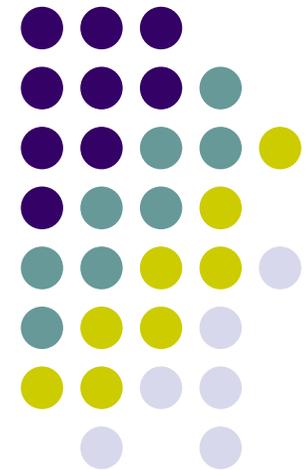




IUC #15

Apr. 15, 2005

- (1) PF-AR BT 3.7-GeV化の検討 (2) (宮島氏)
- (2) サブグループ報告
- (3) マシンスタディ計画 (佐藤)
- (4) その他・議論



IUC関係 Machine Study



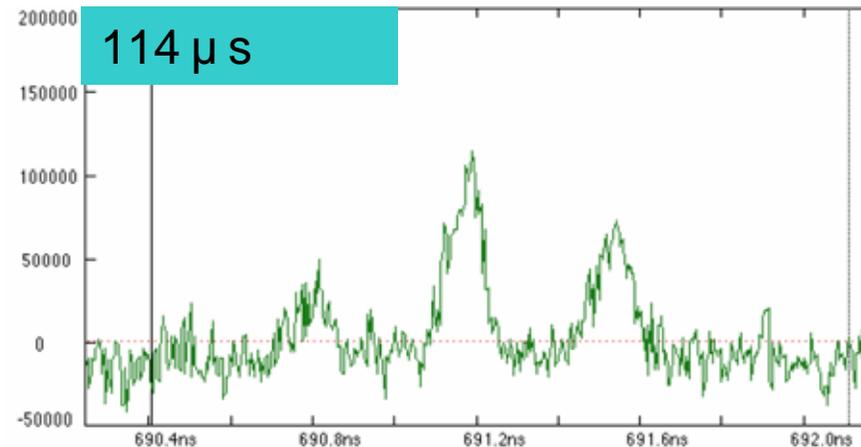
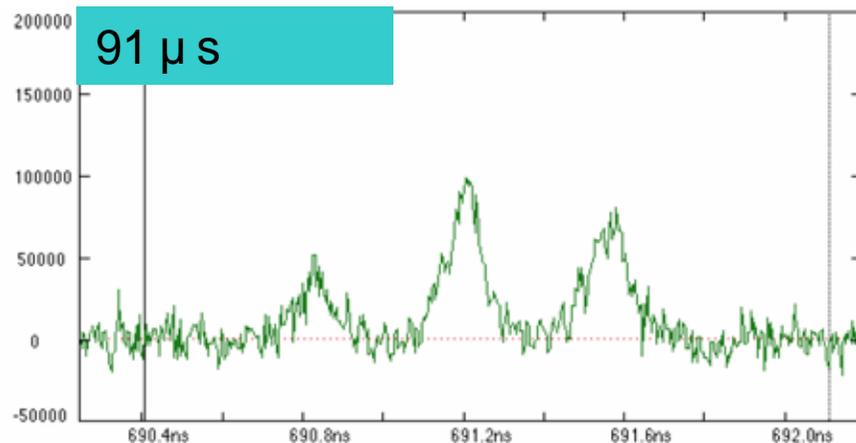
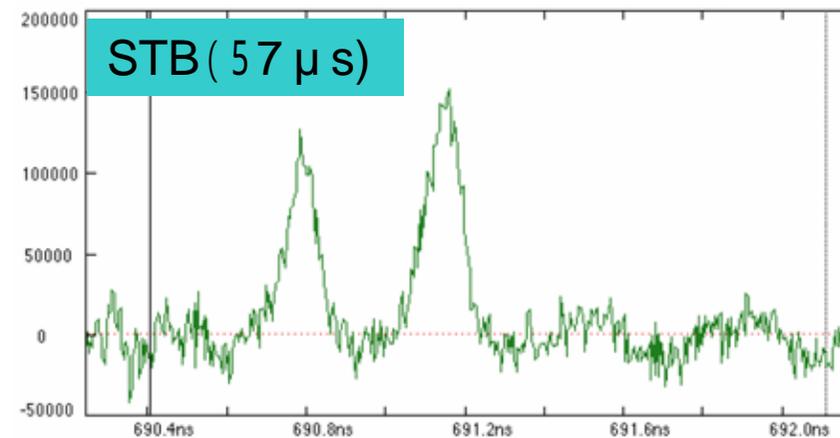
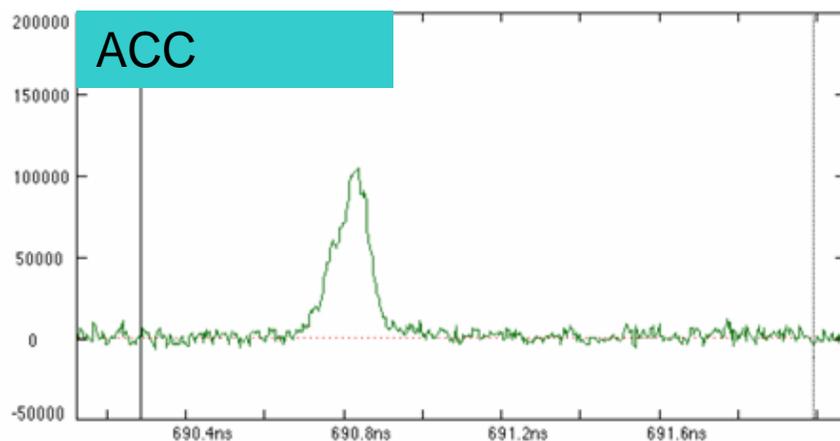
1. A1電子銃よりマルチバンチ (SHB standby)
 - Phase-IIに必要
 - マルチバンチでPFへ入射 (秋以降)
2. Multi-energy linac orbit correction
 - 今期に一度くらいやる。
3. SB 高速切り替え試験
4. その他

A1電子銃よりマルチバンチ

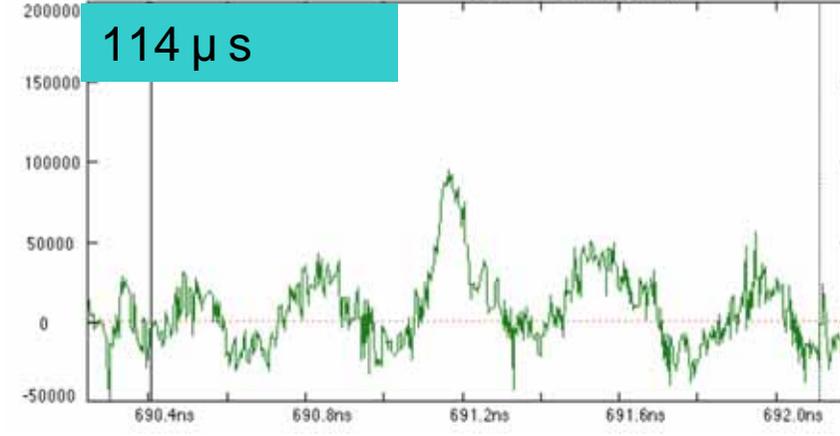
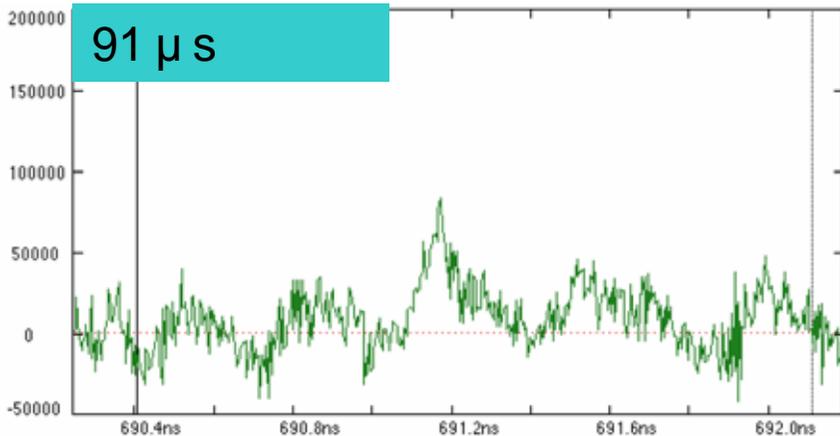
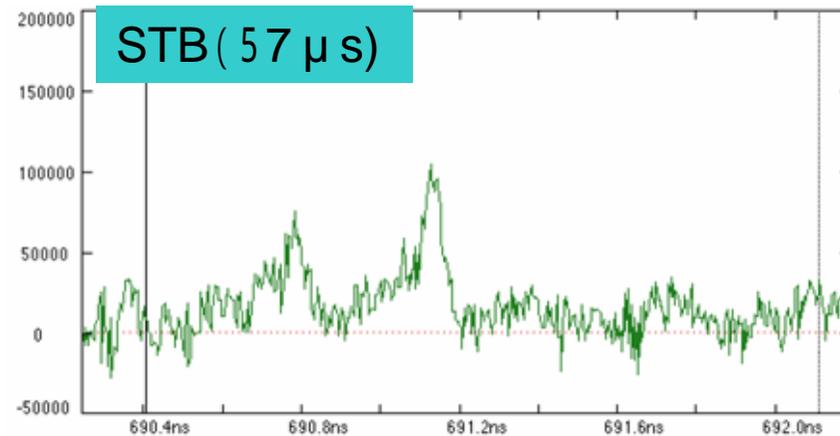
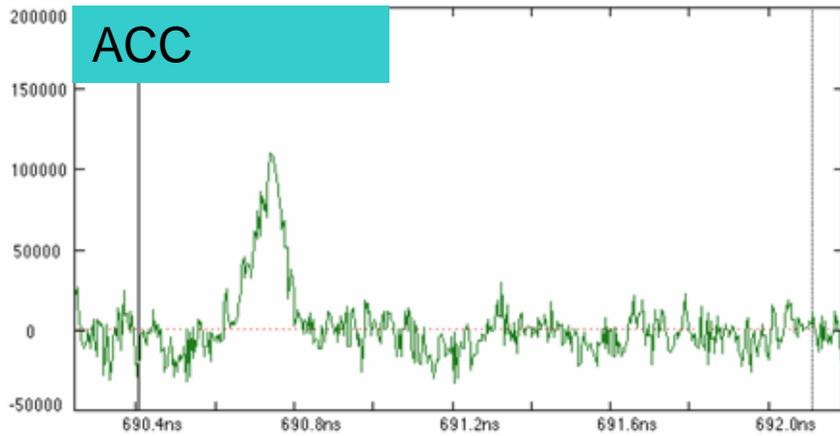


- SHB1,2 standby + 114 μ s
- Charge: 0.8-nC/ 0.6-nC/ 0.15-nC

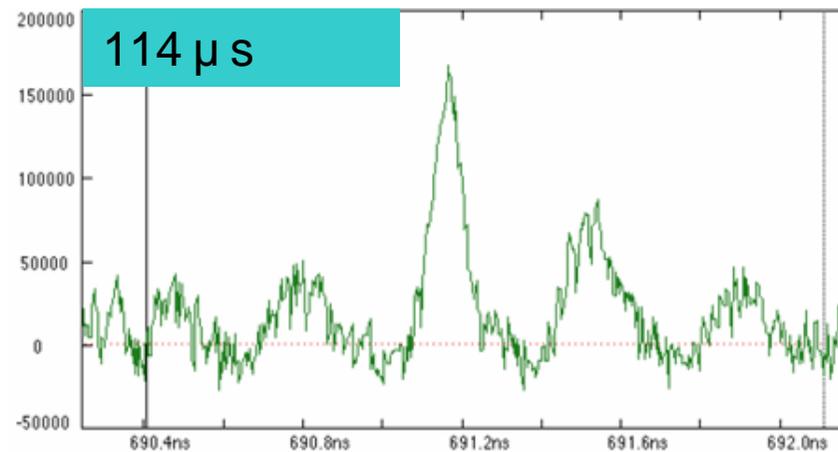
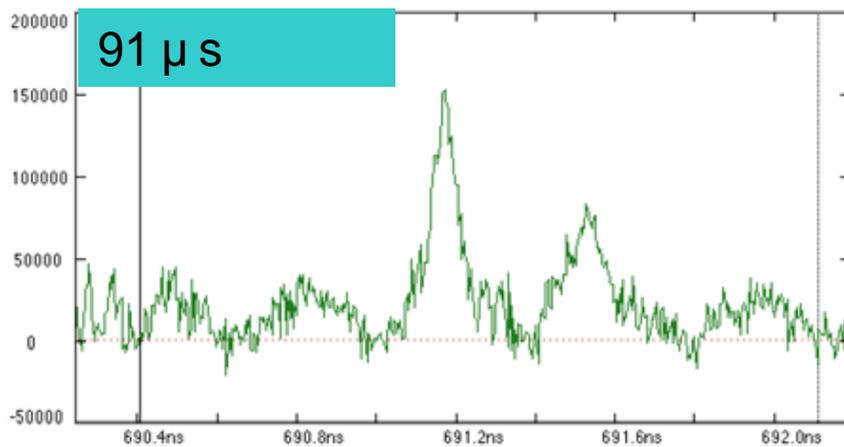
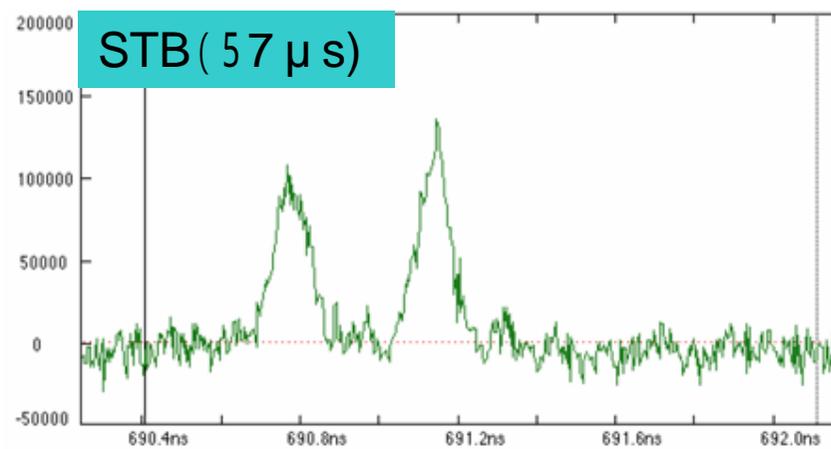
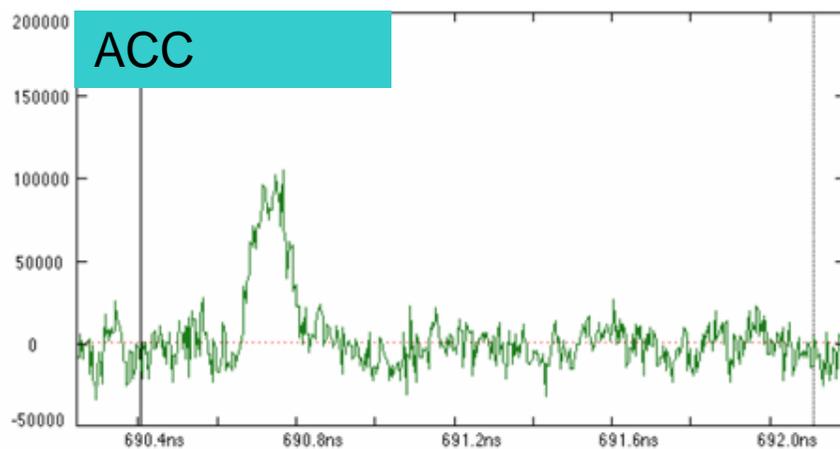
0.8-nC



0.6-nC mode



0.15-nC mode



0.8-nC orbit



STB

Correction Steering Orbit Window

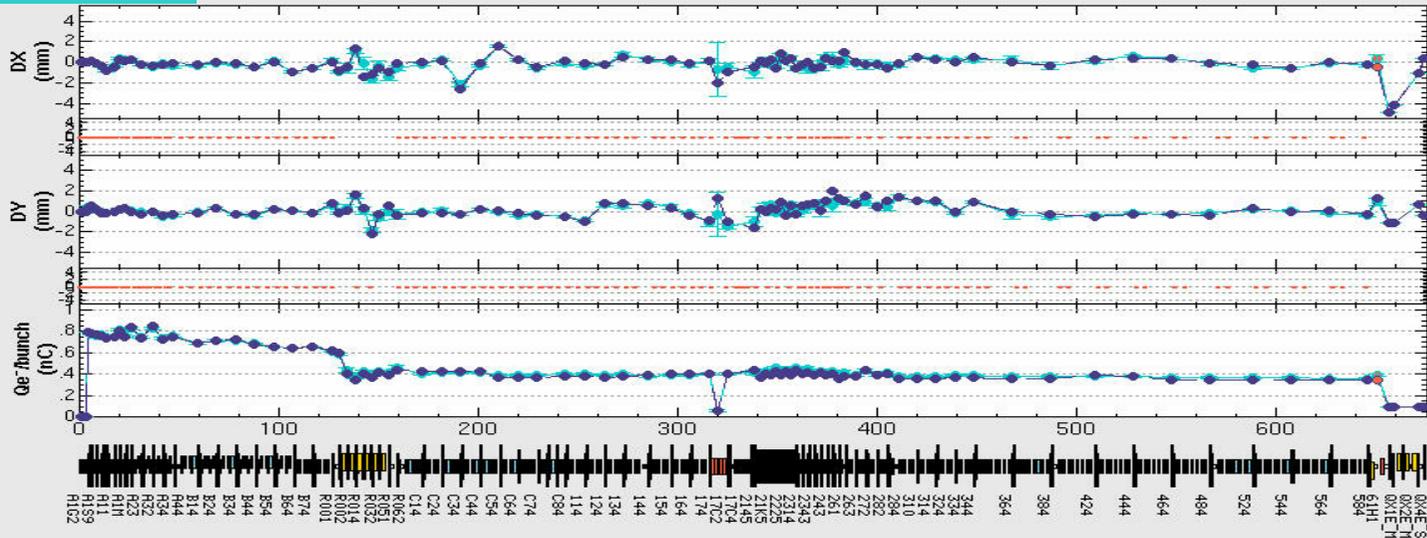
04/13/2005 18:07:44

Help

Electron Linac/BT Orbit

measuring at intervals of .1 sec

measured 04/13/2005 18:07:44



r.m.s = 1.792 mm
max. = 4.433 mm
@ SPQAD2E_M
min. = -11.556 mm
@ SPQAF5E_S

-421 mm
@ SP61H1
(.365±.332mm)

r.m.s = 1.637 mm
max. = 5.649 mm
@ SPQXD7E_M
min. = -12.707 mm
@ SPQAF5E_S

-48 mm
@ SPQMD10E_M
(-.48±9.12506E-9mm)

.352 nC
@ SP61H1
(.386±.016 nC)

.882

File Edit Measurement Correction Steering Orbit Window

04/13/2005 18:09:31

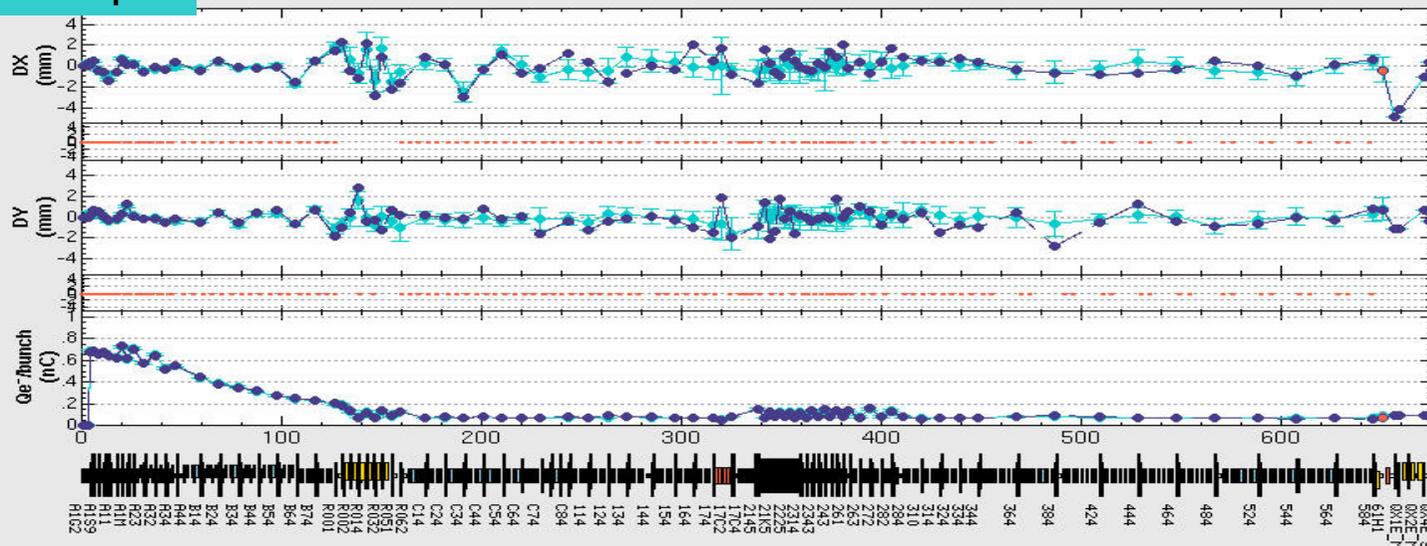
Help

STB+114 μ s

Electron Linac/BT Orbit

measuring at intervals of .1 sec

measured 04/13/2005 18:09:31



r.m.s = 1.898 mm
max. = 4.433 mm
@ SPQAD2E_M
min. = -11.556 mm
@ SPQAF5E_S

-505 mm
@ SP61H1
(-.389±1.233mm)

r.m.s = 1.7 mm
max. = 5.649 mm
@ SPQXD7E_M
min. = -12.707 mm
@ SPQAF5E_S

-46 mm
@ SPQMD10E_M
(-.48±9.12506E-9mm)

.077 nC
@ SP61H1
(.091±.006 nC)

.906

A1からマルチバンチStudyまとめ



- SHBのタイミングを最大限ディレイ (114 μ s)させて、3バンチビームを確認した。(単にstandbyしただけでは、2バンチになる。)
- CT-Gun(グリッドパルス幅2-ns)では、6バンチビームなので、A1-Gun(グリッドパルス幅1-ns)で3バンチに見えるのはconsistentに思われる。
- 上流(A2近辺)からのビームロスが激しいので、次回のスタディで再確認する。