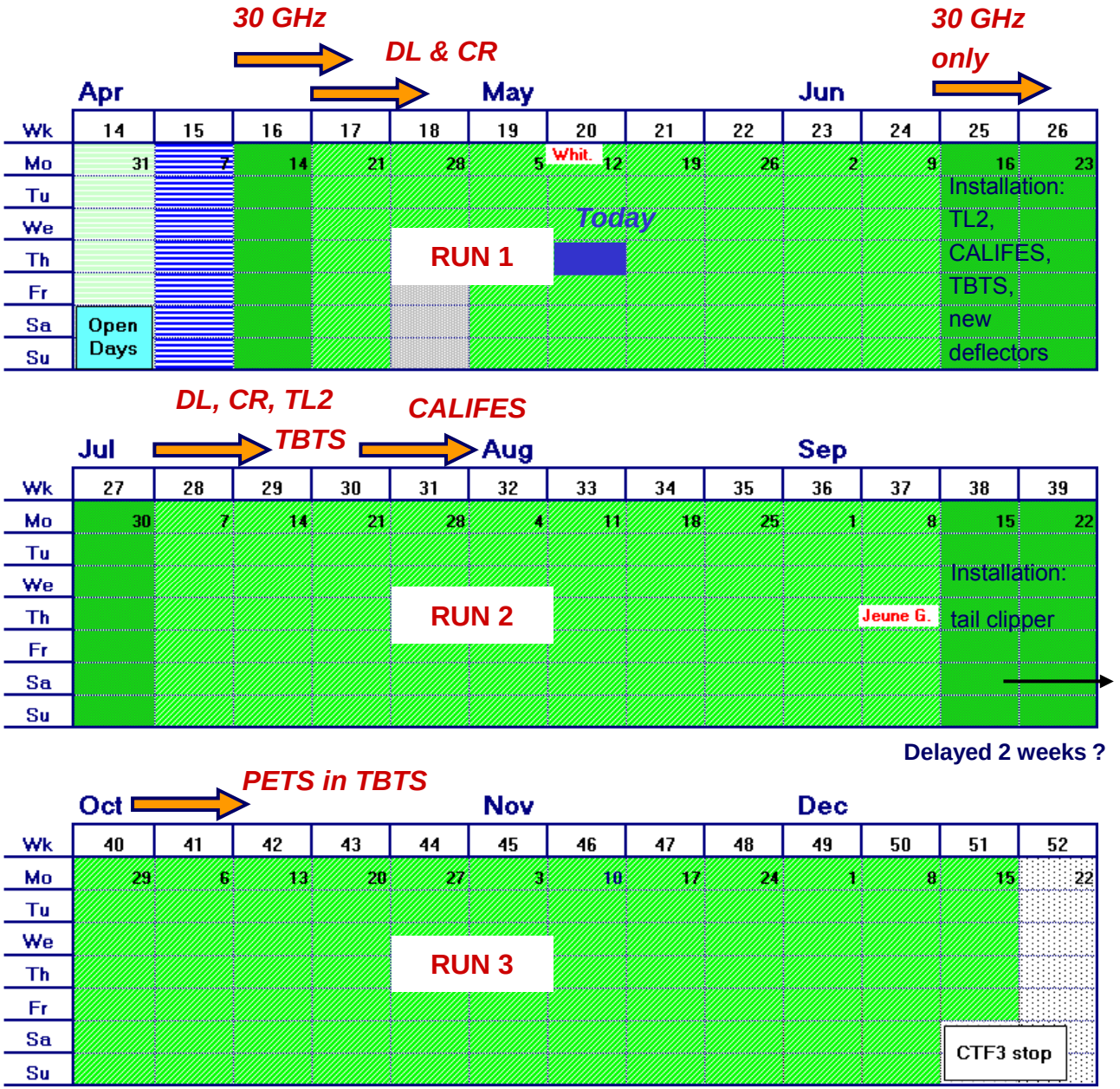
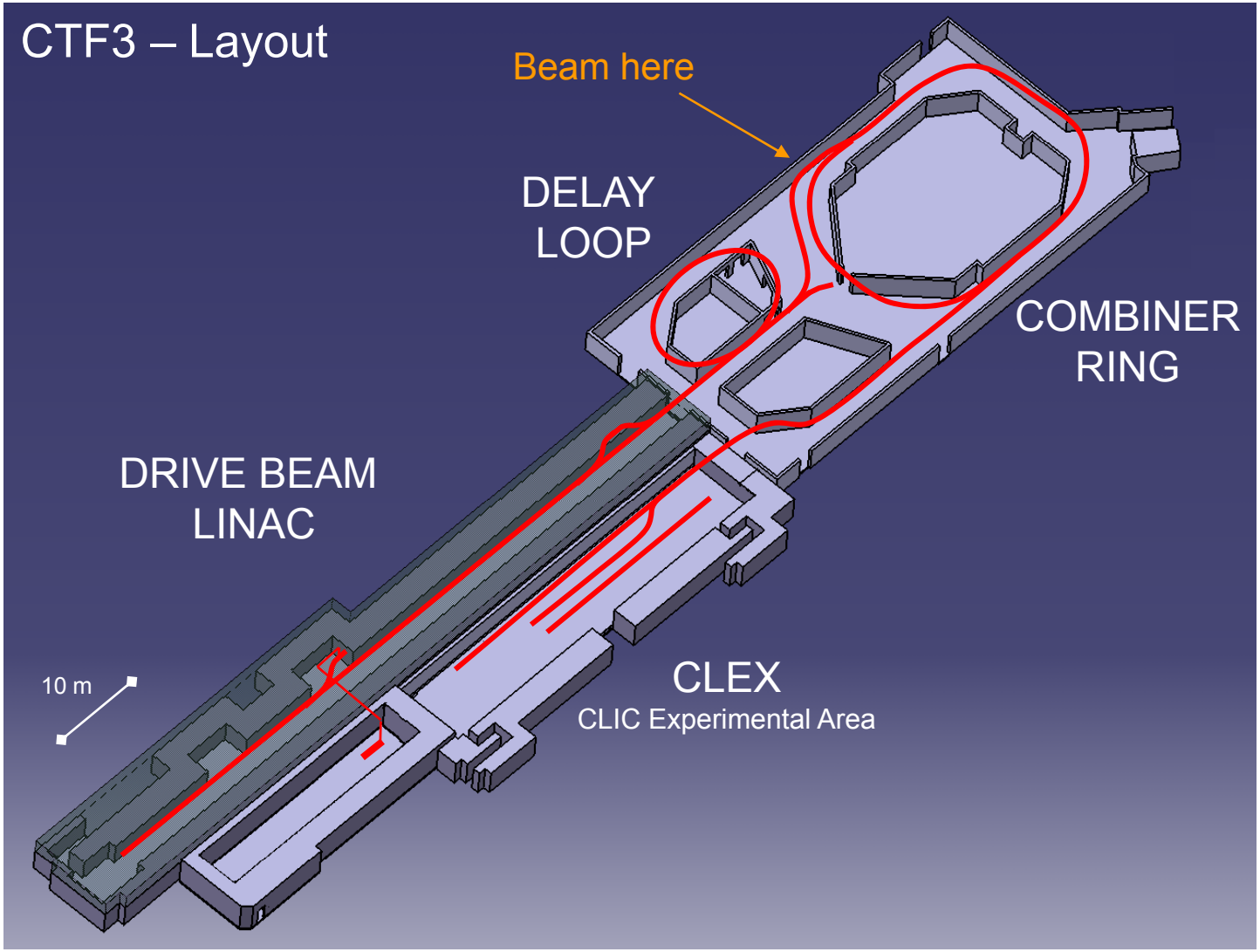
Schedule



Linac only

Linac, Ring area, (CLEX)


CTF3 – Layout
Beam here
DELAY
LOOP
COMBINER
RING
DRIVE BEAM
LINAC
10 m
CLEX
CLIC Experimental Area

Goals & milestones 2008 run

- 1st run (April - June)
  - Injector & Linac: establish stable & documented working point, automatic beam steering & steering algorithm studies, diagnostics consolidation, stability studies, EUROTeV BPMs
  - Delay Loop: complete beam optics measurements (dispersion, orbit, kick measurements, matching), re-establish combination
  - TL1 & combiner ring: complete optics studies (dispersion, closed orbit correction, matching, tunes, kick measurements, quad displacement evaluation, matching), tune and β function dependence of vertical instability, factor four combination with DL bypass ($\geq$ 10 A)
  - DL, TL1 & CR: factor 8 combination ($\geq$ 15 A)
- 2nd run (July - September)
  - Complete DL + CR, new RF deflectors (20 A ?)
  - TL2 commissioning
  - First CALIFES commissioning
  - TBTS commissioning (no PETS)
- 3rd run (September - December)
  - Complete above program
  - Coherent Diffraction Radiation tests
  - TBTS, PETS running in

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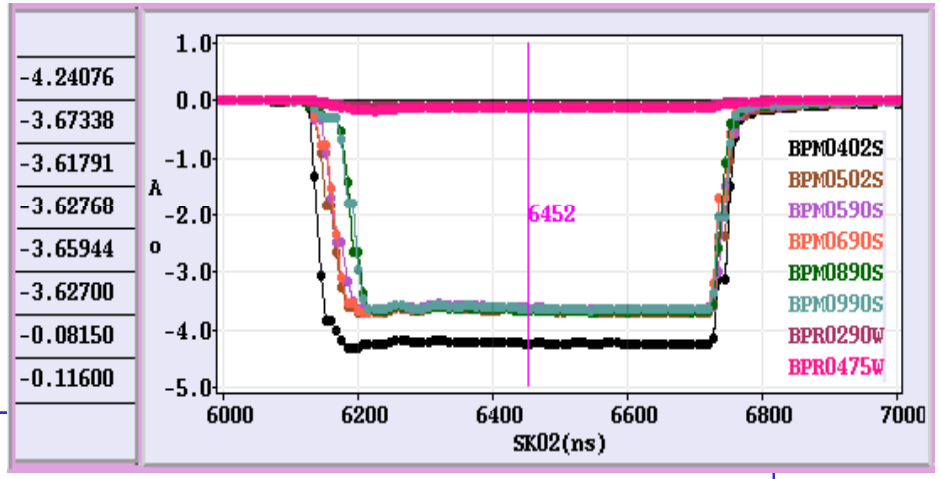
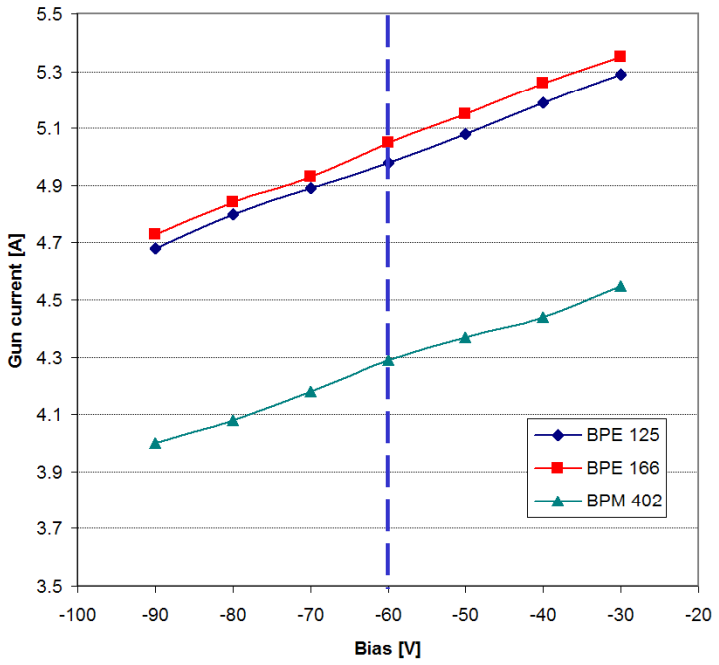
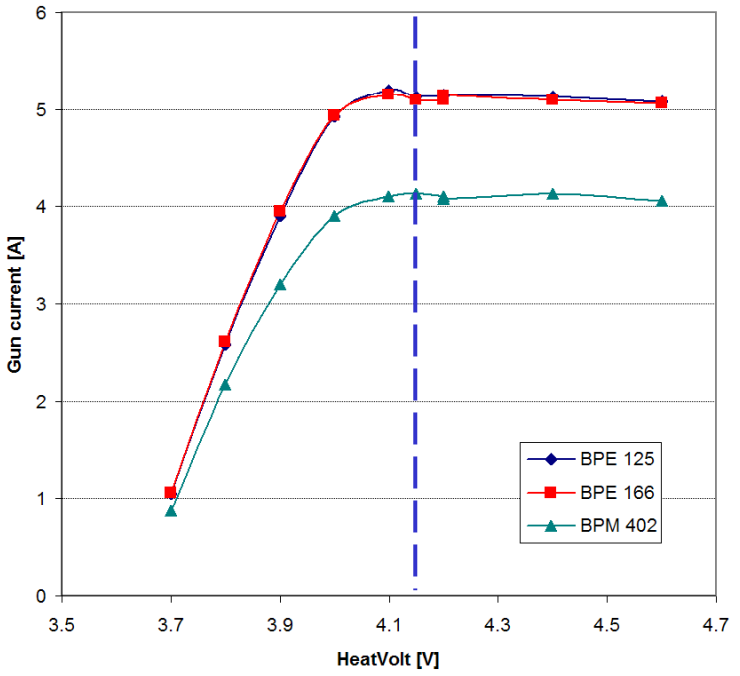
stable & documented working point

Injector & first part of linac



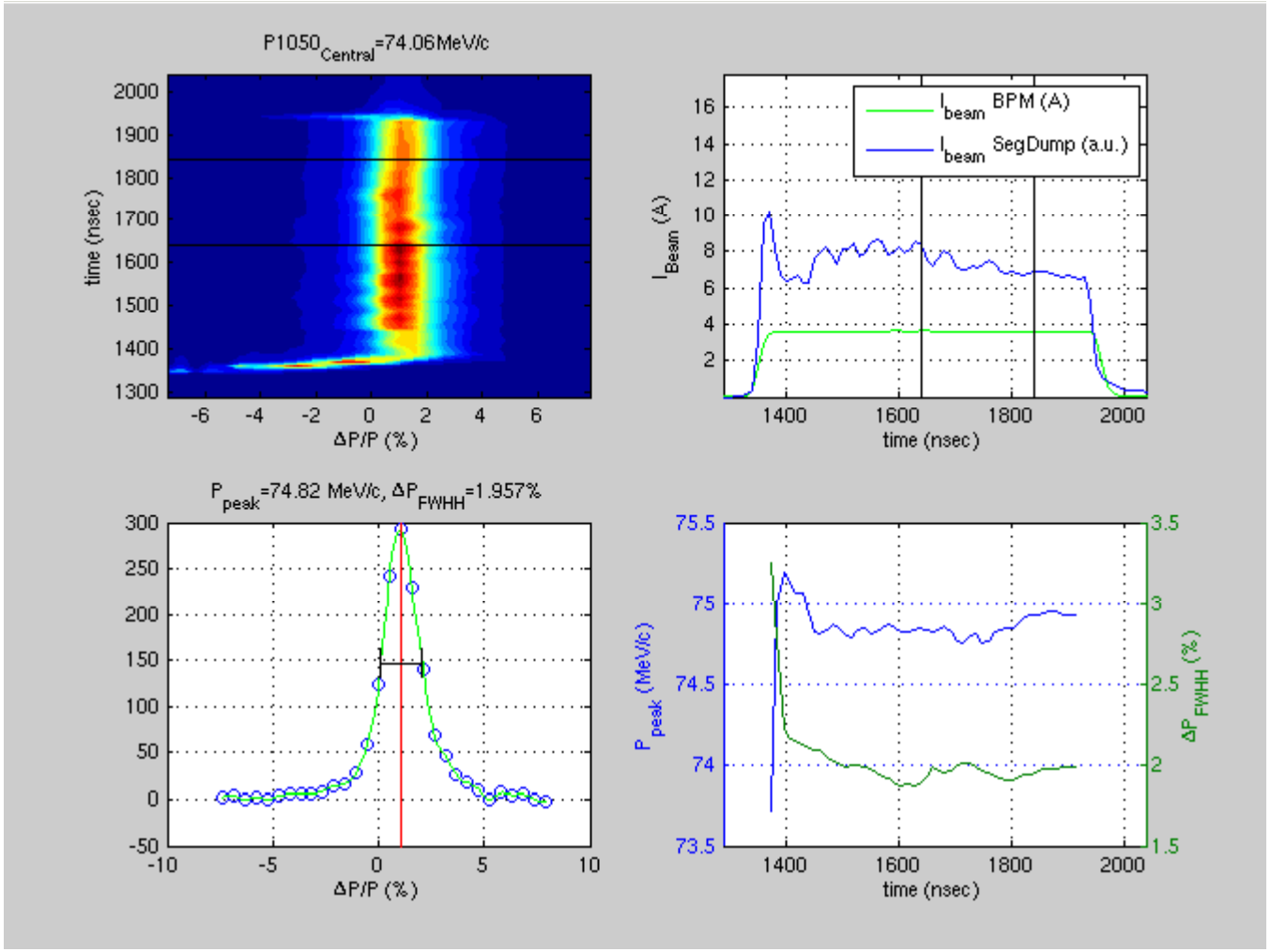
Gun working point



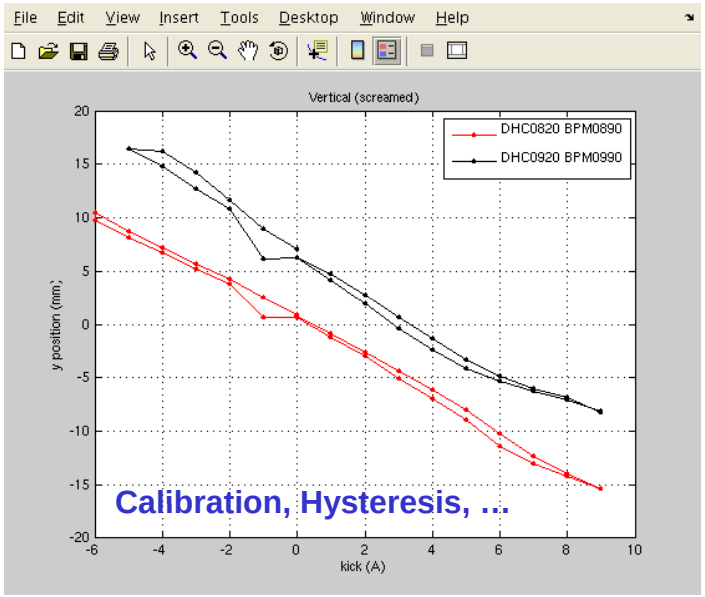


diagnostics consolidation

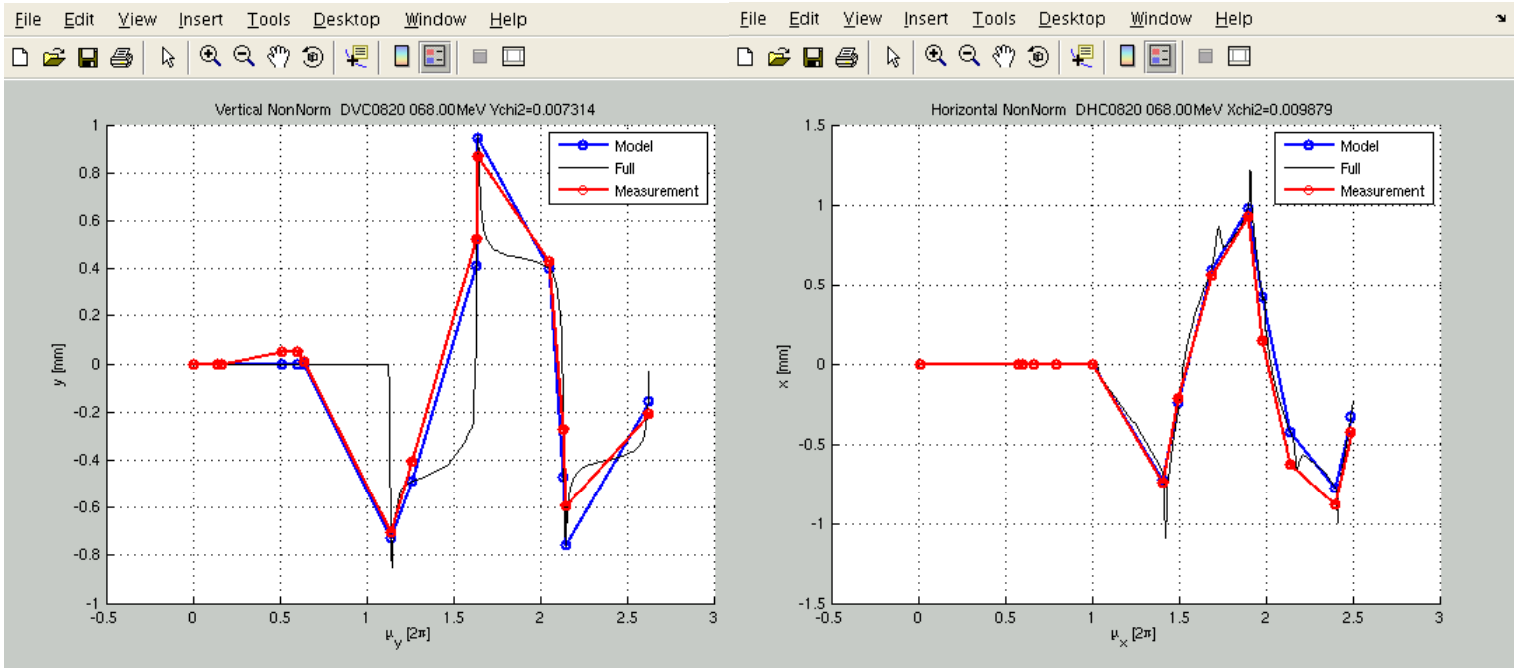
Segmented dump in Spectro 10



automatic beam steering & steering algorithm studies

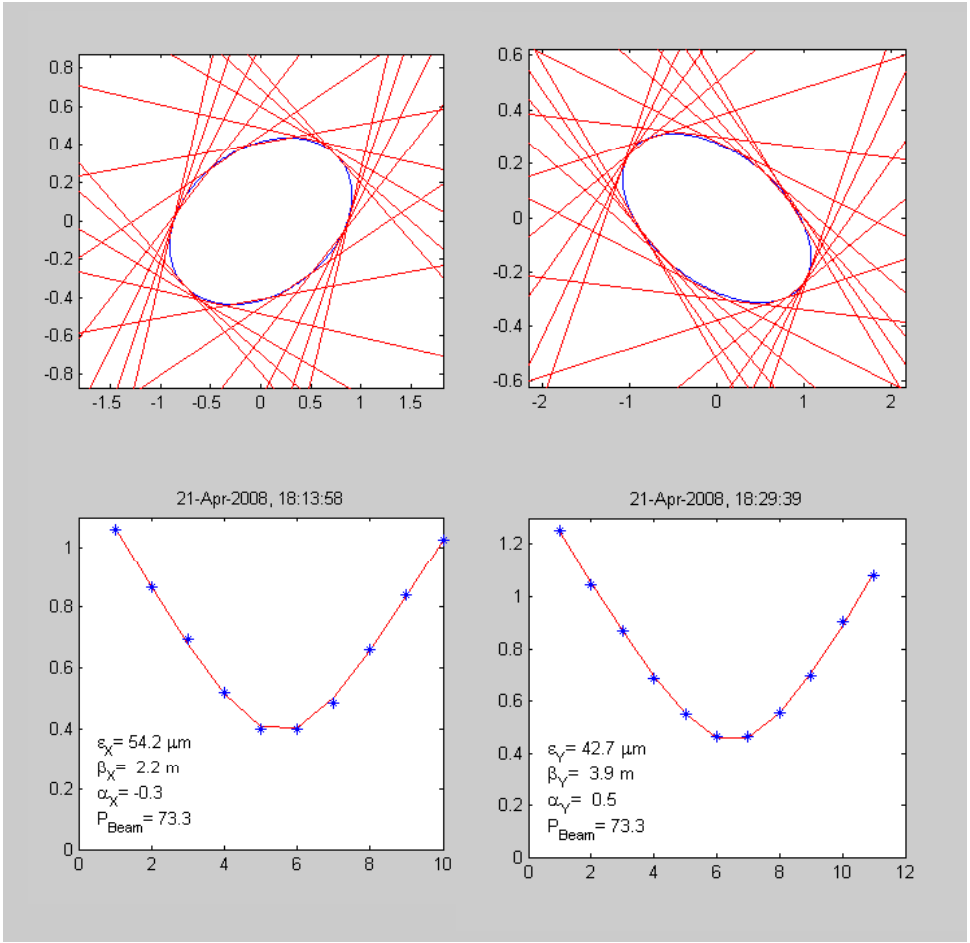


Trajectories, comparison with model



Quad scans

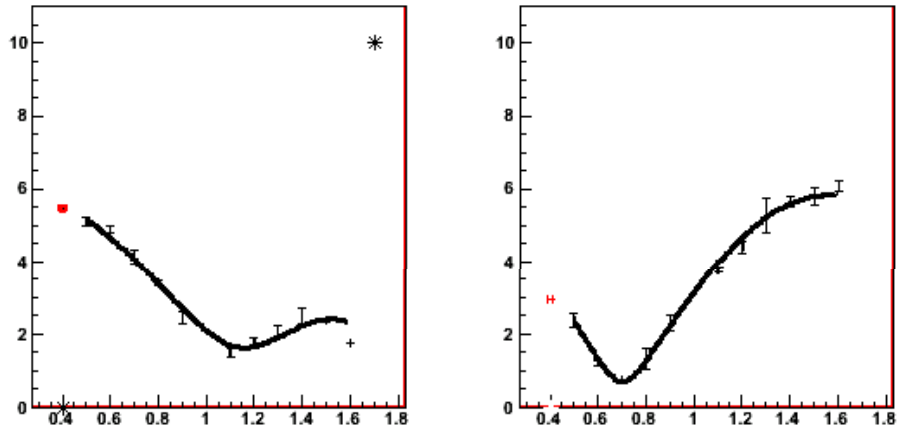
"Standard" program



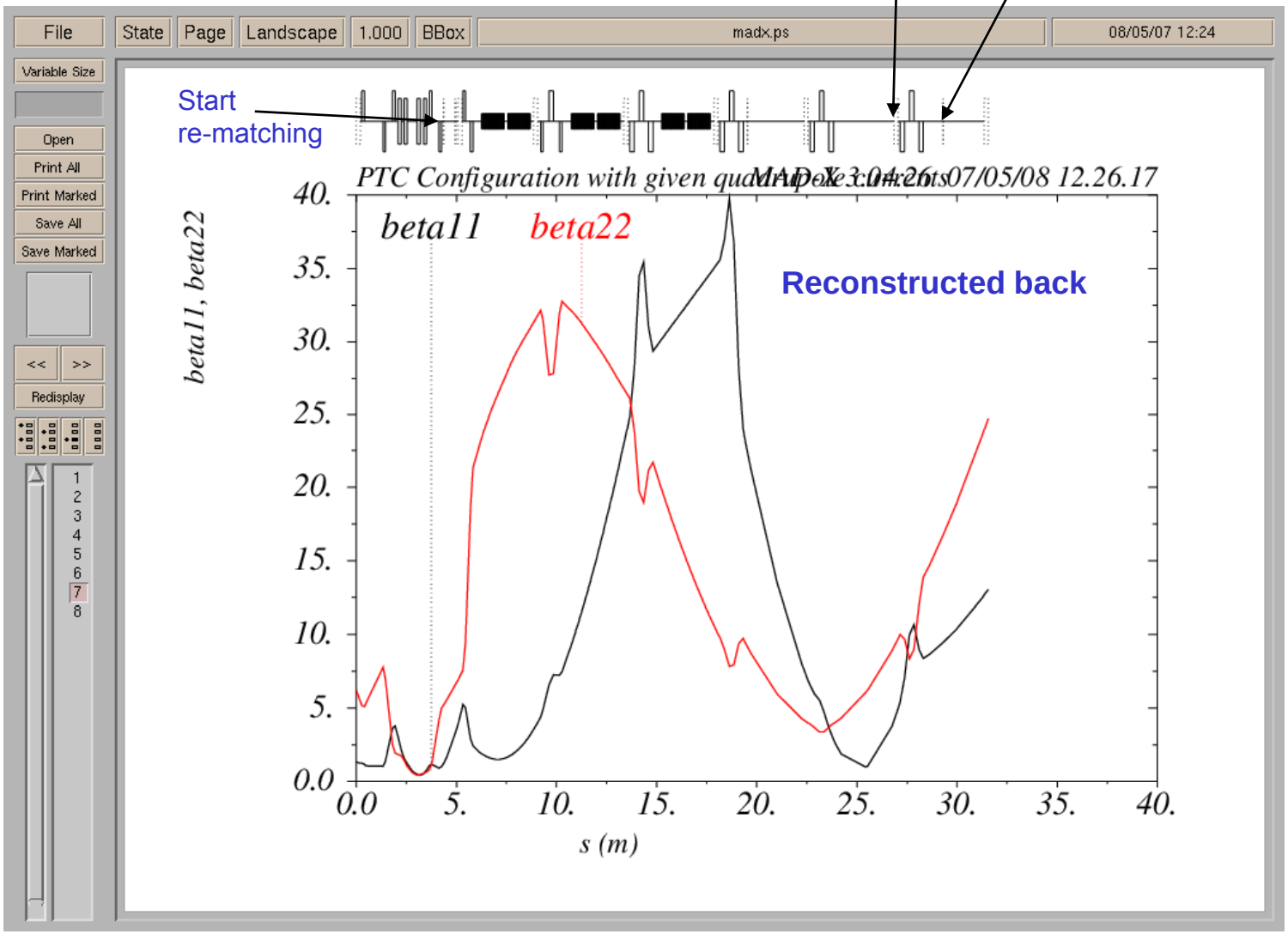
New Piotr's program

- Adapted to non-standard scans, multiple quads
- Errors
- Online rejection of data points
- Choice of fitting routines
- Integrated in the MAD model
- …

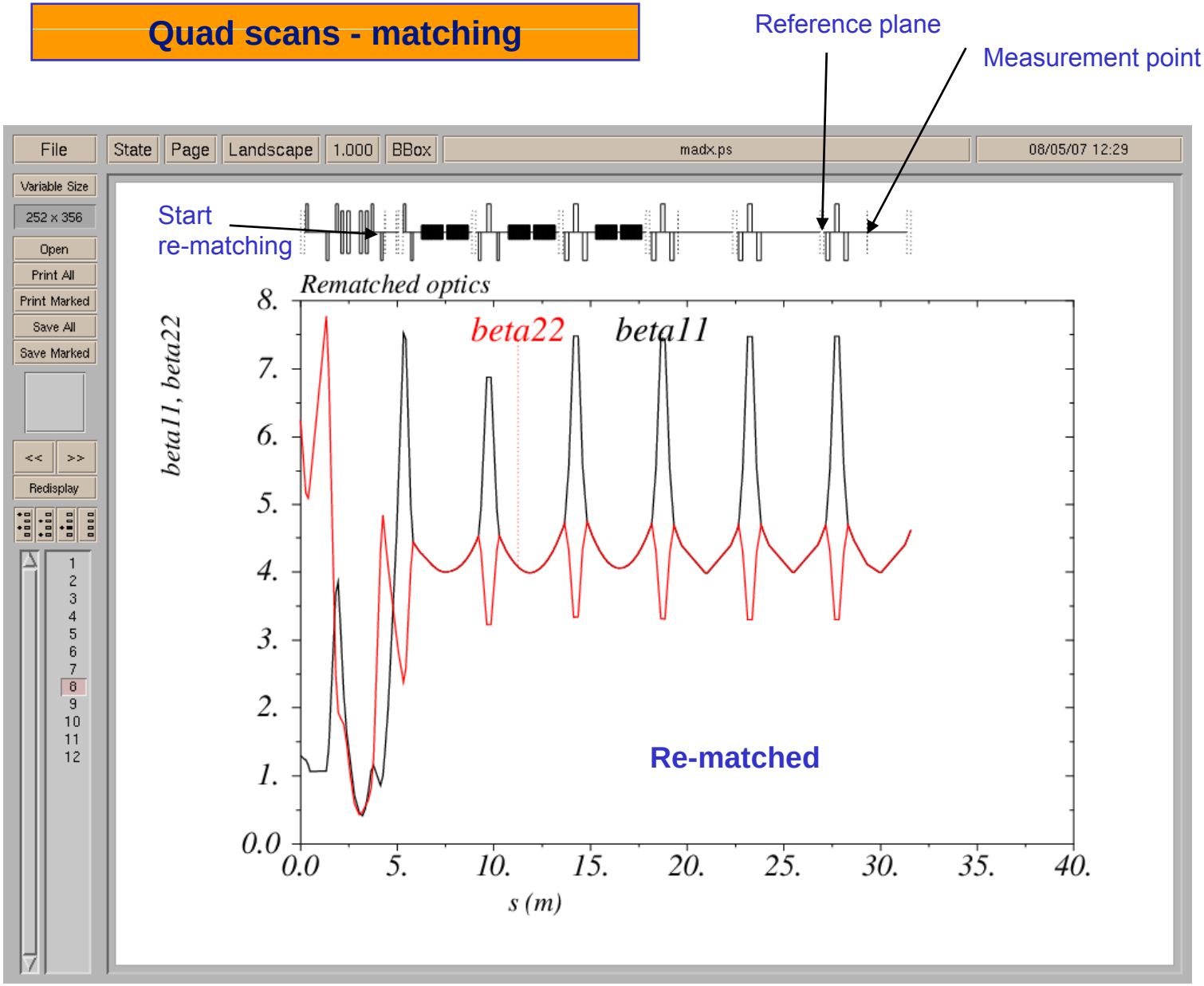
Good agreement with "standard" program



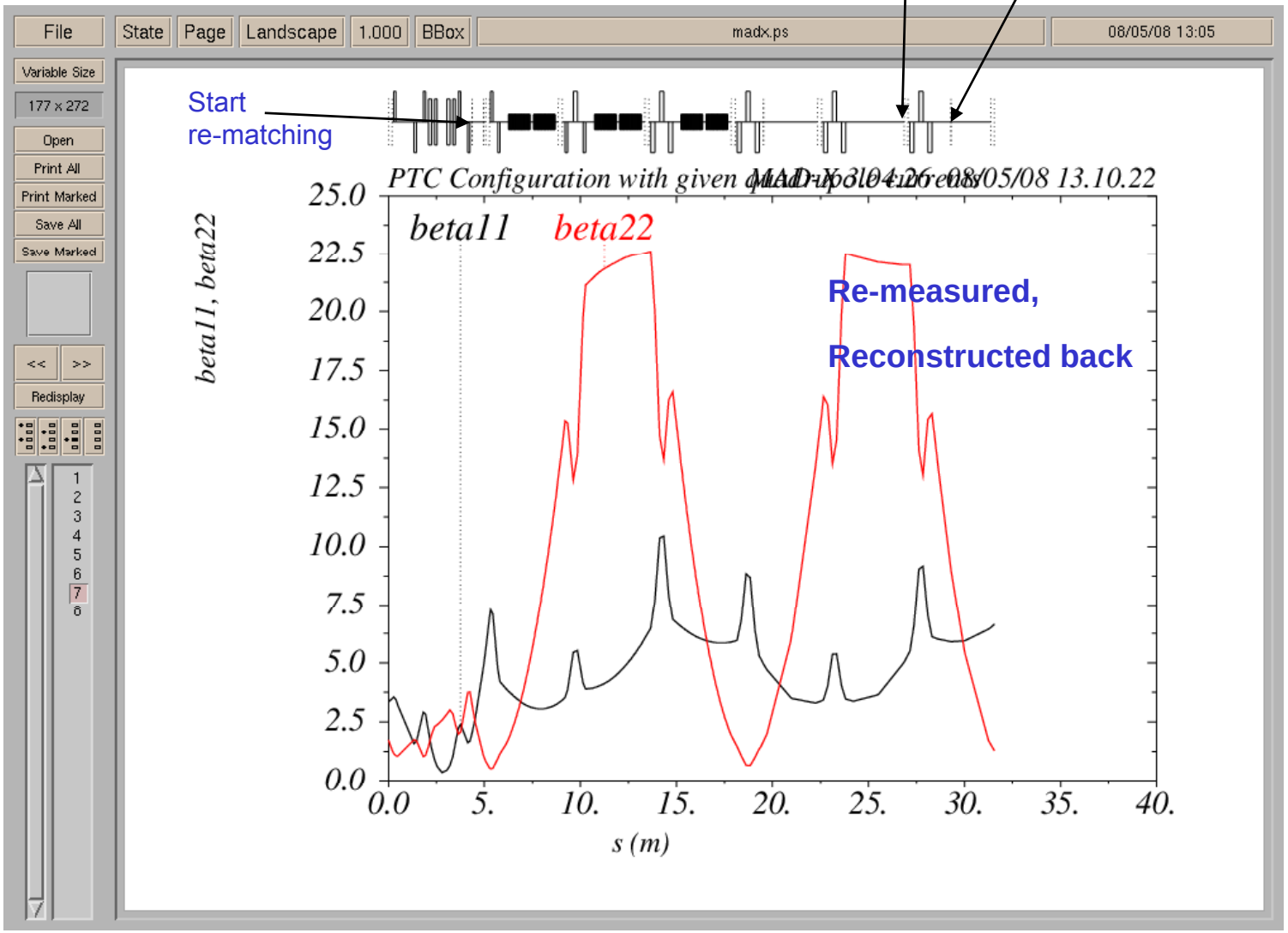
Quad scans - matching



Quad scans - matching

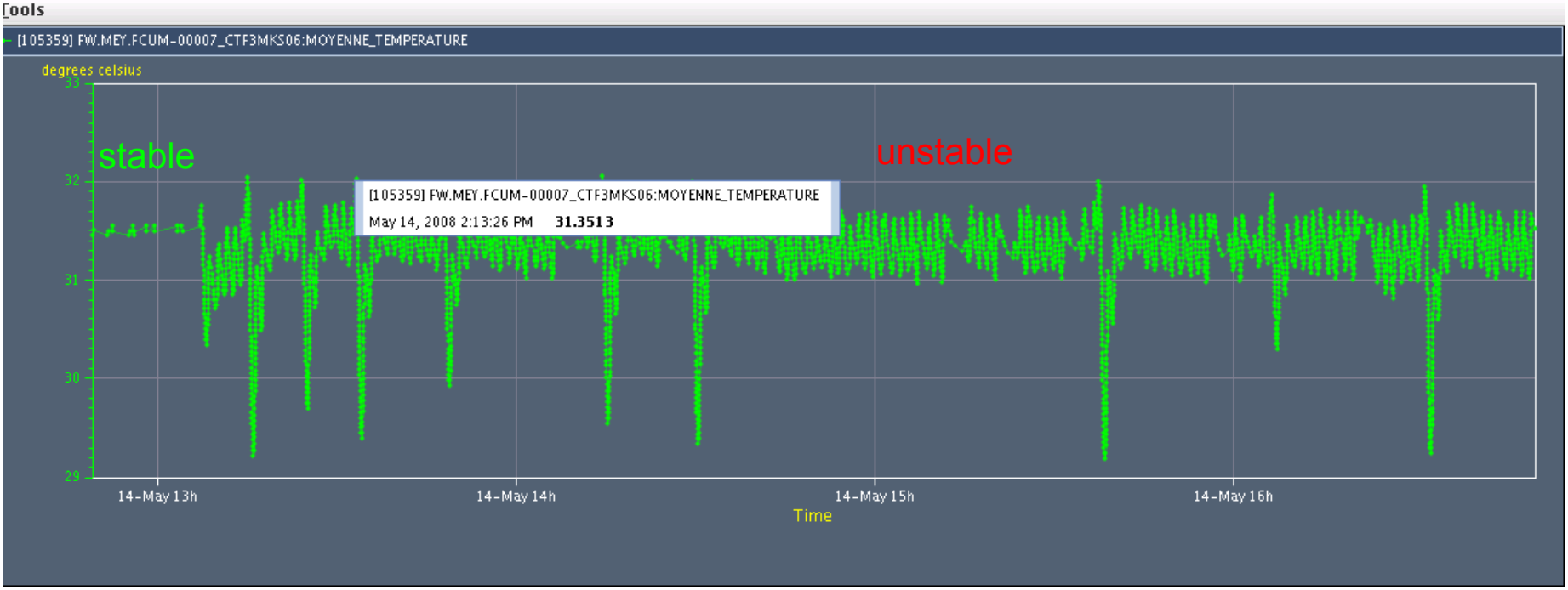


Quad scans - matching



stability studies

RF pulse compression
temperature stabilization



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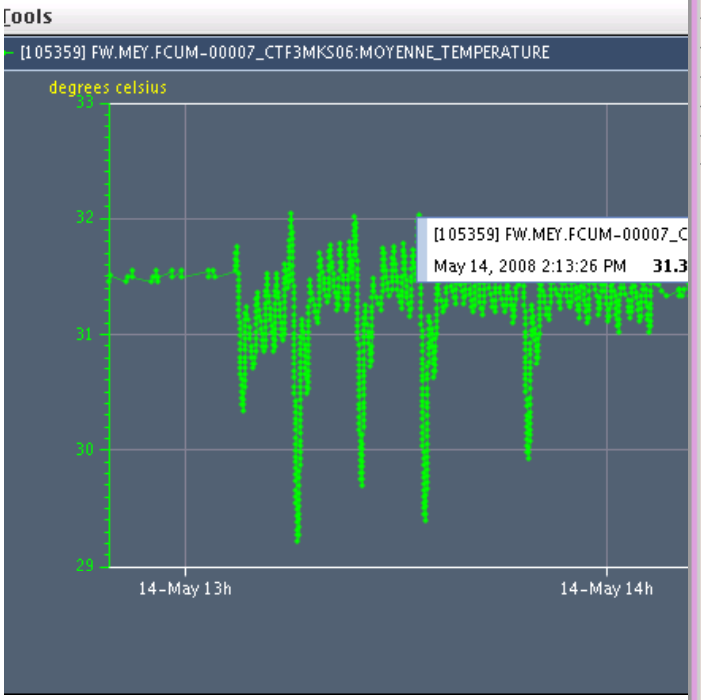
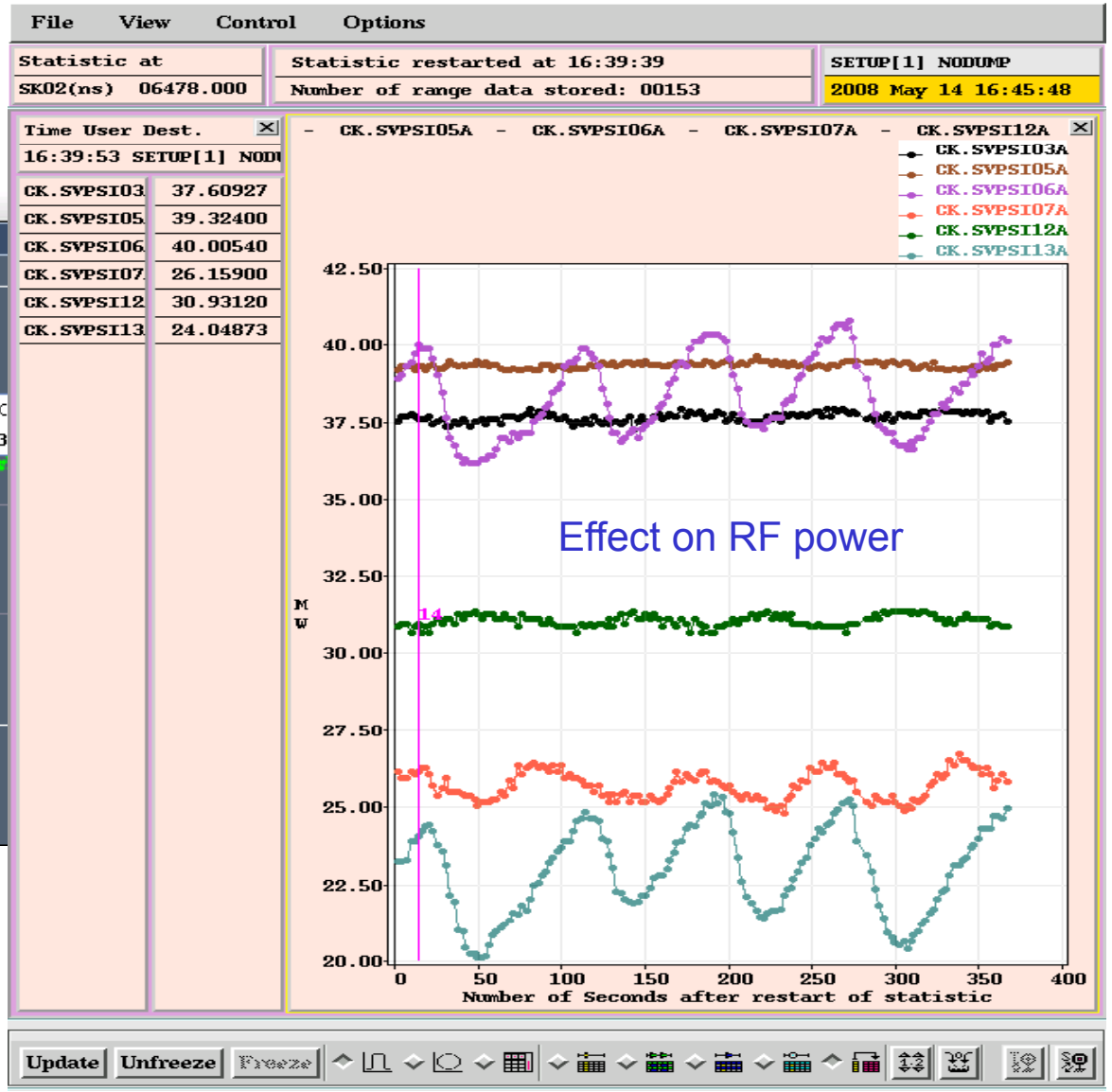
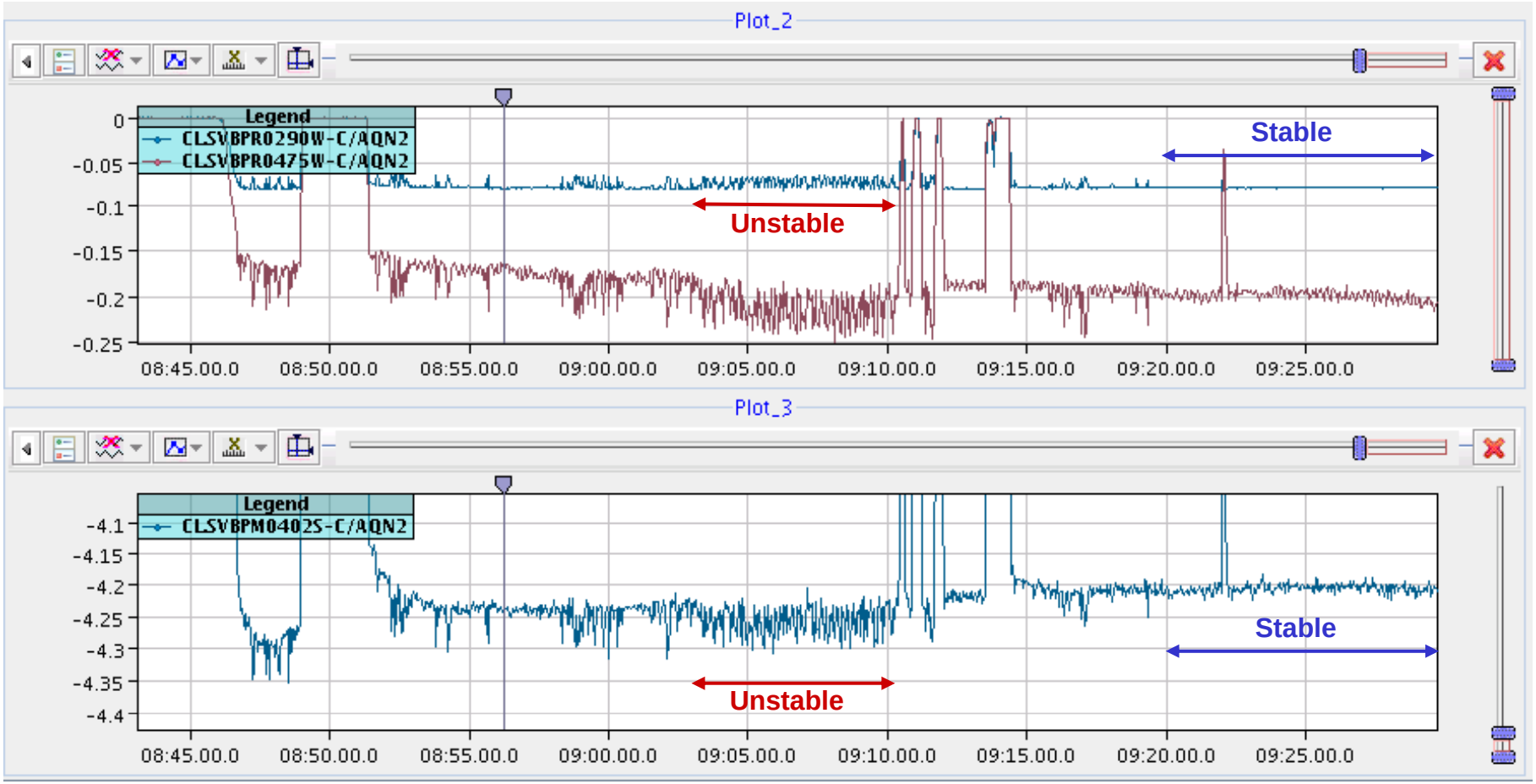




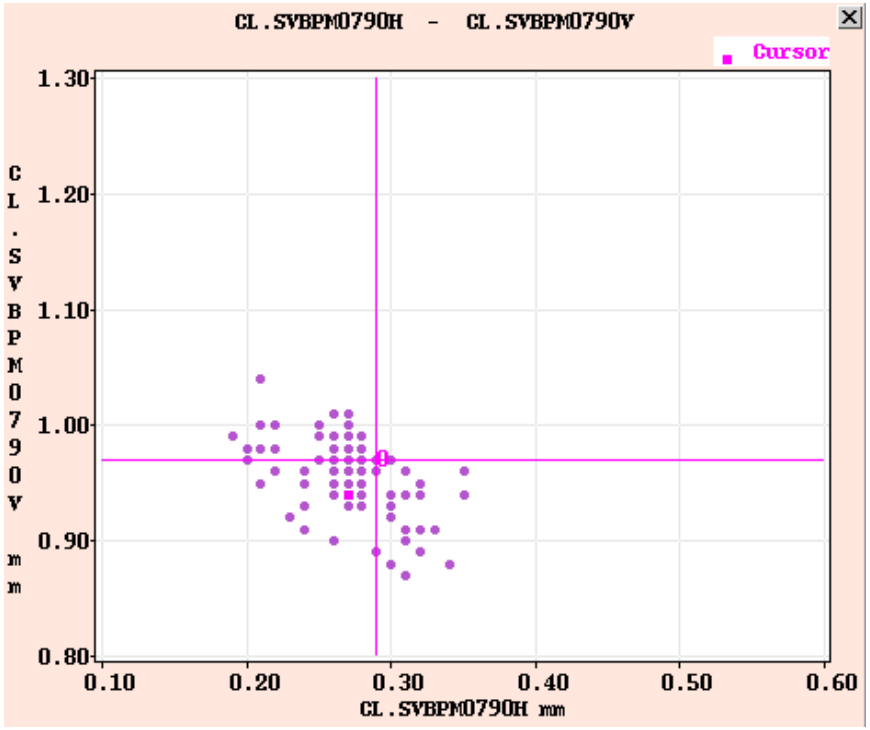
stability studies

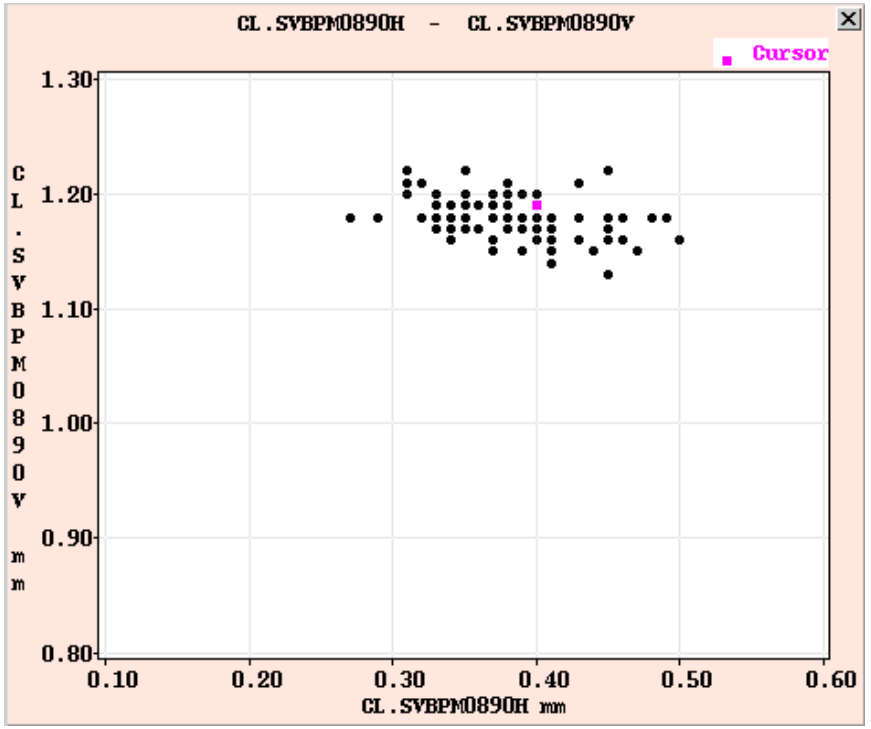
Gun HV (in)stability



stability studies

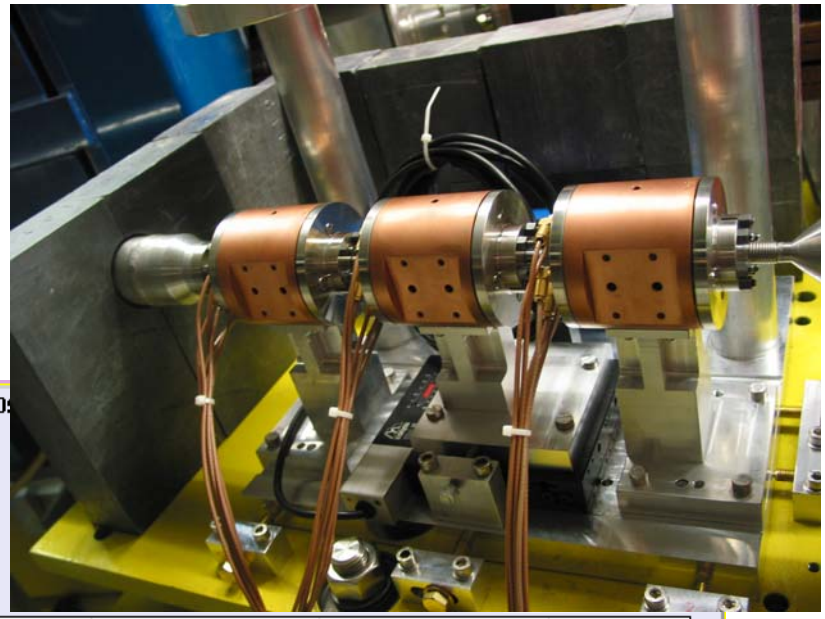
Typical beam jitter in quiet conditions



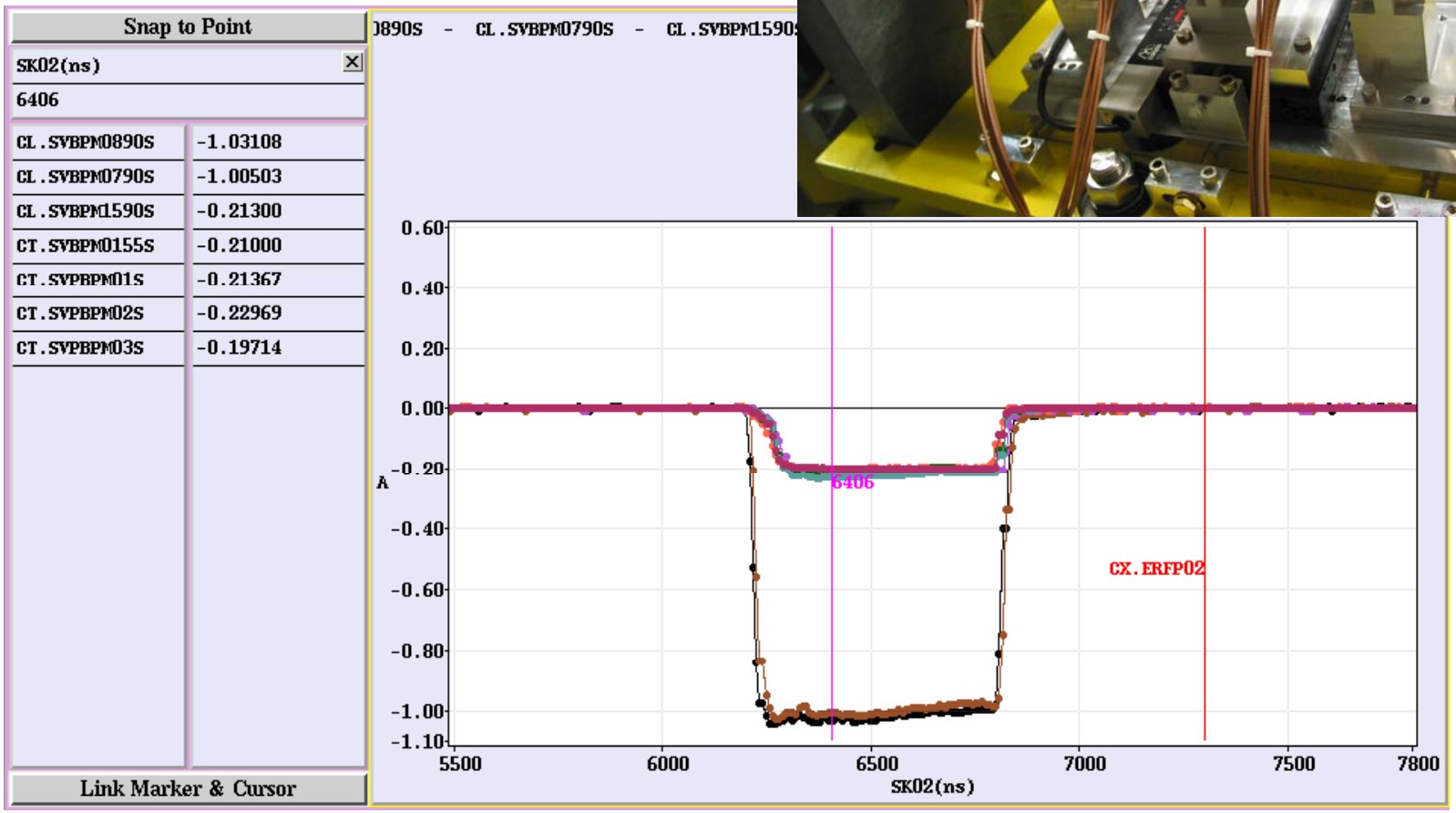


~ 100 μm

EUROTeV BPMs

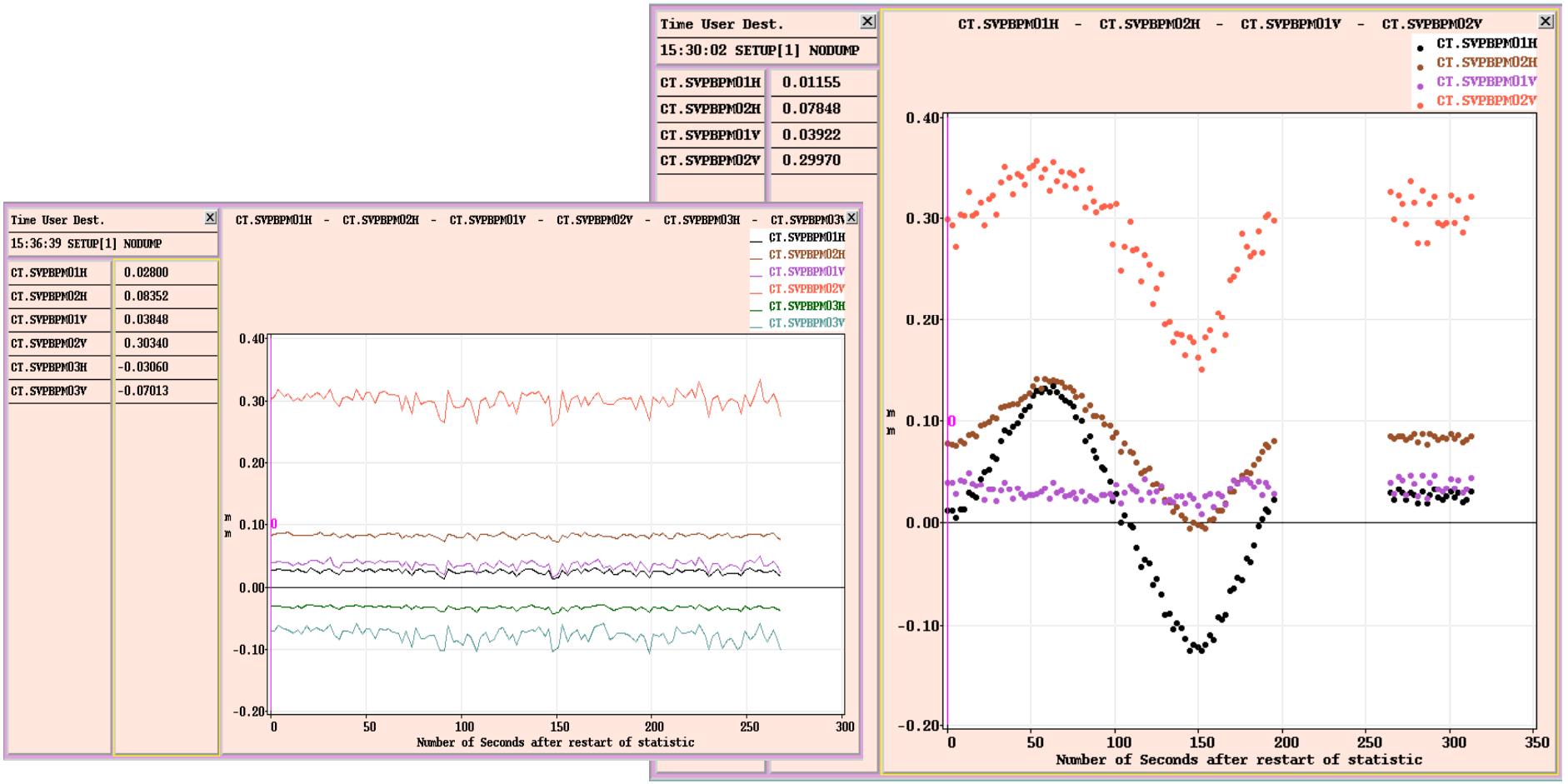


Transmission puzzle



EUROTeV BPMs

Data, other puzzles…



Beams

- Nominal 3 GHz (4 A) — for DL, CR commissioning
- Nominal 1.5 GHz (4 A) — for DL, CR commissioning
- 1 A short pulse — EuroteV BPM
- Nominal 3 GHz variable length — bypass DL/CR, commiss. TL2, TBTS (no PETS), TBL
- CALIFES beams

- $\Rightarrow$ ultimate beams in CLEX

Organization

- Two turns / day (8:00-14:00, 14:00-20:00)
- Daily meeting at 14:00
- One machine responsible per turn (RC, SD, FT, PS) + one “co-pilot” (SB, AD, HS, OM, EA…)
- Plus collaborators + RT, MM

Tentative Schedule – First run