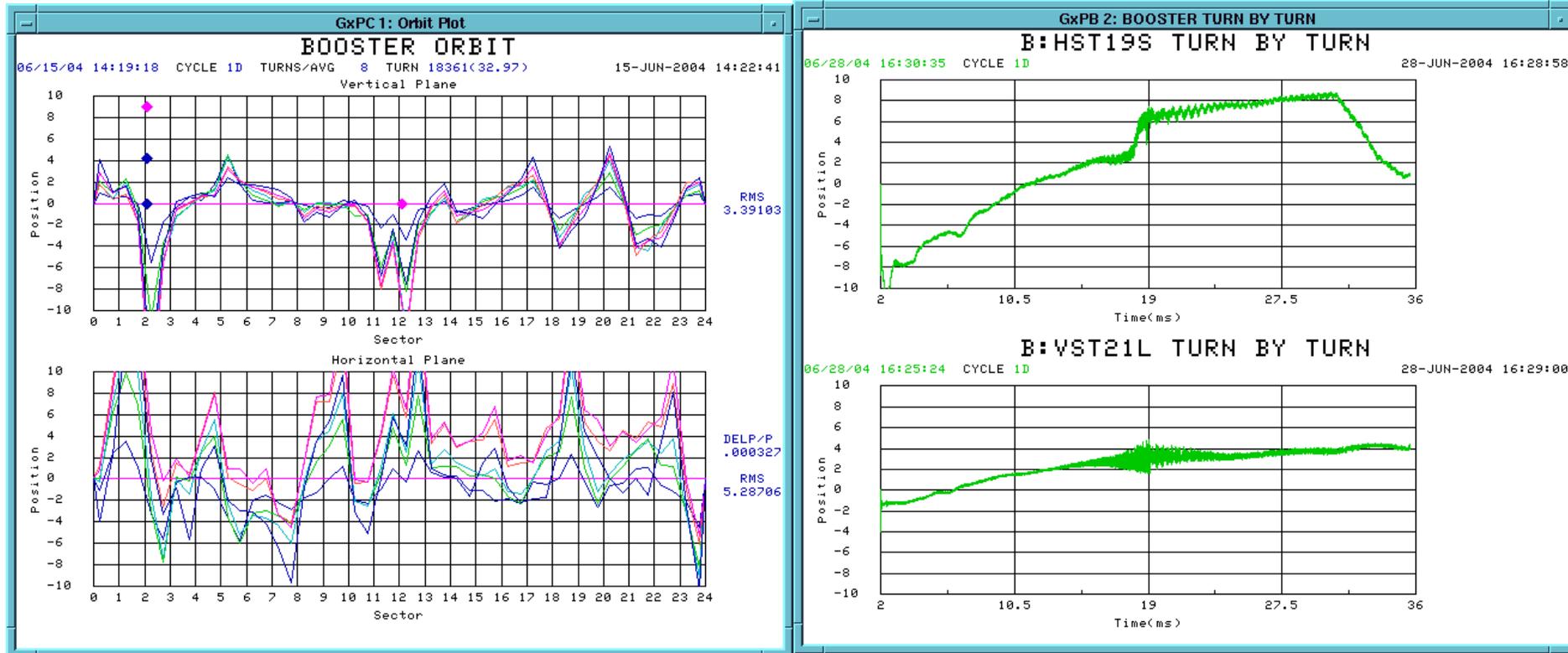


Booster Corrector System

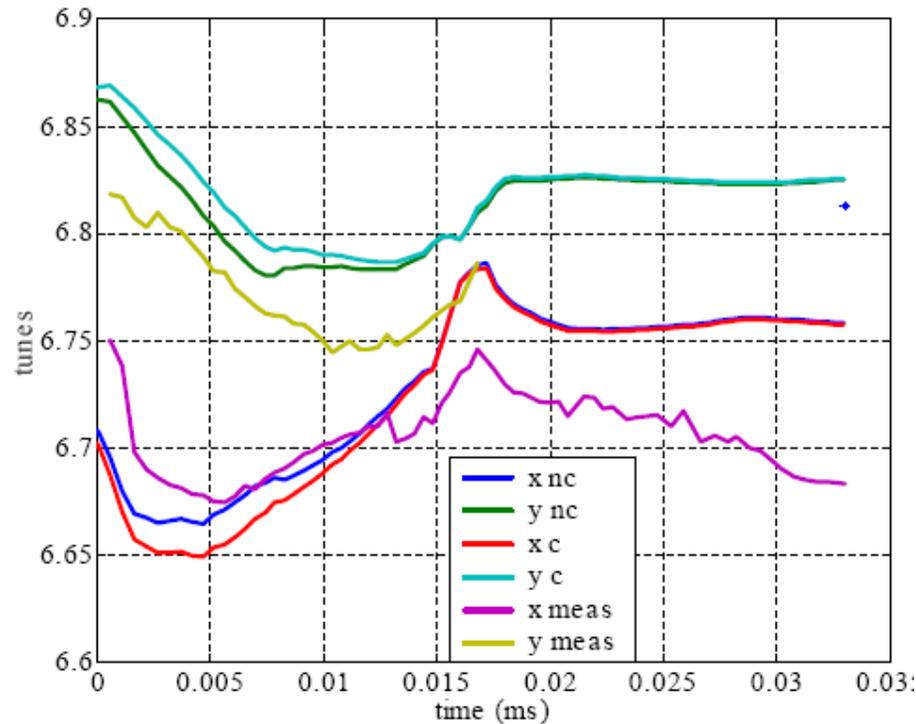
- The existing Booster corrector system is marginal:
 - Cannot control orbit adequately at high field
 - Cannot control tune at high field
- It appears that the few \$M that would be needed to build a better corrector system could reasonably appear under the "proton plan".
- We want to make sure that we specify the system that we need.

Background - Beam Motion



- Preliminary specs:
 - ± 1 cm beam motion in both planes at all energies
 - 1 mm/ms slew rate up to transition

Beam Tune



- Preliminary spec
 - ± 0.1 unit at all energies
 - 0.01 unit/ms at all energies
- Is this enough??

Magnetic Specs

Type	Max. Field	Max. Slew Rate
Horizontal Trim	.009 T-m	.5 T-m/s
Vertical Trim	.015 T-m	.8 T-m/s
Quadrupole	.08 T-m/m	8 (T-m/m)/s
Skew Quadrupole	??	??

- This is about 4 times as powerful as the existing system.
- Questions:
 - Are these specs reasonable?
 - Did I do my calculations correctly?
 - What do we want for skew quads?