Oct.3.2002. 0:30 ごろ～ 1:30 ごろ

確認のため、SB_4の SLED timing を振ってみた。

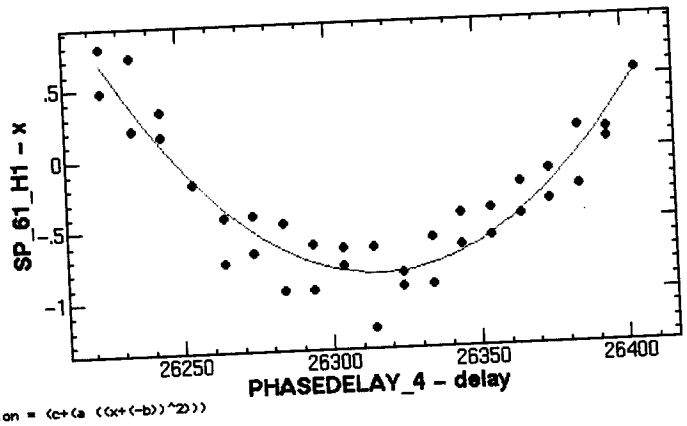
[redacted] 時に悪くなるそう。

10/03/2002 01:29:47 Help

File Edit Window

ChiSquare = 1.20988 Goodness = .46828

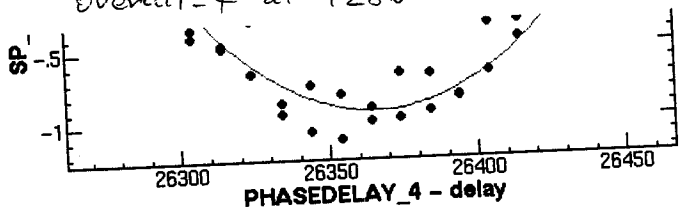
a = 1.77E-4 +/- 1.13E-5 b = 26316.2 +/- 1.56162 c = -.83556 +/- .04532



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

Main Application Area

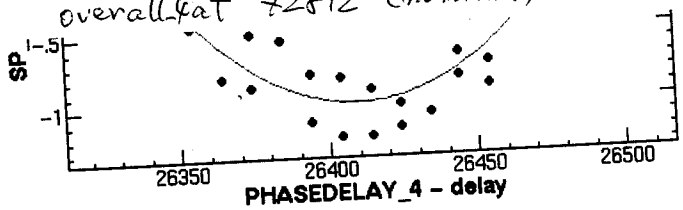
overall_4 at 72862



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

Main Application Area

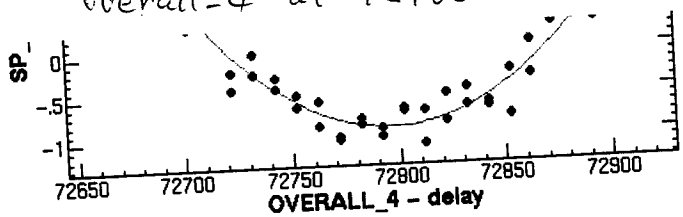
overall_4at 72812 (nominal)



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

Main Application Area

overall_4 at 72763



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

Main Application Area

2002. Nov. 1

44unit部 Aperture制約スタディー

etbeam 1Hz First Bunch Only

電荷量　Q@424 = 0.91nC
　　Q@444 = 0.91nC
　　↓
　　0.94 → 0.90nC
　　スリットをかける.

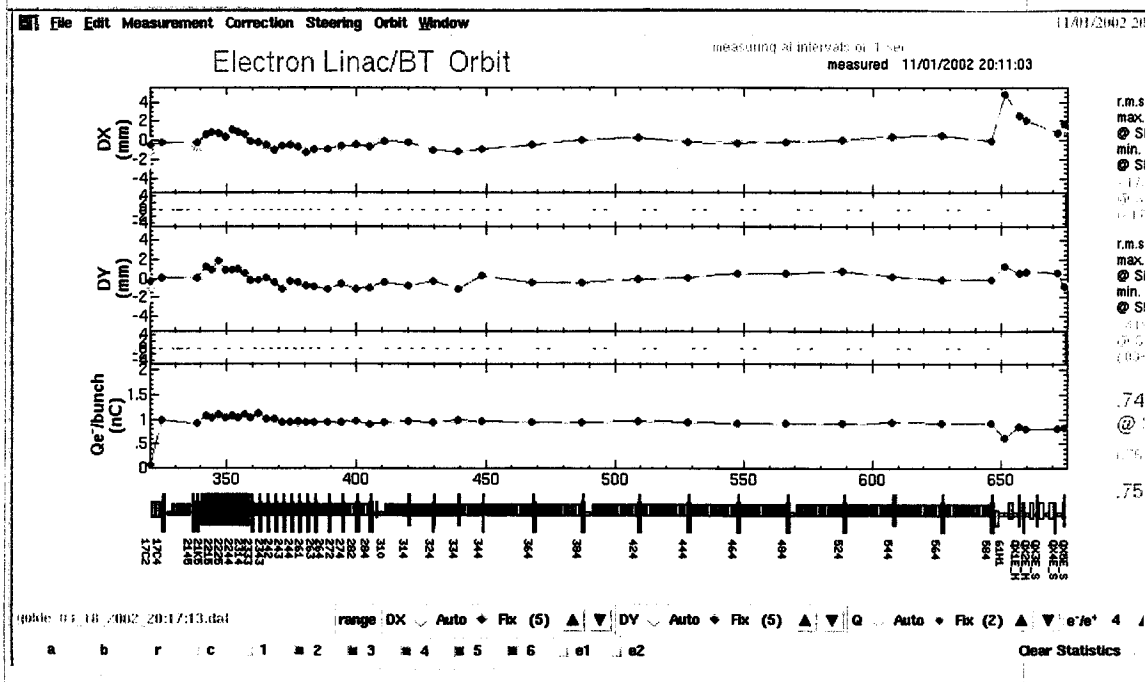
20:11 ☆e⁻beam 1Hz 1bunch.

①タッチパネル
SC_4K_2
なし

Q424	=	0.94nC	→	0.94	
Q444	=	0.93 〃	→	0.92	~0.93
Q584	=	0.91 〃	→	0.90	

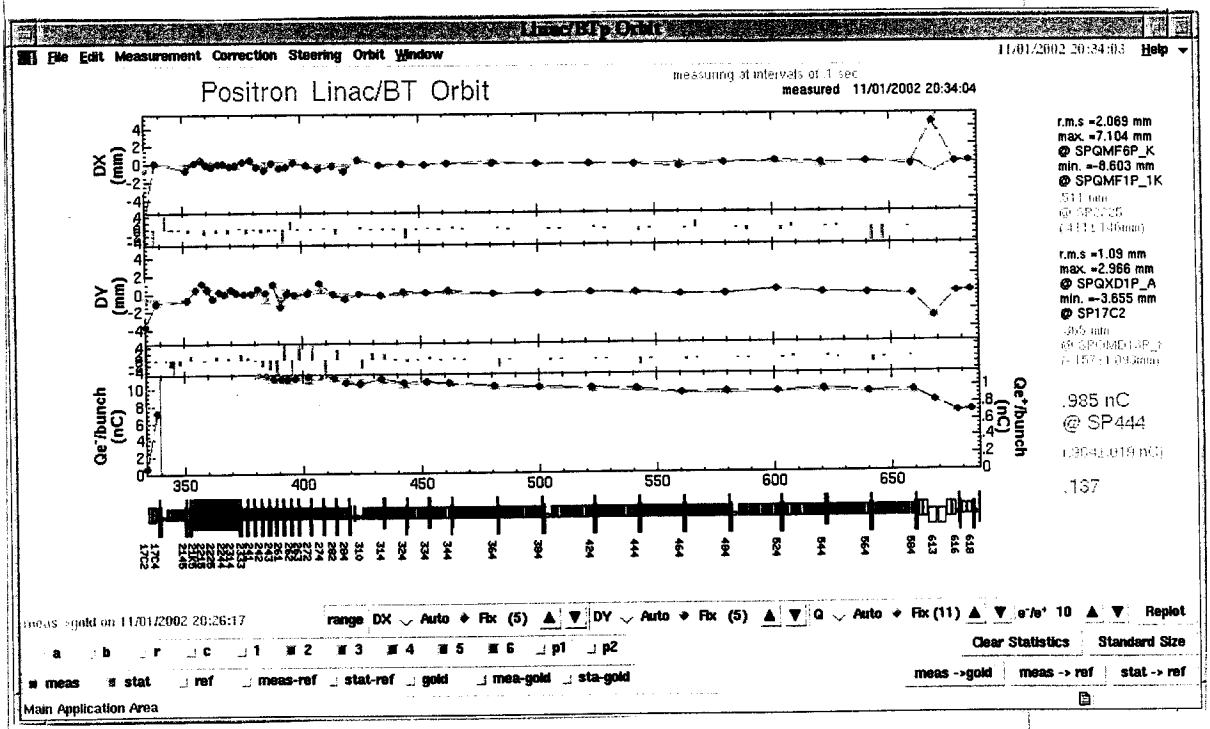
±0.02のバラツキ

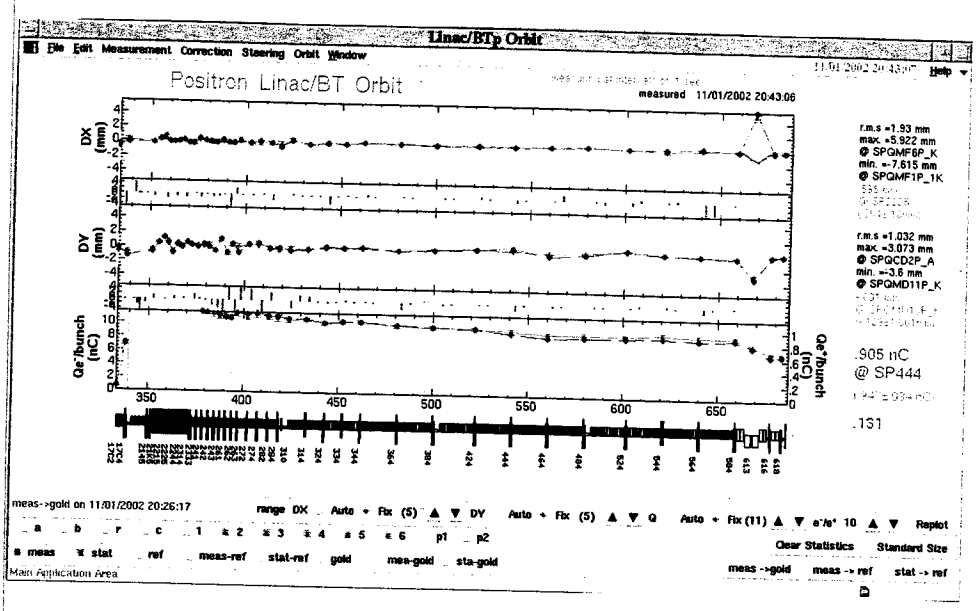
①BPM 442
の値詰めない

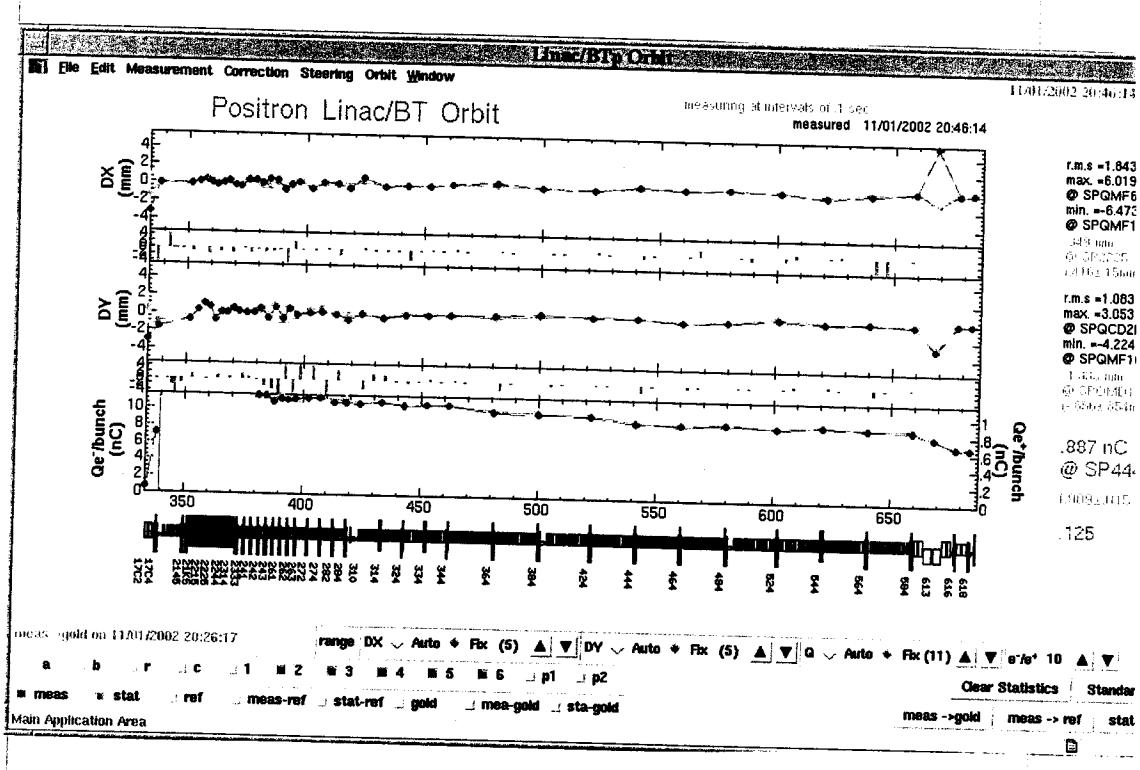


e⁻ beam 1Hz First Bunch only

Q424 = 0.99 ±0.02 nC
Q444 = 0.98 ±0.02 " ~ 0.97 ~ 0.96 → 0.92 ±0.0
Q584 = 0.94 ±0.02 " 0.93 → 0.87




Linac/BTp Orbit
File Edit Measurement Correction Steering Orbit Window
Positron Linac/BT Orbit
measured 11/01/2002 20:43:06
DX (mm)
DY (mm)
Qe⁻/bunch (nC)
Qe⁻/bunch (nC)
r.m.s =1.93 mm
max. =5.922 mm
@ SPQMF6P_K
min. =-7.615 mm
@ SPQMF1P_1K
r.m.s =1.032 mm
max. =3.073 mm
@ SPQCD2P_A
min. =-3.6 mm
@ SPQMD11P_K
.905 nC
@ SP444
.131
meas->gold on 11/01/2002 20:26:17
range DX Auto Fix (5) DY Auto Fix (5) Q Auto Fix (11) e⁻/e⁺ 10 Replot
a b r c 1 2 3 4 5 6 p1 p2
meas stat ref meas-ref stat-ref gold mea-gold sta-gold
Clear Statistics Standard Size
meas ->gold meas -> ref stat -> ref
Main Application Area


Linac/BTp Orbit
File Edit Measurement Correction Steering Orbit Window
Positron Linac/BT Orbit
measured 11/01/2002 20:46:14
DX (mm)
DY (mm)
Qe⁻/bunch (nC)
Qe⁻/bunch (nC)
r.m.s =1.843
max. =6.019
r.m.s =1.083
max. =3.053
.887 nC
.125
meas->gold on 11/01/2002 20:26:17
range DX Auto Fix (5) DY Auto Fix (5) Q Auto Fix (11) e⁻/e⁺ 10
a b r c 1 2 3 4 5 6 p1 p2
meas stat ref meas-ref stat-ref gold mea-gold sta-gold
Clear Statistics
meas ->gold meas -> ref
Main Application Area

QD_42_4 9.011 → 10.989

QF_42_4 8.835 → ~~10.8~~ 11.062

Q444 = 0.92 → 0.96

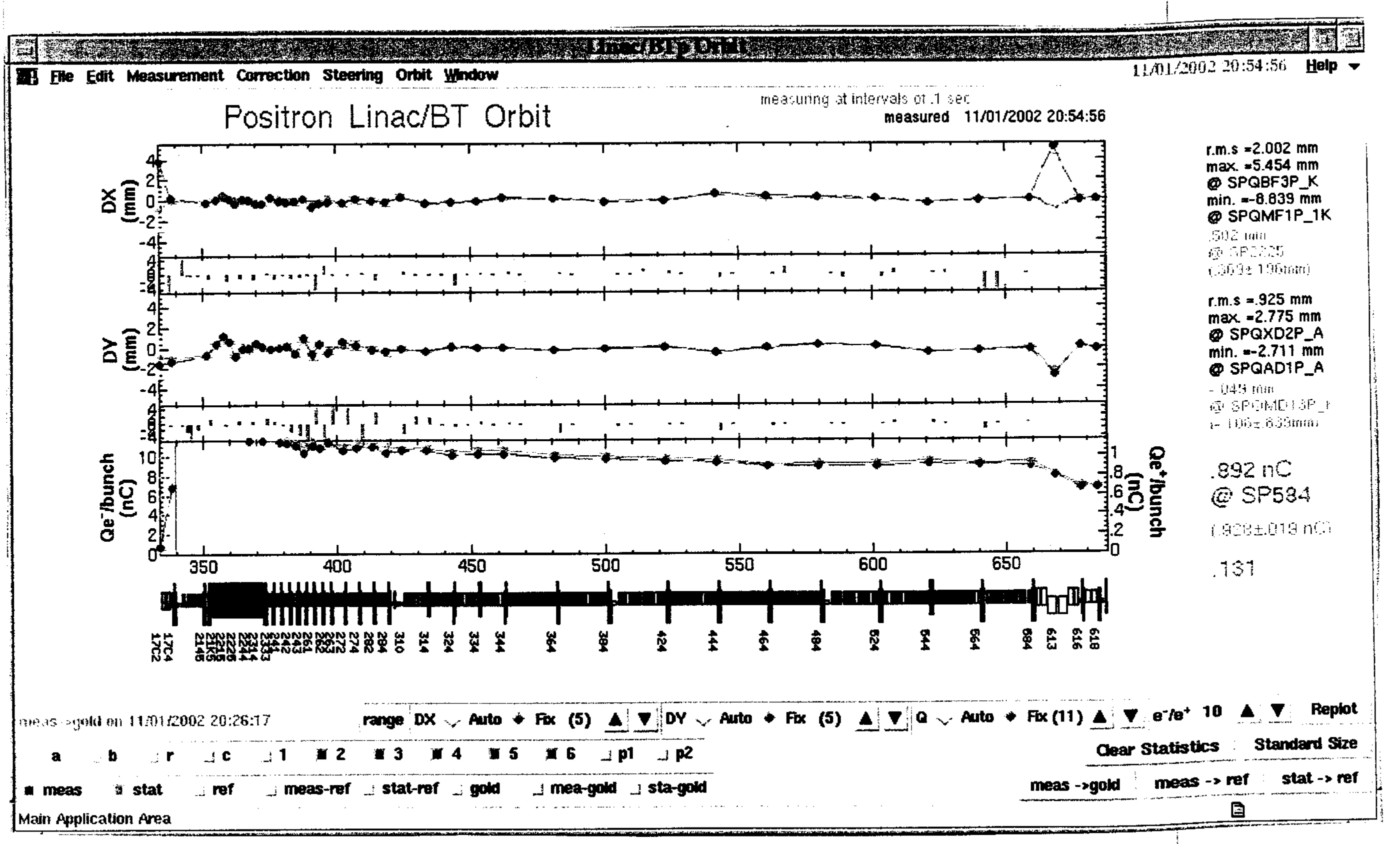
Q584 0.87 → 0.93

(with Slit)

結論

直前Qのtripletのを少し強くすることでBeam Lossは、ほとんどなくすことができる。

結論

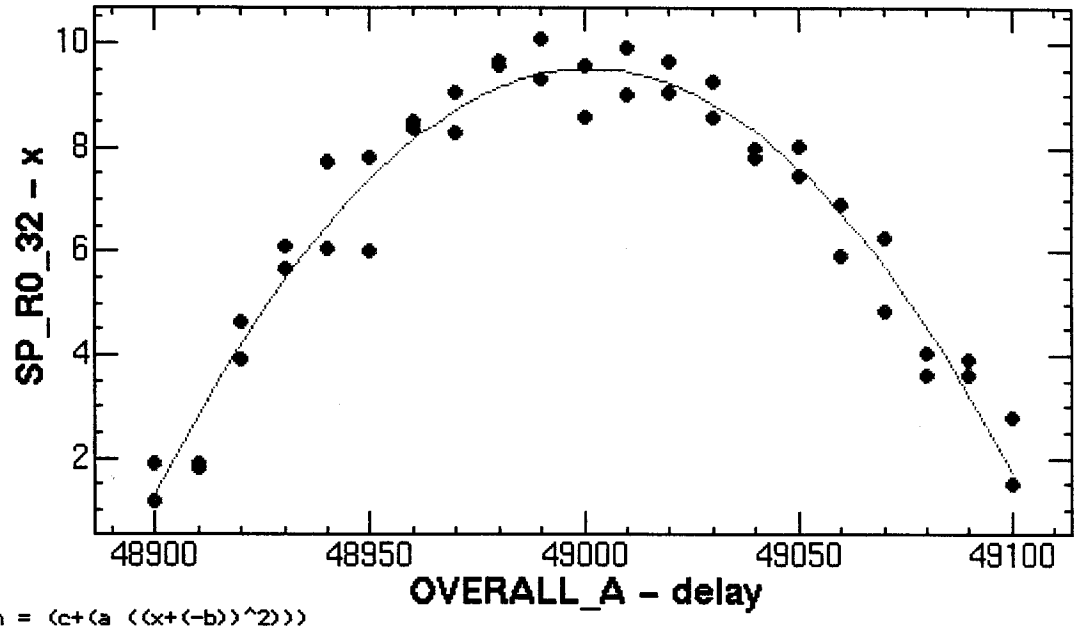


2002.11.13 (水) 午前 · SLED overall check

File Edit Window 11/13/2002 12:32:27 Help

ChiSquare = 15.1809 Goodness = .46988

a = -8.0E-4 +/- 2.95E-5 b = 49001.3 +/- .99574 c = 9.49863 +/- .14466



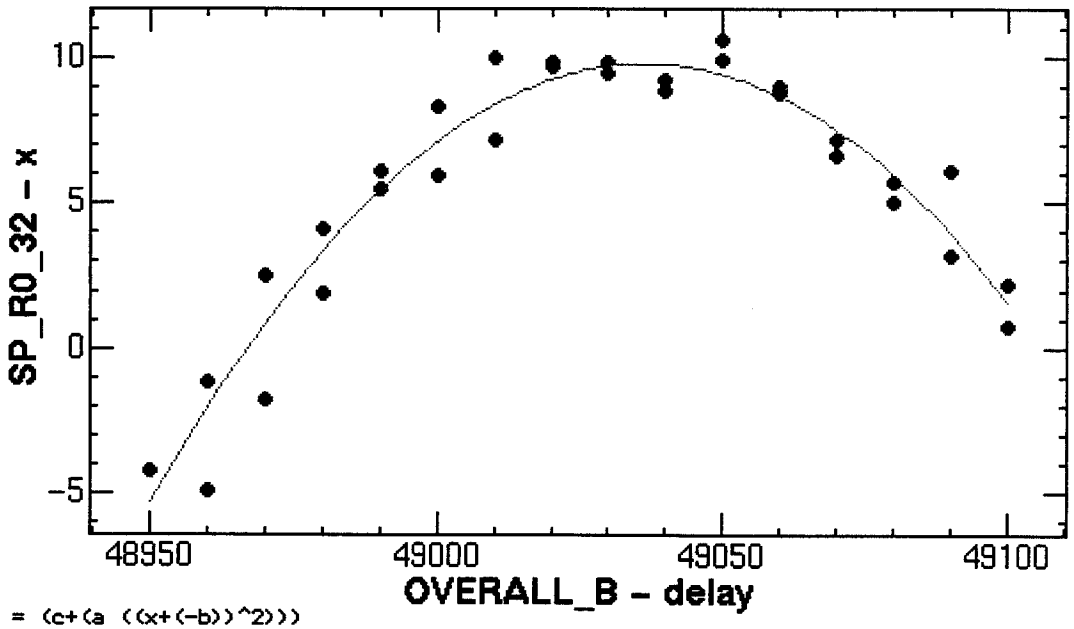
Function = (c+(a ((x+(-b))^2)))

Main Application Area

File Edit Window 11/13/2002 12:39:37 Help

ChiSquare = 42.7159 Goodness = .46507

a = -.00202 +/- 1.14E-4 b = 49036.4 +/- 1.31582 c = 9.78764 +/- .31649



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

Main Application Area

e

Trigger Delays

17:04 v1.3.0

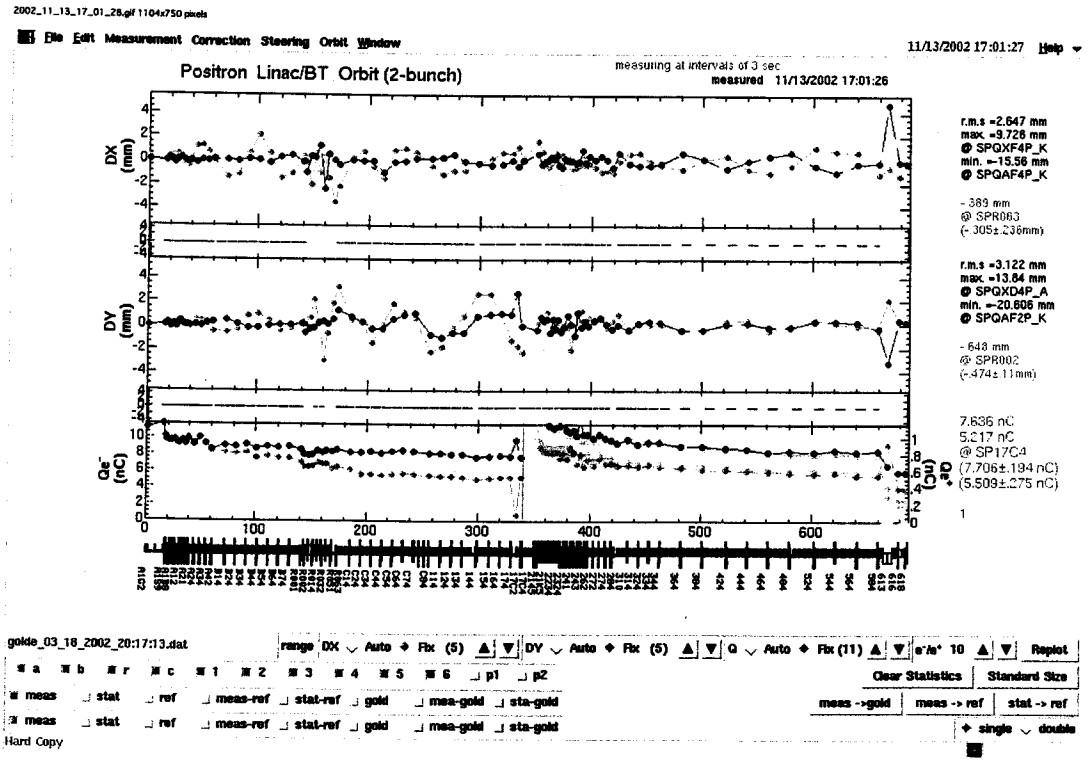
Toggle AB-sled	Toggle C1-sled	Toggle 25-sled	Toggle Monitor
	Reference Nov13 11:42:36	Current Nov13 17:03:45	Difference
KL_A1_RF	93431 ns	93431 ns	0
OVERALL_A	49062 ns	49056 ns	-6
OVERALL_B	49098 ns	49093 ns	-5
OVERALL_C	50910 ns	50910 ns	0
OVERALL_1	72929 ns	72929 ns	0
OVERALL_2	72770 ns	72770 ns	0
OVERALL_3	72691 ns	72691 ns	0
OVERALL_4	72812 ns	72812 ns	0
OVERALL_5	73027 ns	73027 ns	0

ead Ref.	Read Cur.	-96.3	-17.5	-8.8	-1.75	+1.75	+8.8	+17.5	+96.3

delay data213. delay. all

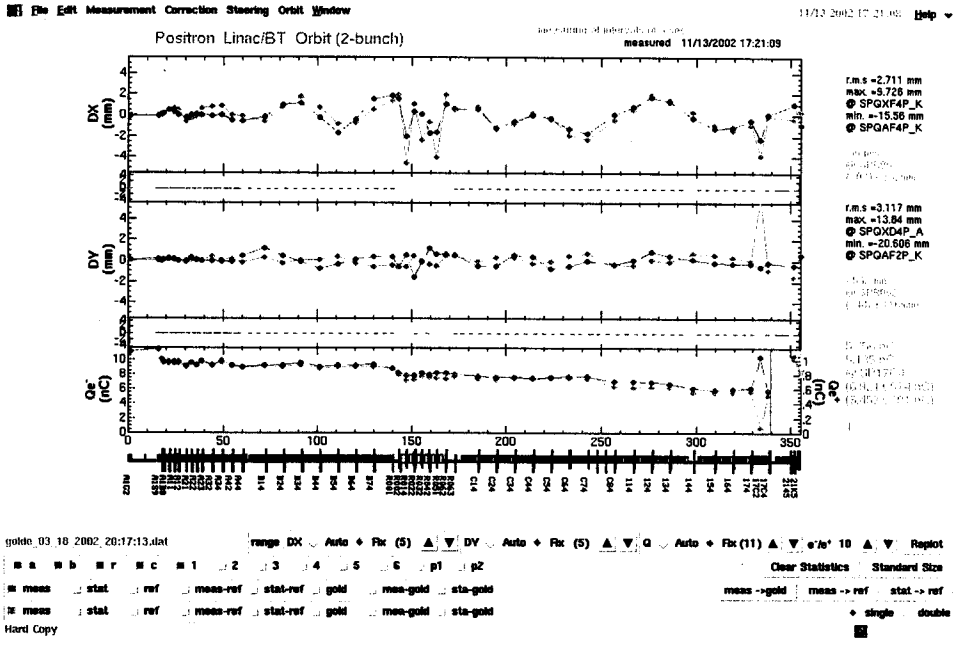
phase data8~~13~~31. phase. all

meas data2318. all



BX-A1-B8 $-0.265 \rightarrow -0.053$

BY_A1_B8 $1.100 \rightarrow 1.208$



2002 11-23 (土) 17:00~ 十川・東福

Longrange transverse wake のみつもり

18:12 2バンチ

~~A1 RF 93431 → 93466 ns (+35 ns)~~ %

~~overall A 49058 →~~

A1 出口のエネルギー測定

				$\Delta E/E_i$
A1 RF	93431 ns		①	3.4%
	93423	(−8 ns)	②	2.9%
	93414	(−17 ns)	③	2.4%
	93405	(−26 ns)	④	2.5%
	93396	(−35 ns)	⑤	1.1%
	93388	(−43 ns)	⑥	2.3%
	93379	(−52 ns)	⑦	3.9%

実測

合わない!

古川さんより TEL

tkstana-a122 (poplar or lychee)

他の場所でも使用可

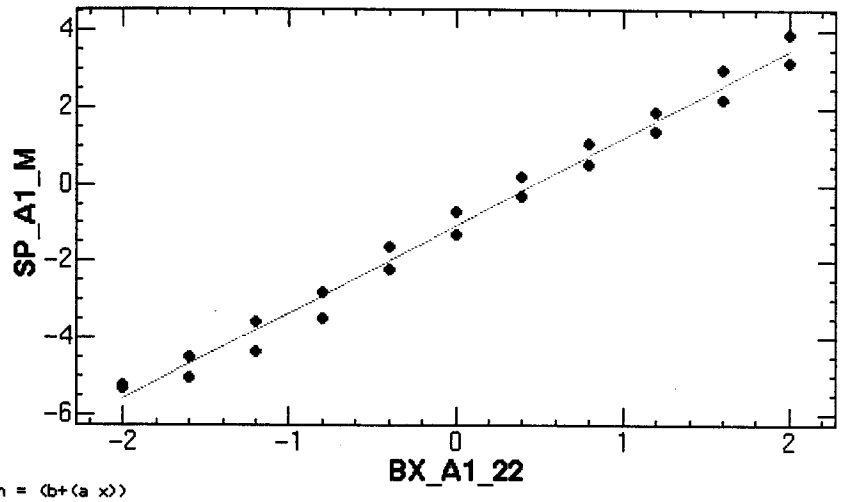
A1 RF	~~9337~~ 93379	(−52 ns)	Ⓐ	2.3%
	93388	(−43 ns)	Ⓑ	2.4%
	93396	(−35 ns)	Ⓒ	3.0%
	93405	(−26 ns)	Ⓓ	3.6%
	93414	(−17 ns)	Ⓔ	2.6%
	93423	(−8 ns)	Ⓕ	
	93431	(0)	Ⓖ	
	93440	(+9 ns)	Ⓗ	

File Edit Window (17) 93379 (-.52 MeV) 11/23/2002 20:24:53 Help

ChiSquare = 2.55774 Goodness = .45793

a = 2.27715 +/- .06028 b = -1.0524 +/- .07624

$\frac{\delta E}{E_1} = 3.9\%$

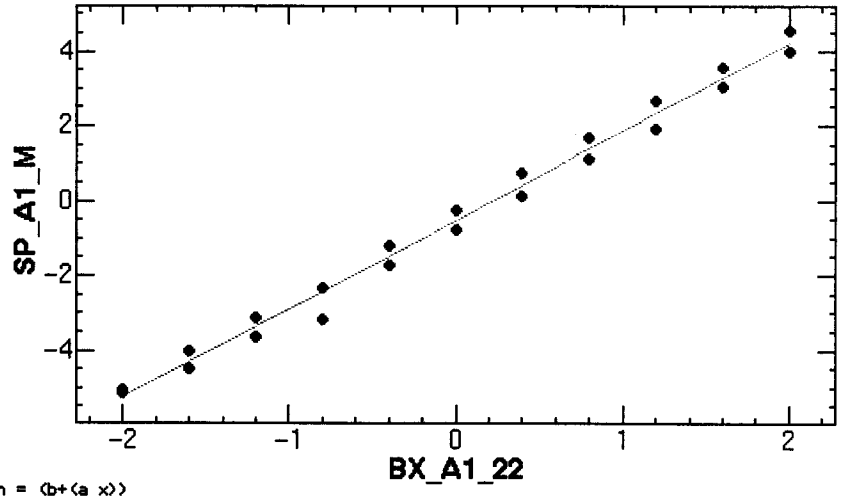


Function = (b+(a x))

Energy at A1_B8 : 8.409643243890635 MeV

ChiSquare = 2.11489 Goodness = .45793

a = 2.37058 +/- .05481 b = -.52282 +/- .06933



Function = (b+(a x))

Energy at A1_B8 : 8.078193383857995 MeV

Hard Copy