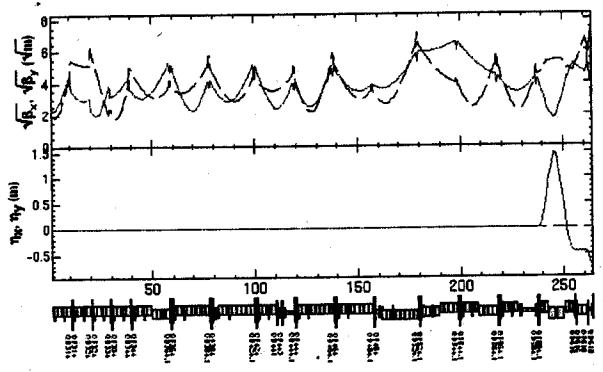
3-wire:ABC  
  3-wire:ABD  
  3-wire:ACD  
  3-wire:BCD  
 4-wire:ABCD  
 NonLinearFit  
 Err(meas), nC n: 0  
 Err(opt) (%) : 0



Wire Scan Optics Calculator Matching

Matching Residual = 4.2214E-28

Matching Conditions	
QD544 QF584: $\beta_x <$	60.00 43.16825
QD544 QF584: $\beta_y <$	60.00 35.83213



Matching Calculation

Calc. Matching

Recover Calculation

Reset Calculation

Q-mag Set

Q-mag Read&Write

Read Q-Mag from File

Save Q-Mag to File

Qmag values were SAVED to /data1/KEKB/Wire/LINAC/sectors/KEKB/data/qvalue/qname\_2009\_2\_13\_18\_46\_5.dat0

Wire A

ChiSquare = 45095.6 Goodness = 48422

sigma1 = 3.31368 +/- 22259	sigma2 = 2.00115 +/- 16336	sigma3 = 2.71610 +/- 14828
asym1 = -1.9500 +/- 12166	asym2 = -2.9922 +/- 15436	asym3 = 0.9097 +/- 10969
xwire1 = 20.3168 +/- 48993	xwire2 = 46.0415 +/- 42471	xwire3 = 74.9214 +/- 35523
b1 = 144.520 +/- 7.50136	b2 = 136.967 +/- 9.29819	b3 = 178.415 +/- 7.92672
a1 = 280.883 +/- 3.66869	a2 = 03246 +/- .03806	

File: WS2009\_2\_13\_18\_52\_12.datA File Pref ReFit 349.8291015625 V 2340

Wire C

ChiSquare = 68029.3 Goodness = 48479

sigma1 = 3.71472 +/- 36248	sigma2 = 2.14201 +/- 20738	sigma3 = 2.23184 +/- 17993
asym1 = -28482 +/- 18709	asym2 = -33093 +/- 16528	asym3 = 43475 +/- 14334
xwire1 = 21.9473 +/- 84931	xwire2 = 46.2262 +/- 42742	xwire3 = 75.9573 +/- 39136
b1 = 97.1714 +/- 8.10311	b2 = 127.225 +/- 10.3940	b3 = 152.335 +/- 10.2232
a1 = 728.395 +/- 4.48658	a2 = 04573 +/- .07131	

File: WS2009\_2\_13\_18\_54\_26.datC File Pref ReFit 639.6075 V 2273

Wire B

ChiSquare = 6682.72 Goodness = 48479

sigma1 = 4.66199 +/- 0.6871	sigma2 = 2.93120 +/- 0.5732	sigma3 = 3.43287 +/- 0.5142
asym1 = -13121 +/- 03412	asym2 = -03447 +/- 03915	asym3 = -07345 +/- 03053
xwire1 = 24.7376 +/- 19381	xwire2 = 49.2837 +/- 14036	xwire3 = 80.2829 +/- 12809
b1 = 154.753 +/- 2.29757	b2 = 170.582 +/- 2.90823	b3 = 201.979 +/- 2.84376
a1 = 175.398 +/- 1.47771	a2 = 02094 +/- 02336	

File: WS2009\_2\_13\_18\_53\_33.datB File Pref ReFit 499.75669375 V 2388

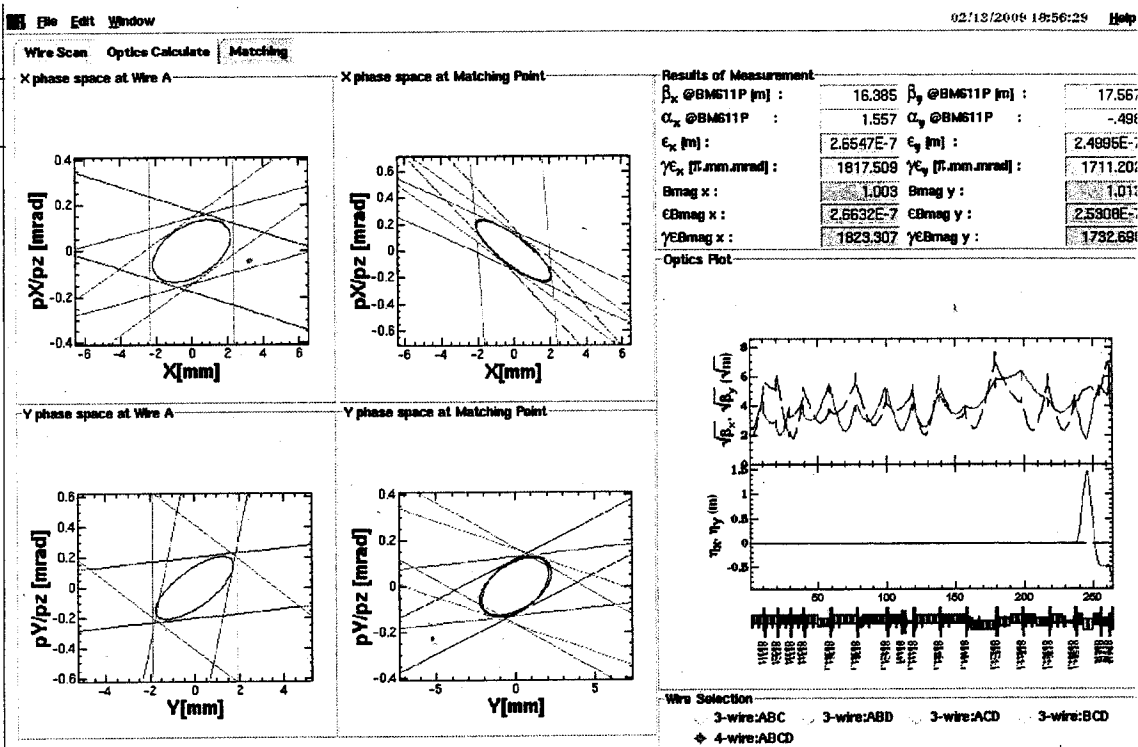
Wire D

ChiSquare = 19778.1 Goodness = 48479

sigma1 = 2.67577 +/- 1.2389	sigma2 = 1.81531 +/- 0.8739	sigma3 = 2.82131 +/- 1.1108
asym1 = 32518 +/- 08889	asym2 = -01934 +/- 02685	asym3 = 06268 +/- 08382
xwire1 = 21.2488 +/- 29462	xwire2 = 46.2348 +/- 21620	xwire3 = 74.9074 +/- 26989
b1 = 130.866 +/- 5.07169	b2 = 147.973 +/- 8.06573	b3 = 144.240 +/- 5.09980
a1 = 385.263 +/- 2.08414	a2 = -03676 +/- 03477	

File: WS2009\_2\_13\_18\_55\_27.datD File Pref ReFit 559.7265625 V 2186

Select Matching zone on 172.19.66.32:80



SHB 2 の位相 91 → 92°  
 SB\_B KBE Delay 1199 → 1997  
 GUN Delay 1.95 → 1.94

