2004.10.28(木) - 10:00 ~

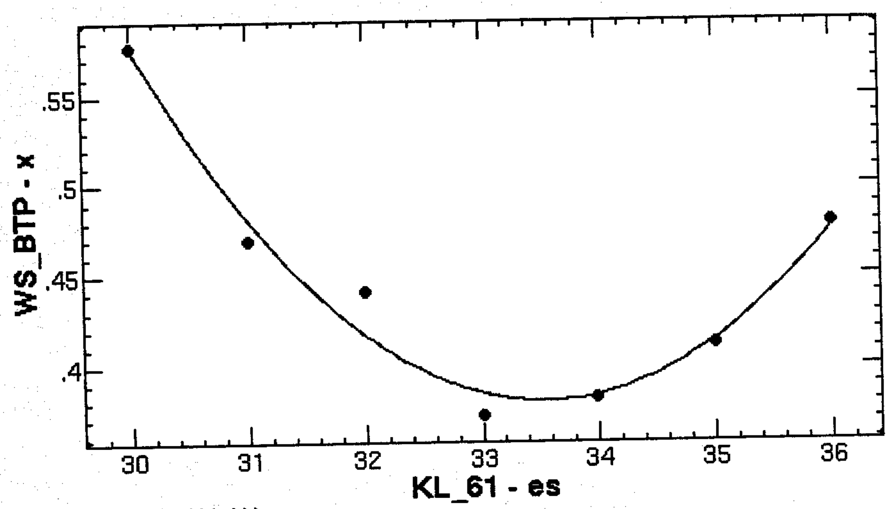
ECSによるエネルギー幅測定

BTコリメータ1 Left 5mm Right 10mm (Beam Centerからの距離)

File Edit Window 10/28/2004 11:47:34 Help

ChiSquare = 8.68E-4 Goodness = .40601

a = .01574 +/- .00160 b = 33.5317 +/- .10375 c = .38020 +/- .00829



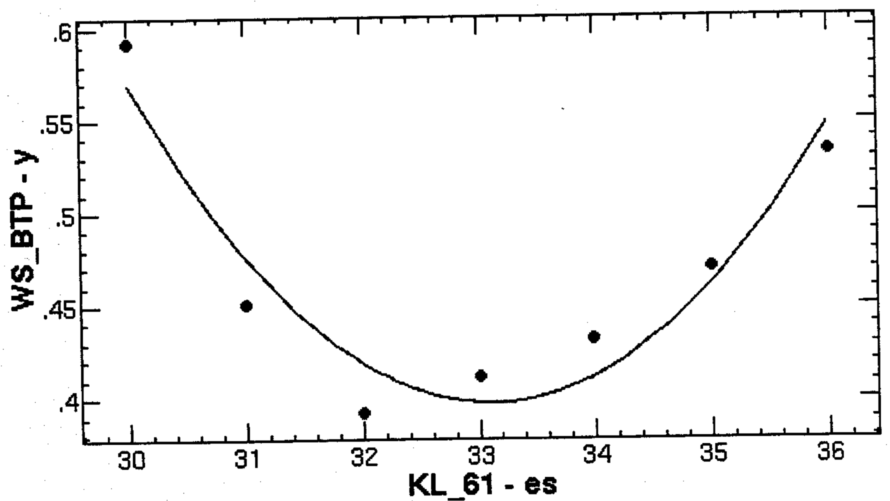
Function = (c+(a ((x+(-b))^2)))

Main Application Area

File Edit Window 10/28/2004 11:48:57 Help

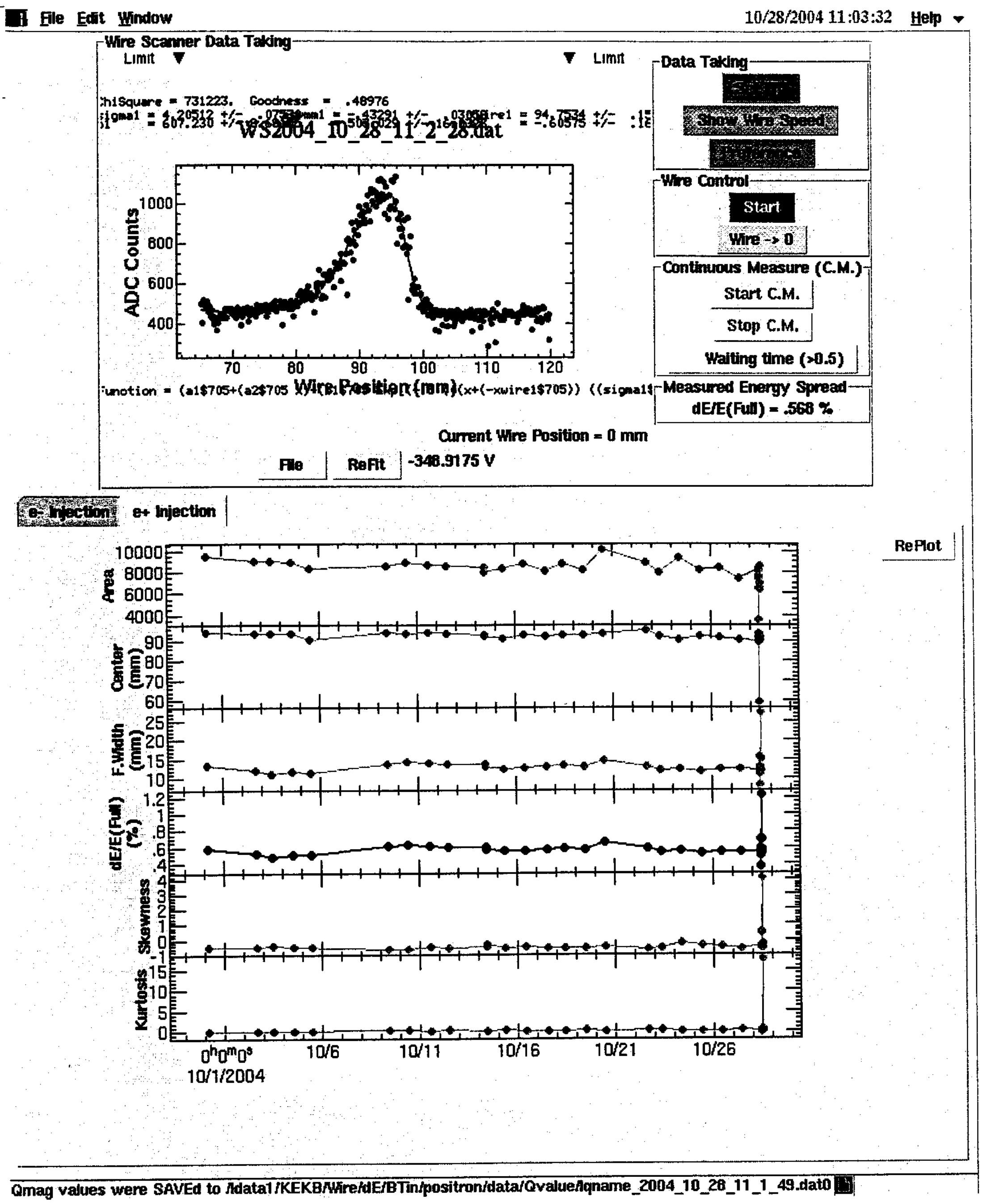
ChiSquare = .00281 Goodness = .40601

a = .01788 +/- .00289 b = 33.0986 +/- .14100 c = .39724 +/- .01526



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

Hard Copy



KL-61 STB 1st. プログラム変更後

KL-61 Es=30 kV 1st P

KL-61 Es=31 kV 1st P

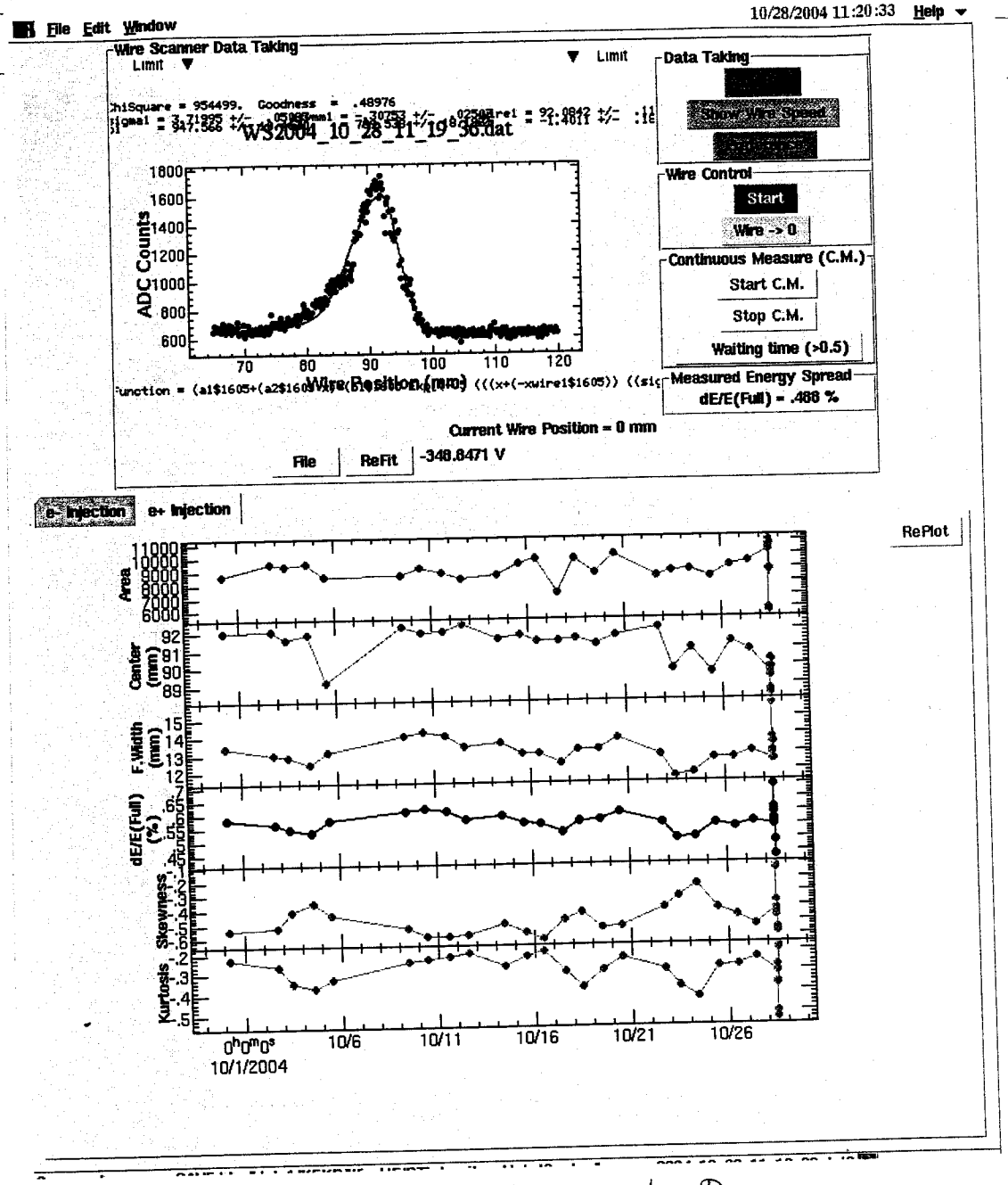
KL-61 Es=32 kV 1st P

KL-61 Es=33 kV 1st P

KL-61 Es=34kV (プログラム変更後)

KL-61 Es=35. kV 1st P

KL-61 Es=36.0kV 1st P



KL-61 Es=30.0kV 2nd P

KL-61 Es=31kV 2nd P

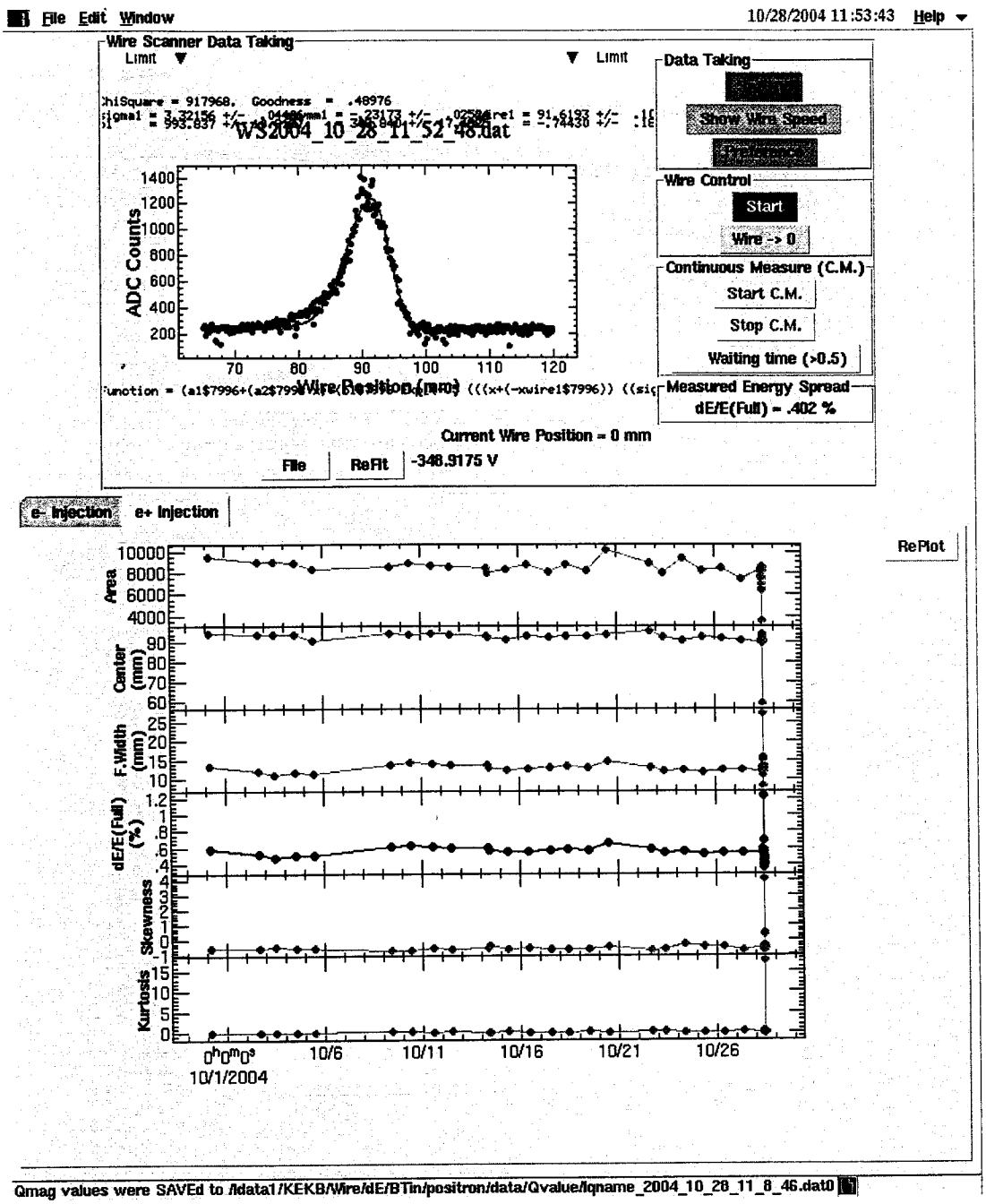
KL-61 Es=32.0kV 2nd P

KL-61 Es=33kV 2nd P

KL-61 Es=34kV 2nd P

KL-61 Es=35kV 2nd P

KL61 Es=36kV 2nd P



KL_61 Es = 33.5kV 1st P

e+ (SP_61_3) FB offset = 0mm

Offset = 5mm

e+ Offset = 10mm

KL_61 Es = 33.5kV 2nd P

e+ (SP_61_3) FB Offset = 0mm

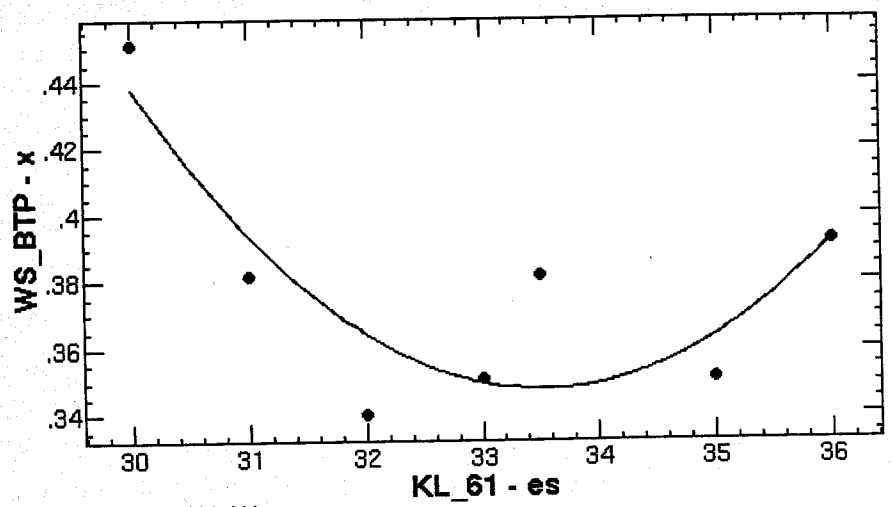
e+ Offset 5mm

Offset = 10mm

16:30 e+エネルギー中心測定　コリメーター1（全開）（他も全開）

File Edit Window　10/28/2004 17:01:31 Help

ChiSquare = .00225 Goodness = .40601
a = .00731 +/- .00252　b = 33.5193 +/- .35556　c = .34746 +/- .01311

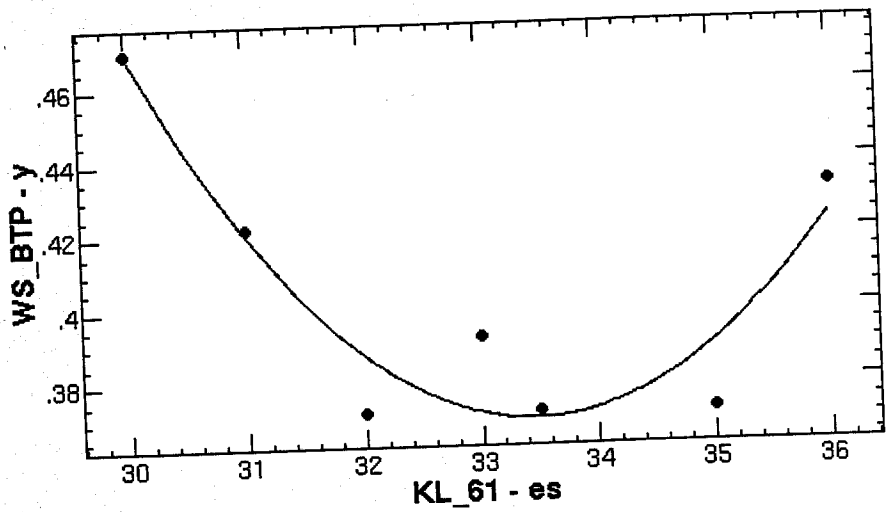


Function = (c+(a ((x+(-b))^2)))

Main Application Area

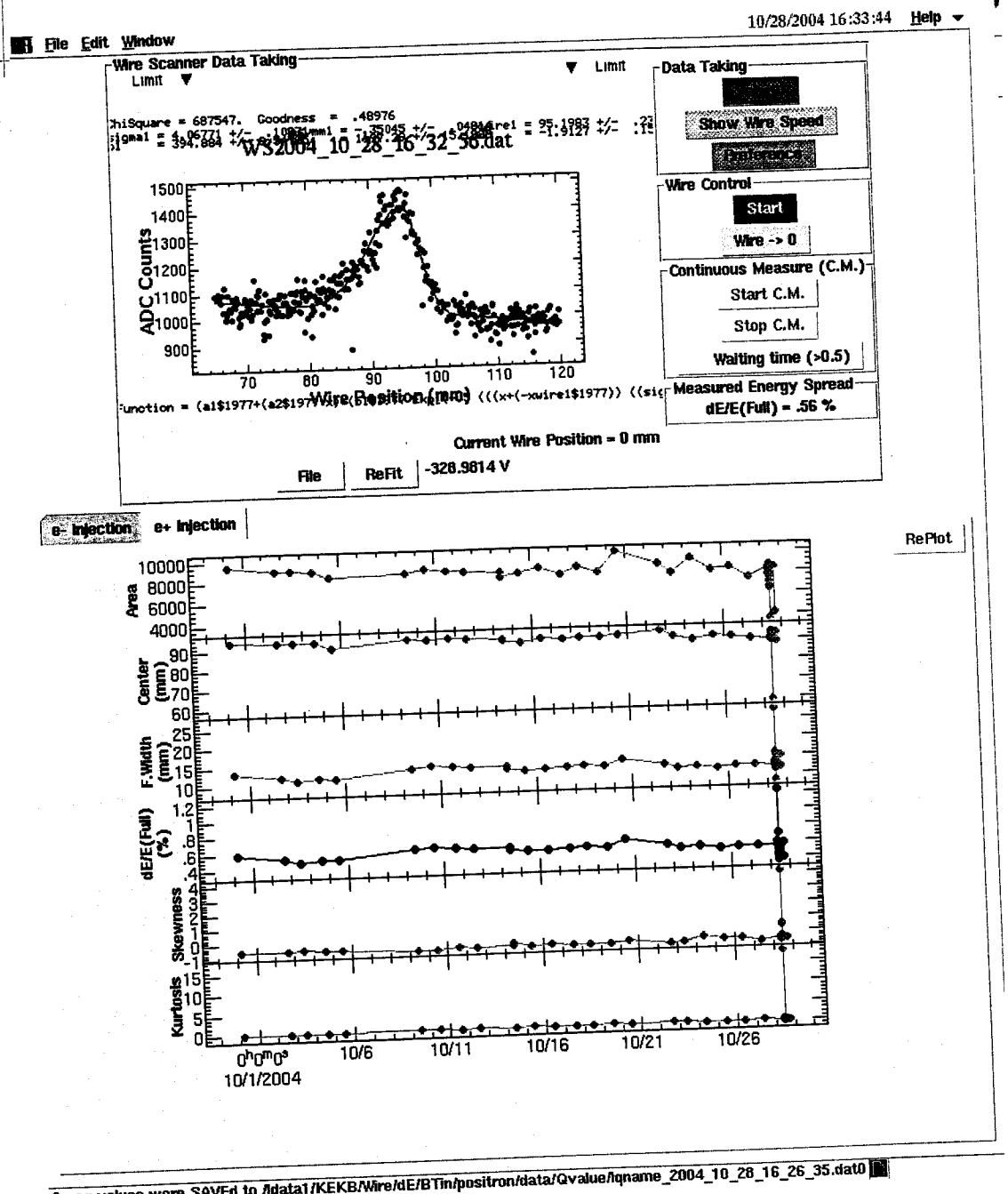
File Edit Window　10/28/2004 17:01:52 Help

ChiSquare = .00105 Goodness = .40601
a = .00835 +/- .00172　b = 33.4549 +/- .20629　c = .36982 +/- .00897



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

Hard Copy



Qmag values were SAVEd to /data1/KEKB/Wire/dE/BTin/positron/data/Qvalue/qname_2004_10_28_16_26_35.dat0

KL_61 STB 1st

KL_61 Es = 30 kσ 1st

KL_61 Es = 31 kσ 1st

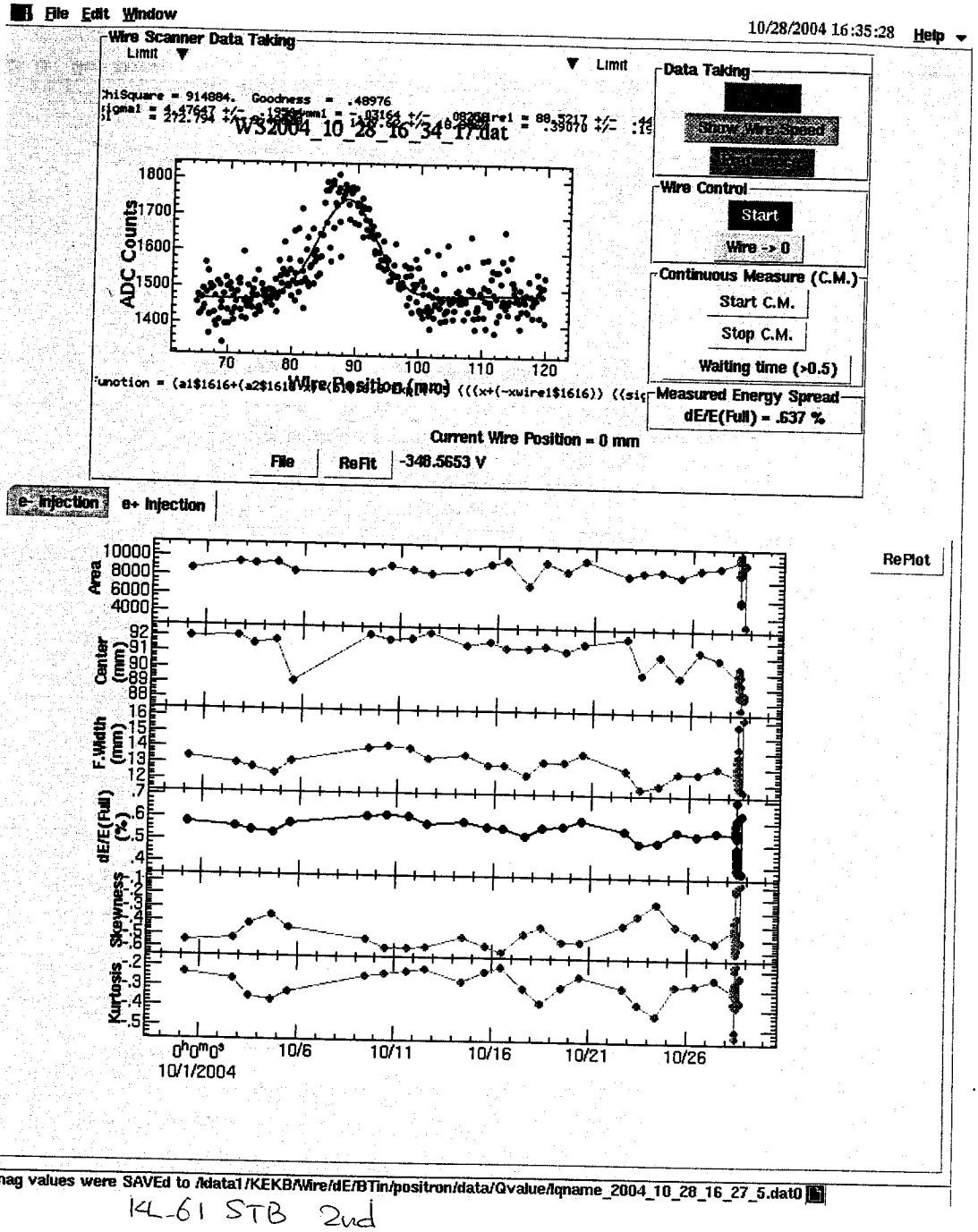
KL_61 Es = 32 kσ 1st

KL_61 Es = 33 kσ 1st

KL_61 Es = 33.5 kσ 1st

KL_61 Es = 35 kσ 1st

KL_61 Es = 36 kσ 1st



Qmag values were SAVEd to /data1/KEKB/Wire/dE/BTin/positron/data/Qvalue/lqname_2004_10_28_16_27_5.dat0

LL_61 STB 2nd

LL_61 Es=30 kV 2nd

LL_61 Es=31 kV 2nd

LL_61 Es=32 kV 2nd

LL_61 Es=33 kV 2nd

LL_61 Es=33.5 kV 2nd

LL_61 Es=35 kV 2nd

LL_61 Es=36 kV 2nd

2004. 12. 2　C-band 加速試験　紙谷、杉村、横山

13:38　RF-ON.
14:27　AR入射　P.180

⓪ 4-4 unit　Es = 28.56 kV　2004.10.6 (前回と同じ値での測定をする。)
(Power=12.4, Pf=9.4)

① ARモード e⁻ビーム　Energy = 3.0019 GeV　BM-61-1
5Hz.　Current = 132.845A.　Analyzerパネル

SC-61-H ビームスポット確認.

(※1-4 は Standby. 1-5 Acc. メンテ作業の都合上.)

② Feedback OFF　AR Energy, 5X, 5Y PF AR
4X, 4Y
6X, 6Y. PF.

③ BPM Average 5.
軌道補正(手動プログラム)

④ SP-61-H1　Xposition　-3.5 → ±0.04
Energy knob　3.1454 → 3.1018

⑤ 4-4 Acc モード ON　Xposition -2.8

⑥ 4-4 Phase　144.5° → 123° にセット.

	Min	Max	Standby時
	52 6.5°	123°	
Xposition	3.6	-3.6	-0.032

⑦ Simple Correlation Plot.

~~File名~~
~~KL44-sp61h 2004.12.2 15:~~

trig data - T	DELAY-TIME
KL-44	7180
KL-44-RF	28
KL-44-RF2	2180.

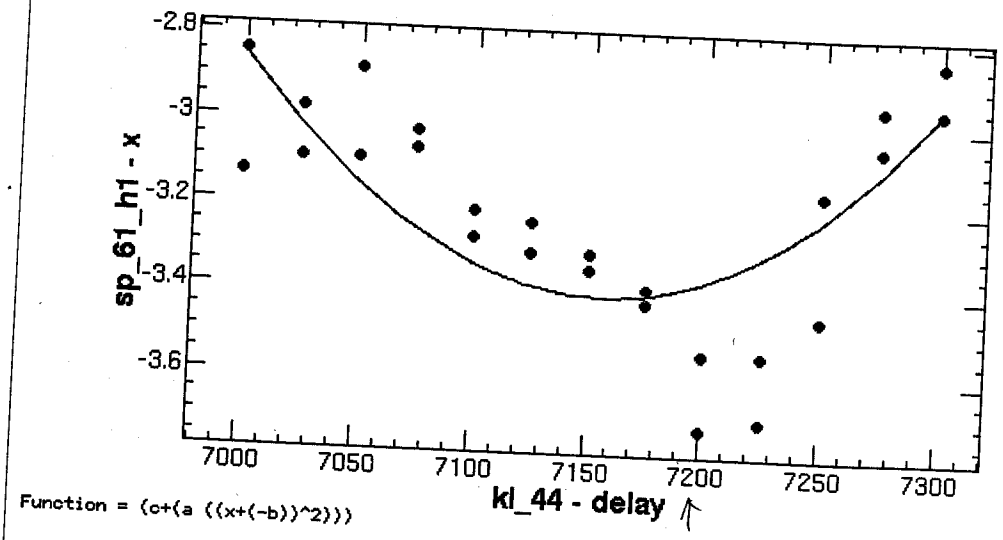
Active Equipment	Type	Trigger-Delay
	Name	KL-44
SP	Name	SP-61-h1
Start		6000
Stop		8000
Step		25

interval (sec) 3

File Edit Window 12/02/2004 15:40:00 Help

ChiSquare = .77156 Goodness = .46077

a = 2.24E-5 +/- 4.63E-6 b = 7157.11 +/- 8.68125 c = -3.4108 +/- .05405



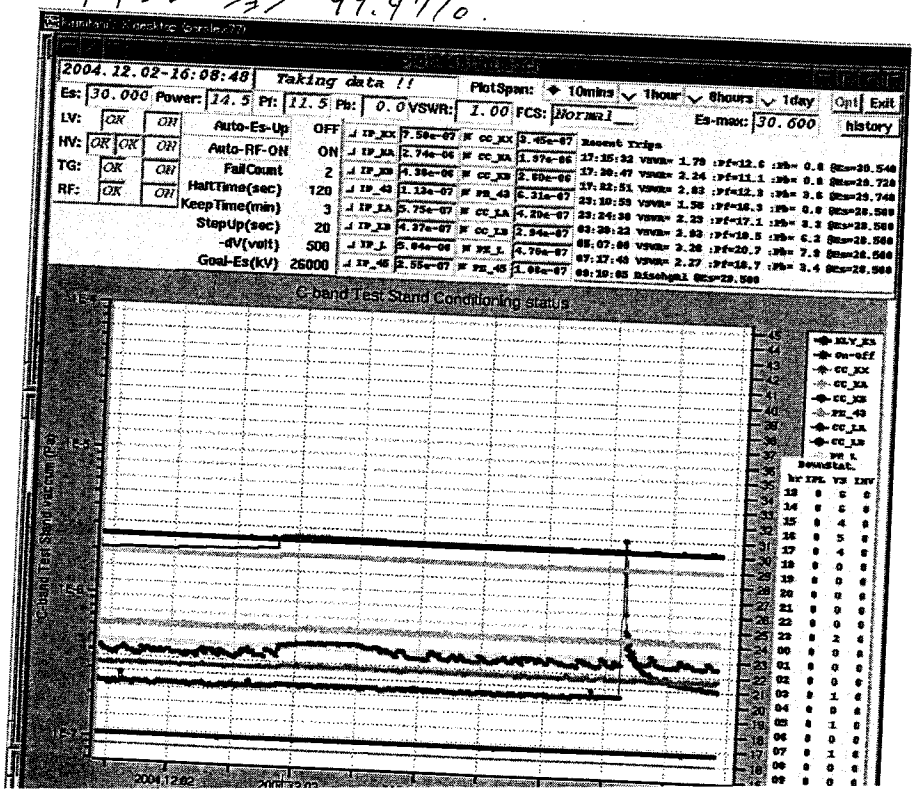
Function = (c+(a ((x+(-b))^2)))

Hard Copy

KL-44 - delay 7200 にセット

trig set KL-44 7200

アテニエーション 99.97%.



ES=30.0kV.

Pf-ratio = $\frac{11.5}{9.2}$ = 1.25

Powa-ratio = $\frac{14.5}{12.4}$ = 1.17

Egain-ratio = $\frac{42.5}{37.5}$ (40) = 1.13

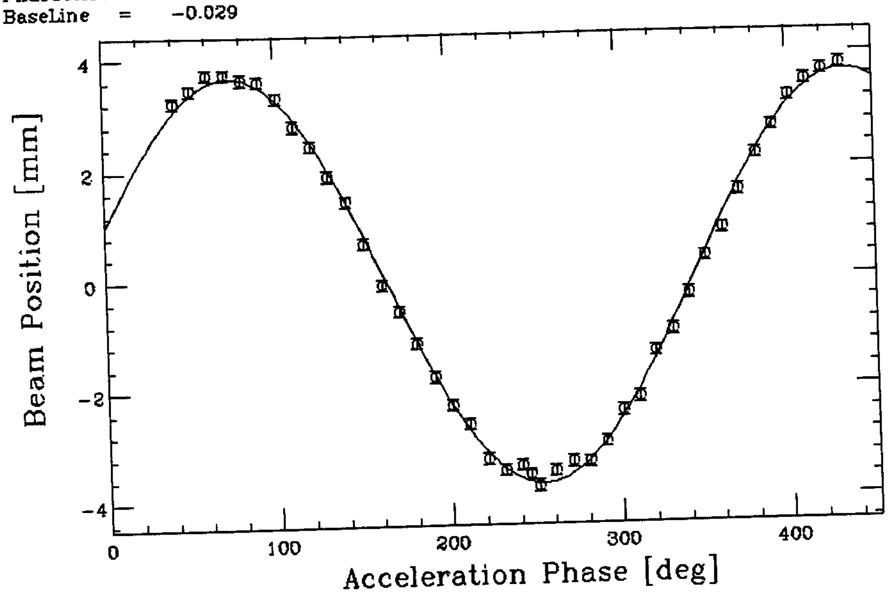
1.13^2 ~ 1.28

Es = 28.56 kV
Power = 12.4 , Pf = 9.2 ~ (9.0) ばらつき
(↙ 下がった!? 9.4)

C−band accelerator module:

Amplitude = 3.699
PhaseOffset= −16.421
BaseLine = −0.029

Energy Gain = 36.089
Accel Field = 37.504



Es = 30.00 kV
Power = 14.5
Pf = 11.5

42.487 MV/m

C−band accelerator module:

Amplitude = 4.189
PhaseOffset= −43.791
BaseLine = −0.023

Energy Gain = 40.864
Accel Field = 42.467