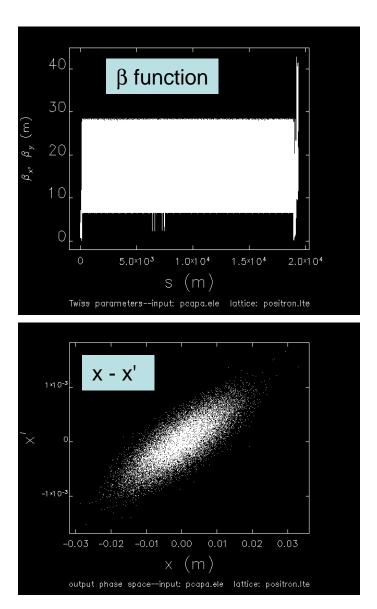
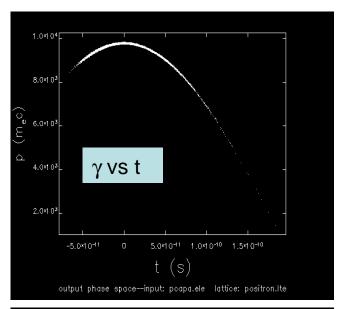
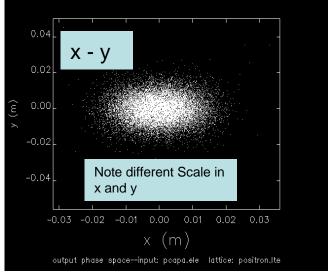
## S2E Tracking for e- and e+ source

- Preliminary beam optics was designed; but it is only single-particle dynamics.
- Need a bunch of particles to track through e- and e+ sources; ANL Borland's Elegant code is used.
- After lots of pains to convert MAD input files into Elegant, 1<sup>st</sup> cut of tracking results for e+ source are presented (initial bunch distribution with large energy spread and emittance is assumed).
- Next step is to include *quads tolerance*, *structure tolerance*, *wakes*, etc.
- Same procedures for e- source

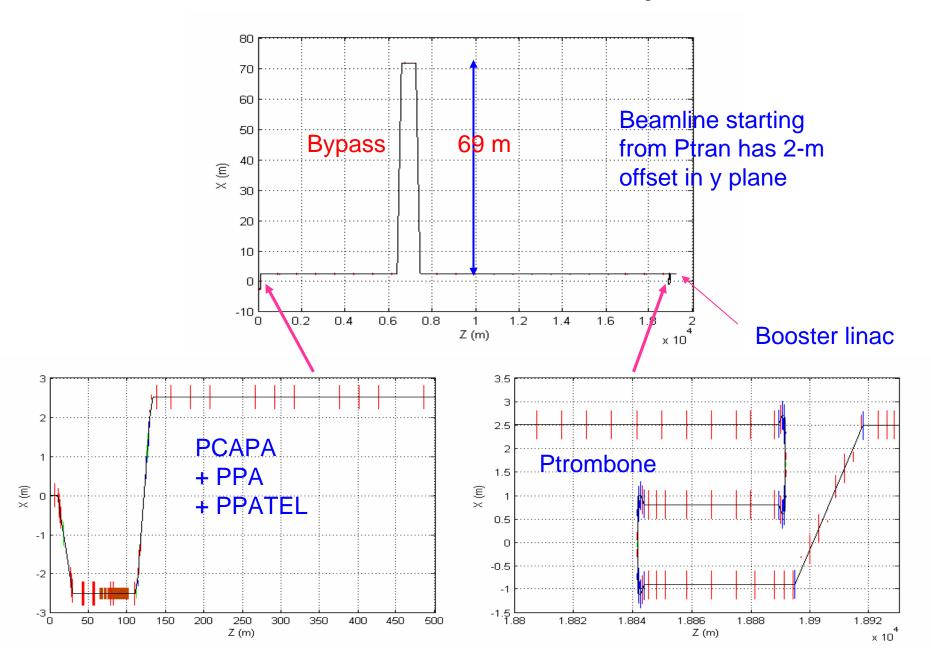
## Initial tracking through e+ source







## e+ source survey



## e- source survey

