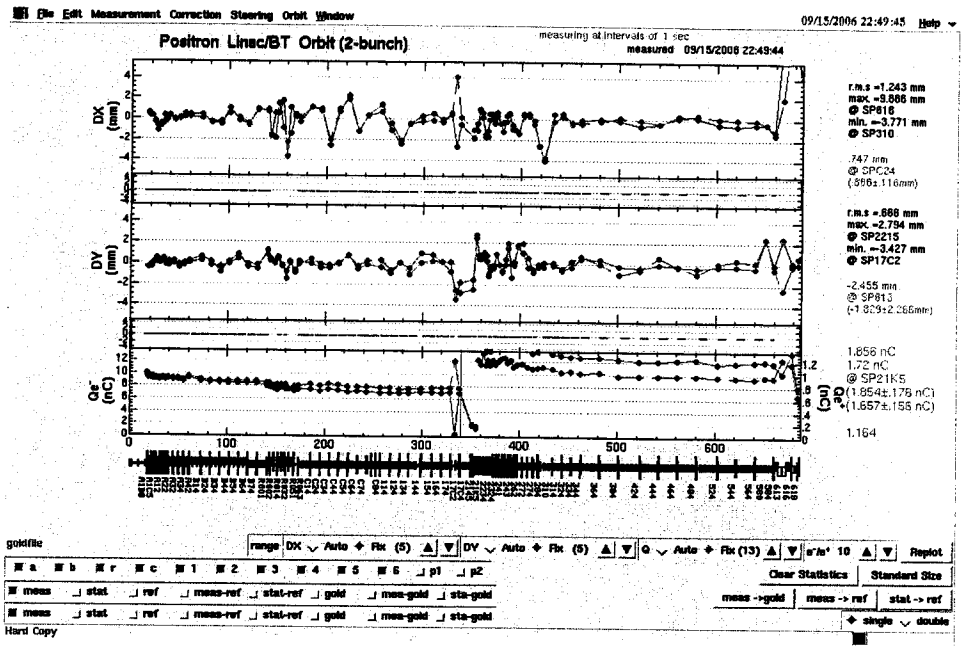
8/8

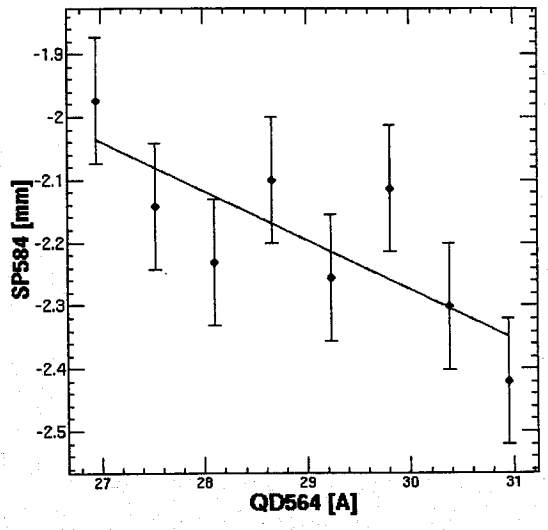
ECS
ビームが通らな
い



2006 10/31 (火) SP58-0 Quad BPM テスト

10:00 bpk より ビーム を SP58-0 Quad BPM と 行ったり 来たり させる

File Edit Window 10/31/2006 11:59:58 Help

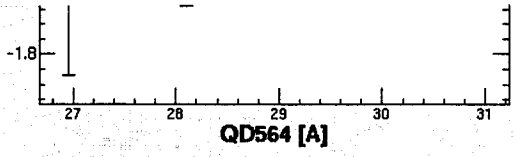


Condition
BPM to be Calibrated : SP580
Direction : ◆ Horizontal ◡ Vertical
Used Components :
BPM : SP580
Steering : {{"SX553",1}}
from -2
to 0
number 4
Q magnet: QD564
from -2
to 2
number 8
next | remem. | save
GO | STOP | READ

Display
BPM : SP584
Steering step : 1

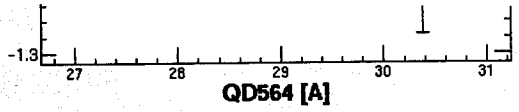
Result
When the beam is at the Q center :
BPM reading [mm]: 2.6226
error [mm]: .91864
Last BPM taken into account : SP584
rel. curr. thresh. : .7
Fit | Chk I | Save

Main Application Area



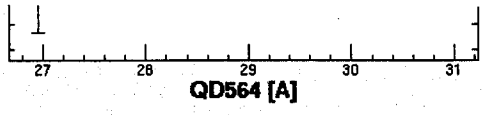
When the beam is at the Q center :
BPM reading [mm]: 2.6226
error [mm]: .91864
Last BPM taken into account : SP584
rel. curr. thresh. : .7
Fit | Chk I | Save

Hard Copy



error [mm]: .91864
Last BPM taken into account : SP584
rel. curr. thresh. : .7
Fit | Chk I | Save

Hard Copy



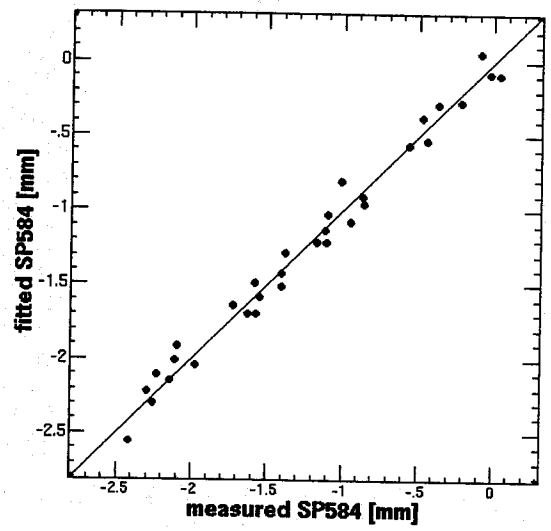
error [mm]:
Last BPM taken into account : SP584
rel. curr. thresh. :
Fit | Chk I

Hard Copy

File Edit Window

10/31/2006 12:00:33 Help

residual = .106 mm



Condition
BPM to be Calibrated : SP580
Direction : ◆ Horizontal ◇ Vertical
Used Components :
BPM : SP580
Steering : {{"SX553",1}}
from -2
to 0
number 4
Q magnet: QD564
from -2
to 2
number 8
next | remem. | save
GO | STOP | READ

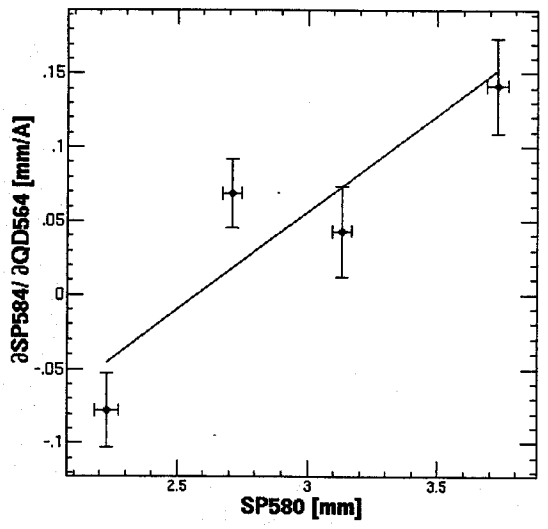
Display
BPM : SP584
Steering step : Fit0

Result
When the beam is at the Q center :
BPM reading [mm]: 2.6226
error [mm]: .91864
Last BPM taken into account : SP584
rel. curr. thresh. : .7
Fit | Chk I | Save

Hard Copy

File Edit Window

10/31/2006 12:00:27 Help



Condition
BPM to be Calibrated : SP580
Direction : ◆ Horizontal ◇ Vertical
Used Components :
BPM : SP580
Steering : {{"SX553",1}}
from -2
to 0
number 4
Q magnet: QD564
from -2
to 2
number 8
next | remem. | save
GO | STOP | READ

Display
BPM : SP584
Steering step : Fit

Result
When the beam is at the Q center :
BPM reading [mm]: 2.6226
error [mm]: .91864
Last BPM taken into account : SP584
rel. curr. thresh. : .7
Fit | Chk I | Save

Hard Copy

File Edit Window 10/31/2006

Condition
BPM to be Calibrated :
SP580
Direction :

File Edit Window 10/31/2006 11:50:00 Help

Condition
BPM to be Calibrated :
SP580
Direction :
Horizontal ◆ Vertical
Used Components :

File Edit Window 10/31/2006 11:50:07 Help

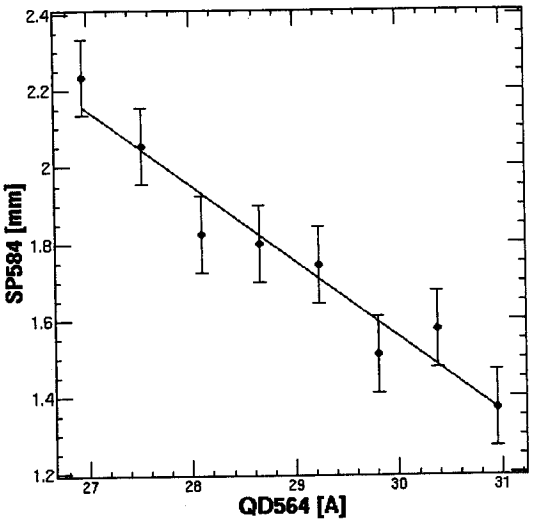
Condition
BPM to be Calibrated :
SP580
Direction :

File Edit Window 10/31/2006 11:50:14 Help

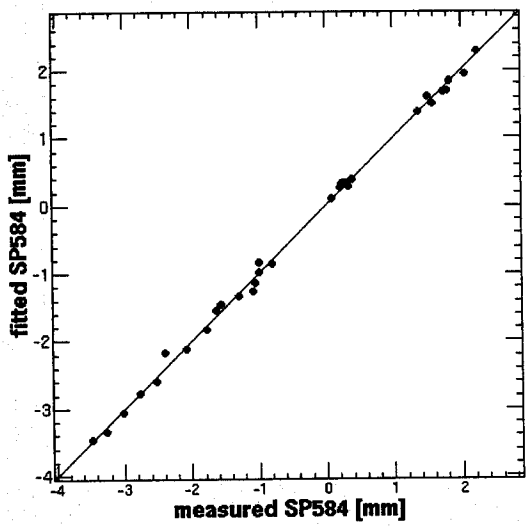
Condition
BPM to be Calibrated :
SP580
Direction :
Horizontal ◆ Vertical
Used Components :
BPM : SP580
Steering : {{"SY553",1}}
from -1
to 3
number 4
Q magnet: QD564
from -2
to 2
number 8
next remem. save
GO STOP READ

Display
BPM :
SP584
Steering step :
4

Result
When the beam is at the Q center :
BPM reading [mm]: -.21566
error [mm]: .0286
Last BPM taken into account :
SP584
rel. curr. thresh. : .7
Fit Chk I Save



residual = .089 mm



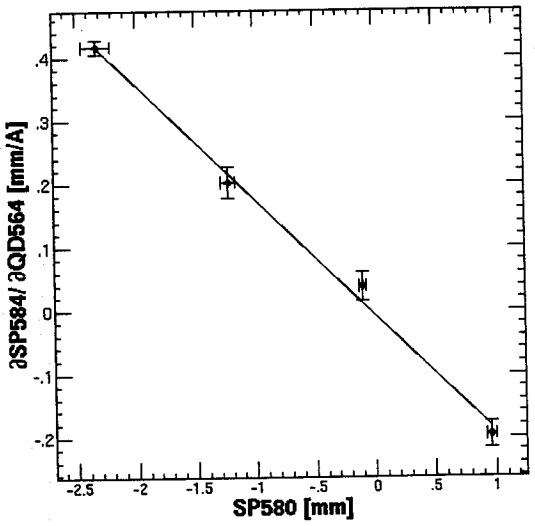
Condition
BPM to be Calibrated : SP580
Direction : Horizontal ◆ Vertical
Used Components :
BPM : SP580
Steering : {{"SY553",1}}
from -1
to 3
number 4
Q magnet: QD564
from -2
to 2
number 6
next | remem. | save
GO | STOP | READ

Display
BPM : SP584
Steering step : Fit0

Result
When the beam is at the Q center :
BPM reading [mm]: -.21566
error [mm]: .0286
Last BPM taken into account : SP584
rel. curr. thresh. : .7
Fit | Chk I | Save

Hard Copy

File Edit Window 10/31/2006 11:50:24 Help

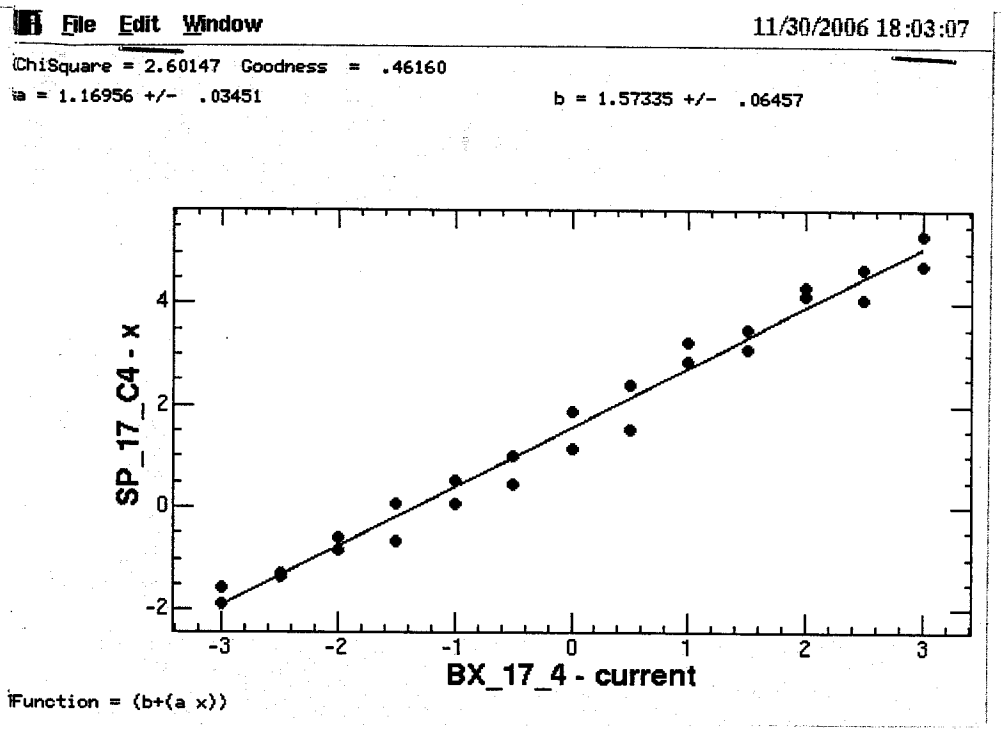


Condition
BPM to be Calibrated : SP580
Direction : Horizontal ◆ Vertical
Used Components :
BPM : SP580
Steering : {{"SY553",1}}
from -1
to 3
number 4
Q magnet: QD564
from -2
to 2
number 6
next | remem. | save
GO | STOP | READ

Display
BPM : SP584
Steering step : Fit

Result
When the beam is at the Q center :
BPM reading [mm]: -.21566
error [mm]: .0286
Last BPM taken into account : SP584
rel. curr. thresh. : .7
Fit | Chk I | Save

Nov.30.2006 (古い)



e+ Targetでの Positionと Angleの固定に向けて

tkfb_orbitlXYpk (これまで)

B[XY]_17_4 ⇒ SP_17_C4

の代わりに

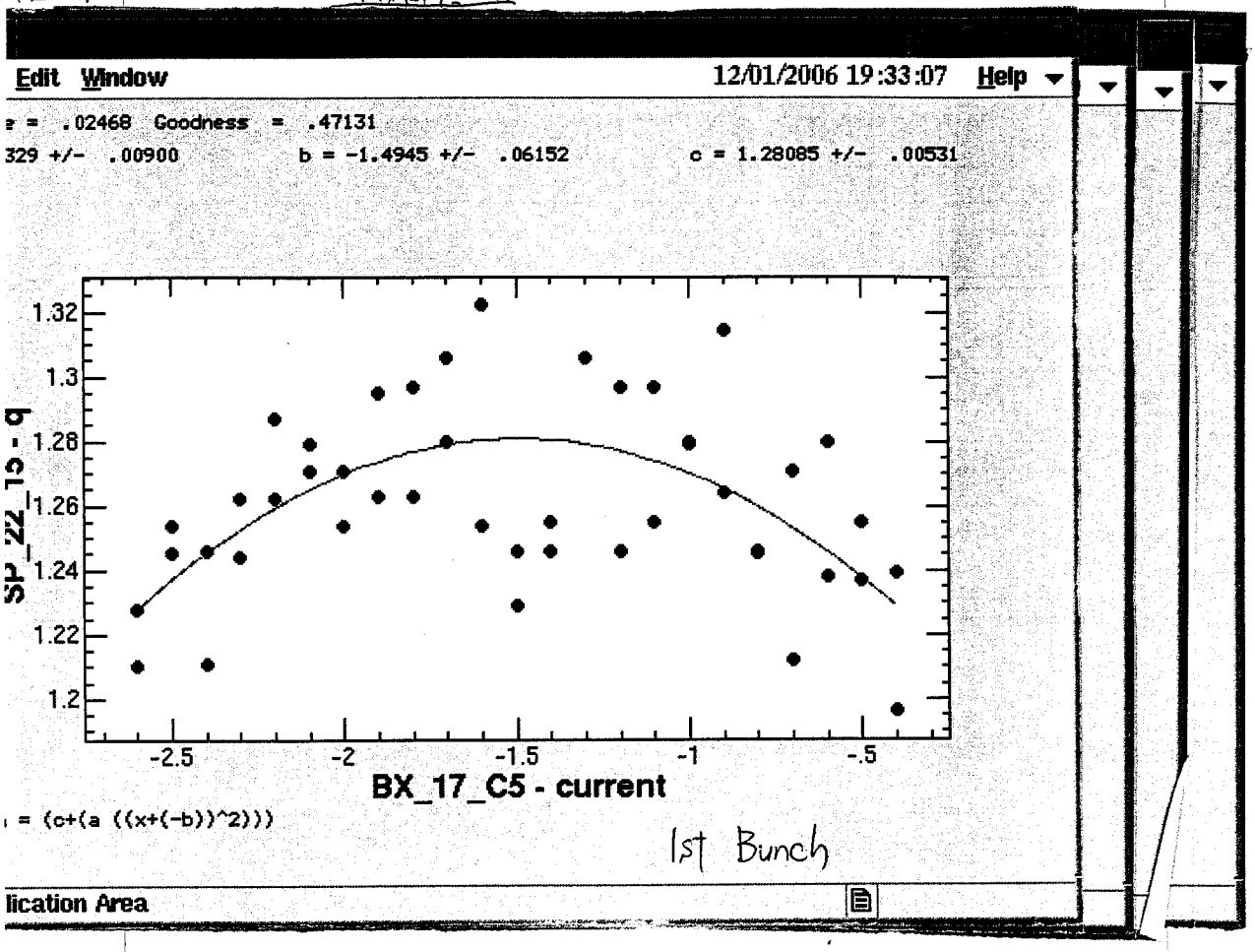
tkfb-orbit1[XY]pk を作成

S[XY]_16_3 ⇒ SP_17_4

B[XY]_17_4 ⇒ SP_17_C4

(menu や自動立ち上げにも登録済)

2006. 12. 1 ~~BX/Y_17_C5~~ BX/Y_17_C5 Simple Correlation Plot 実施 (vs SP_22_15_9)

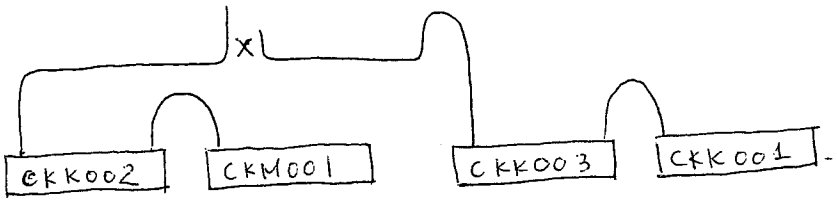


22:30 IX, IY et Orbit Feedback にて Offset 1, 2 の値を1つずつ

23:20 0, -1, 1 に ~~変化させ~~ 設定したが、チャージ量が増加するポイントがなかったため、~~元値(0)~~ に戻した。

2006/12/12(火)　C-band 4-4 unit ビーム加速試験

9:00～



計算で、加速ゲイン ≒ 22.36 $\sqrt{Pf}$

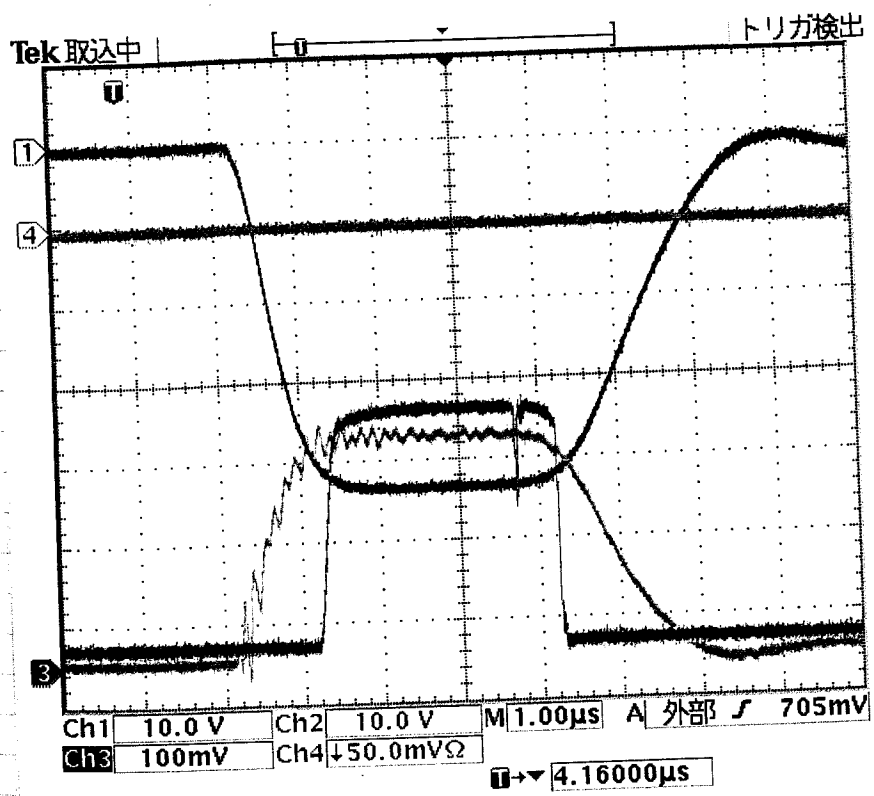
tesh

~~2006/9/12のパラメータにセット~~　2006/9/13

trig get

各パラメータ

KI-44	6280 ns	→	~~6614 ns~~	6614	パラメータにセット
KI-44_phase	2750	→	~~2360~~	~~2500~~ 2750	
KI-44_delay	2500	→	~~2500~~	→ 2500	
KI-44_width	3276	→	~~2836~~	→ 3276	
_sb	~~28~~ 177	→	~~28~~	→ 28 → 177	



Es = 43 kV

Ch3 振幅 292mV　CT

Ch2 振幅 27.8 V　Pf VIDEO OUT

Ch1 振幅 43.0 V　CD

KL-44_　6614
_phase　2750
_delay　2500
_width　3276
_sp　177

4-3, 4-5. S-band ユニットで 加速ゲインの 測定

① KEKB e^-モード 8GeV, 1nC, 5Hz

② SC-61-h で ビームスポット 確認

③ 各種フィードバック OFF

④ BPM 5 times Average Mode

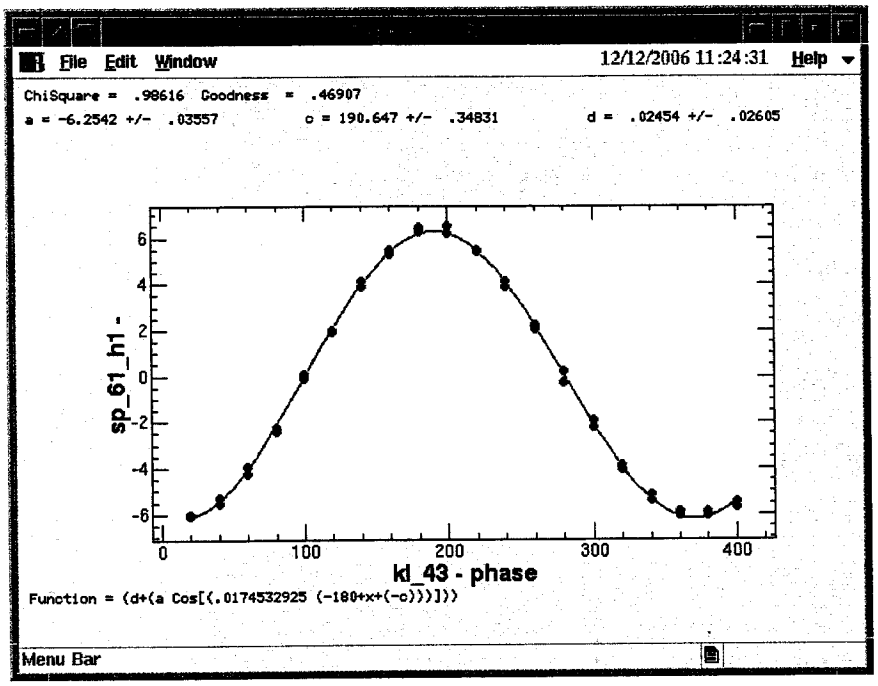
⑤ SP-61-h1 で Position = 0 になるように、energy knob
energy knob 7.8539 → 8.0898

⑥ 吉田氏軌道プログラム Start

⑦ 4-3 Acc にセット

⑧ Simple Correlation

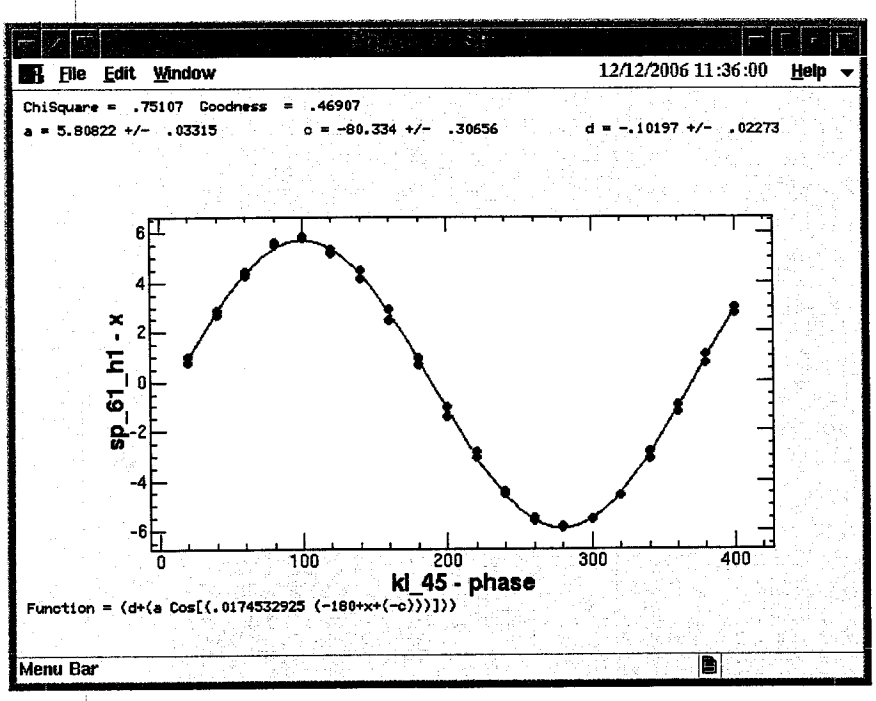
4-3



$$E_{gain} = 8.0 \times \frac{6.2542}{307.5}$$
$$= 162.7 \text{ [MeV]}$$

$E_s = 41$ KV

4-5



$$E_{gain} = 8.0 \times \frac{5.80822}{307.5}$$
$$= 151 \text{ [MeV]}$$

$E_s = 42$ KV