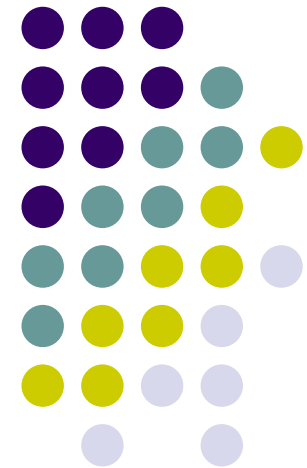




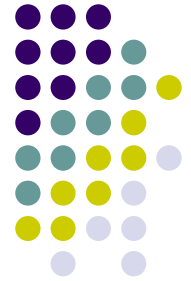
# IUC #15

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

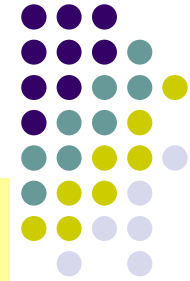


# IUC関係 Machine Study



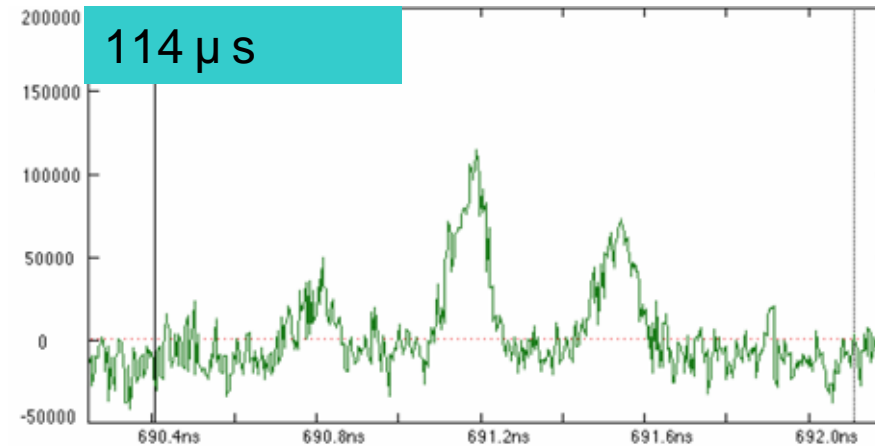
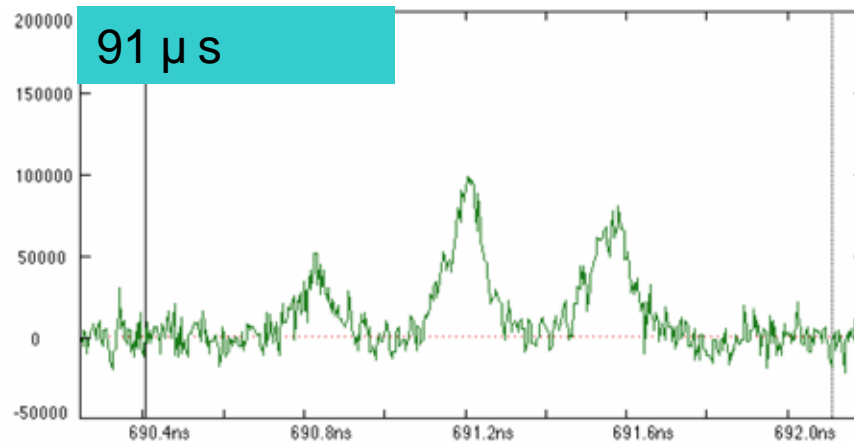
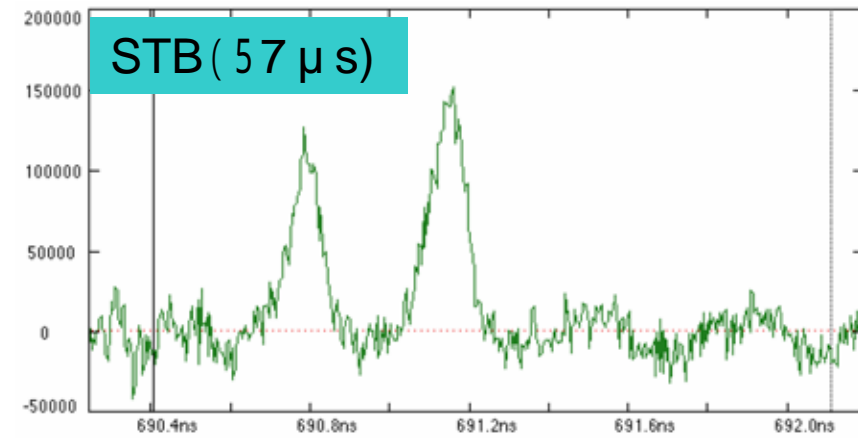
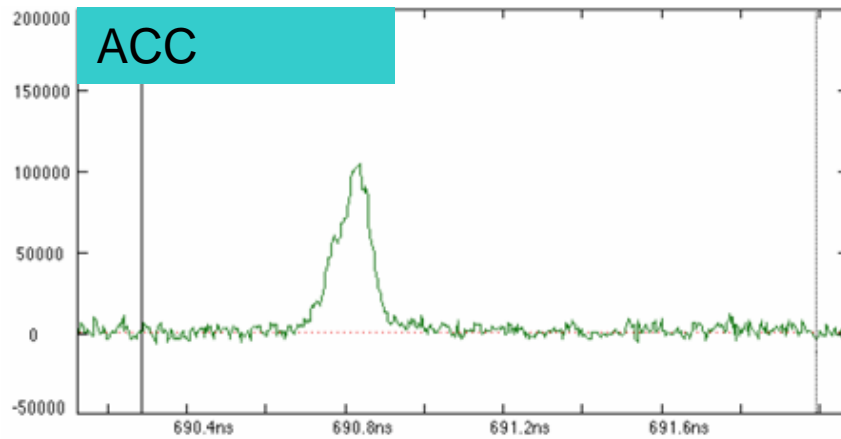
1. A1電子銃よりマルチバンチ (SHB standby)
  - Phase-IIに必要
  - マルチバンチでPFへ入射 (秋以降)
2. Multi-energy linac orbit correction
  - 今期に一度くらいやる。
3. SB 高速切り替え試験
4. その他

# A1電子銃よりマルチバンチ

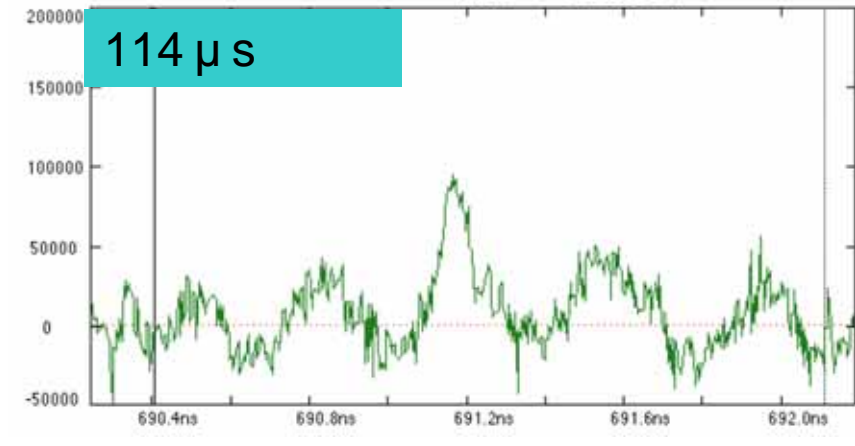
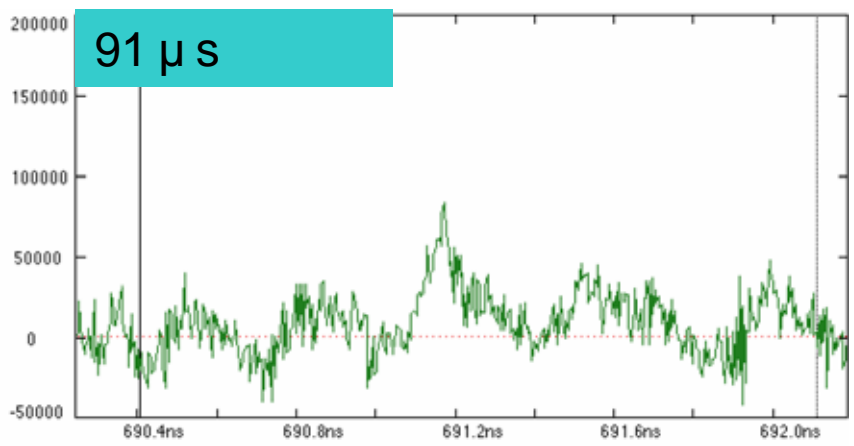
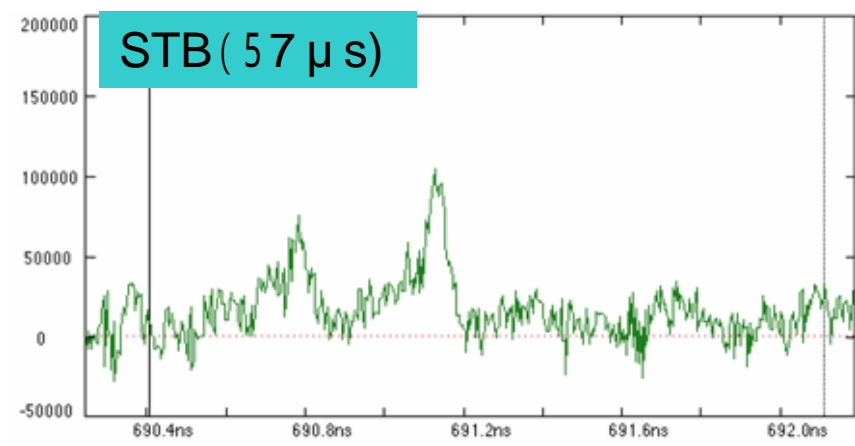
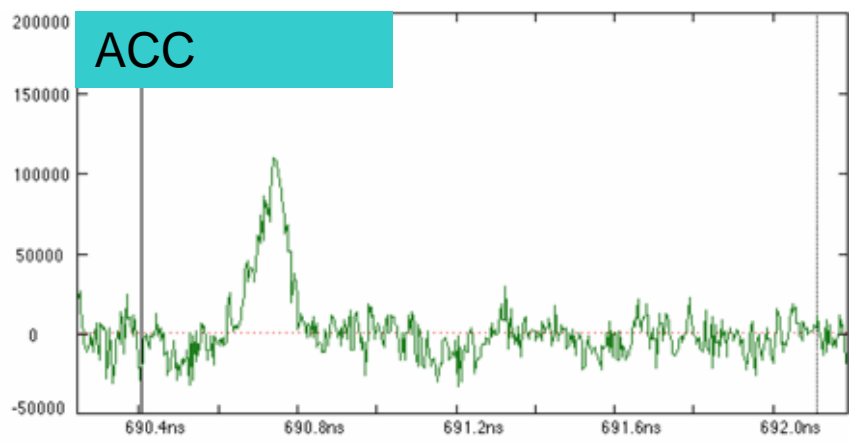


- SHB1,2 standby + 114  $\mu$ s
- Charge: 0.8-nC/ 0.6-nC/ 0.15-nC

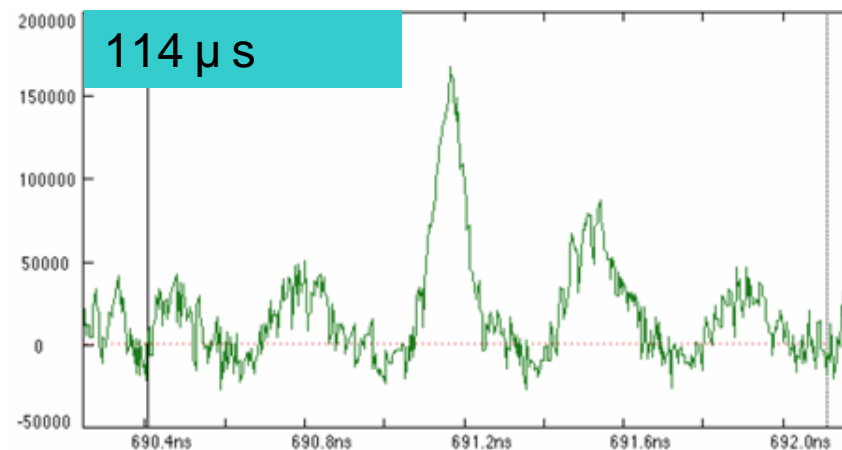
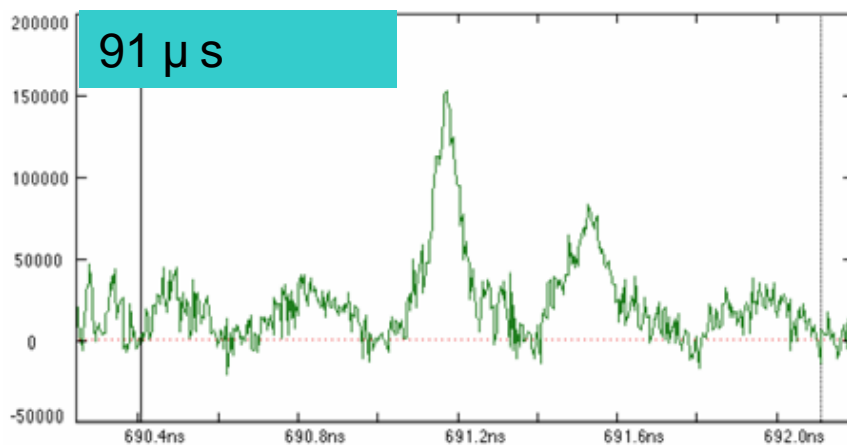
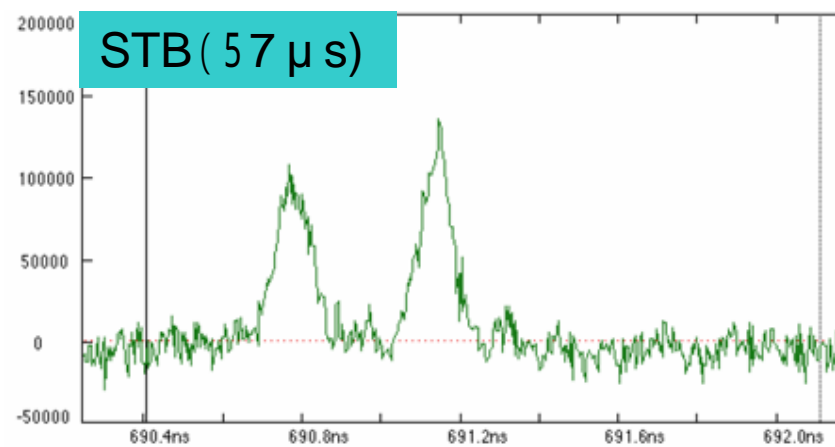
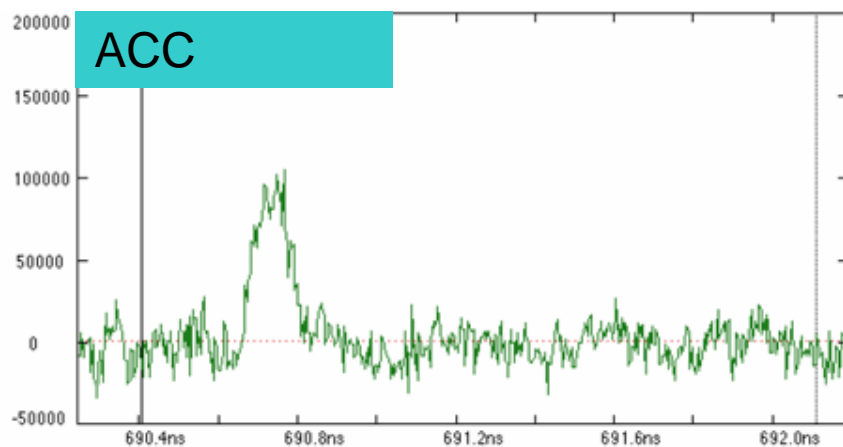
0.8-nC



# 0.6-nC mode



# 0.15-nC mode



# 0.8-nC orbit



STB

Correction Steering Orbit Window

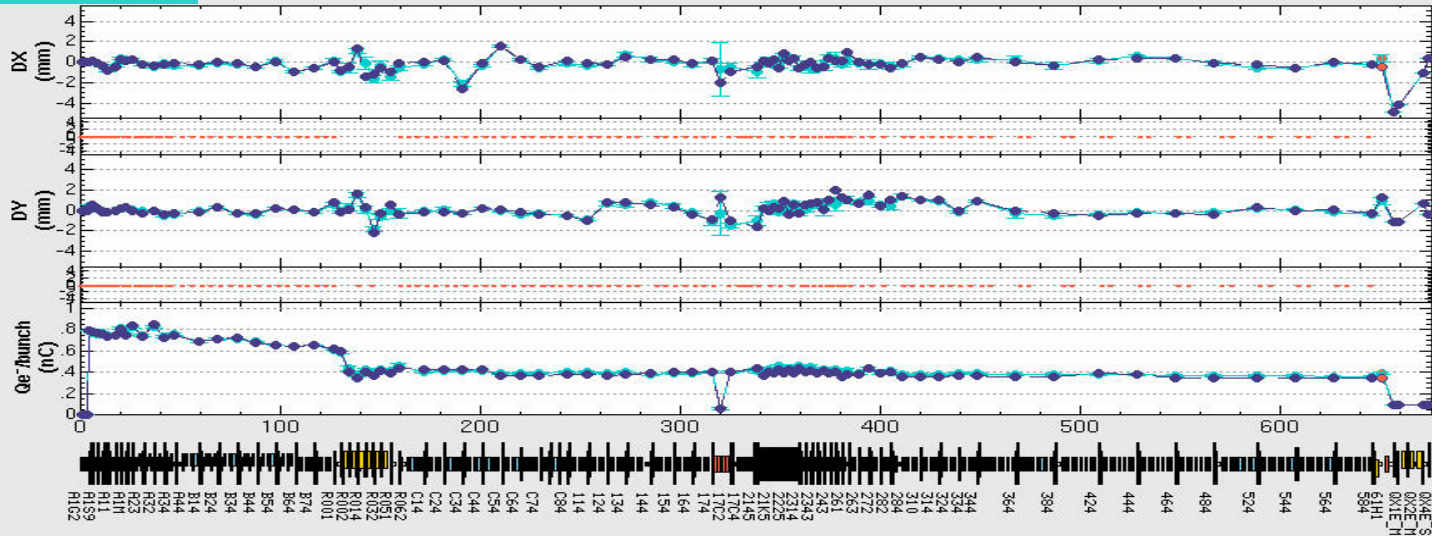
04/13/2005 18:07:44

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

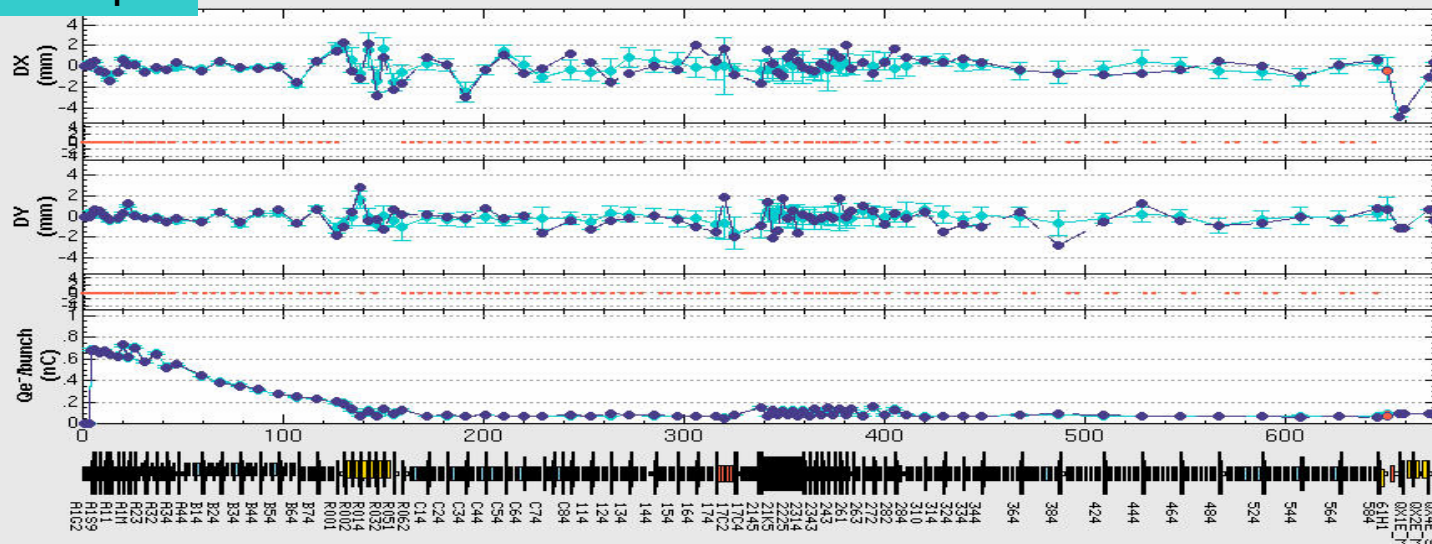
Help

STB+114  $\mu$ 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  $\mu$ 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。