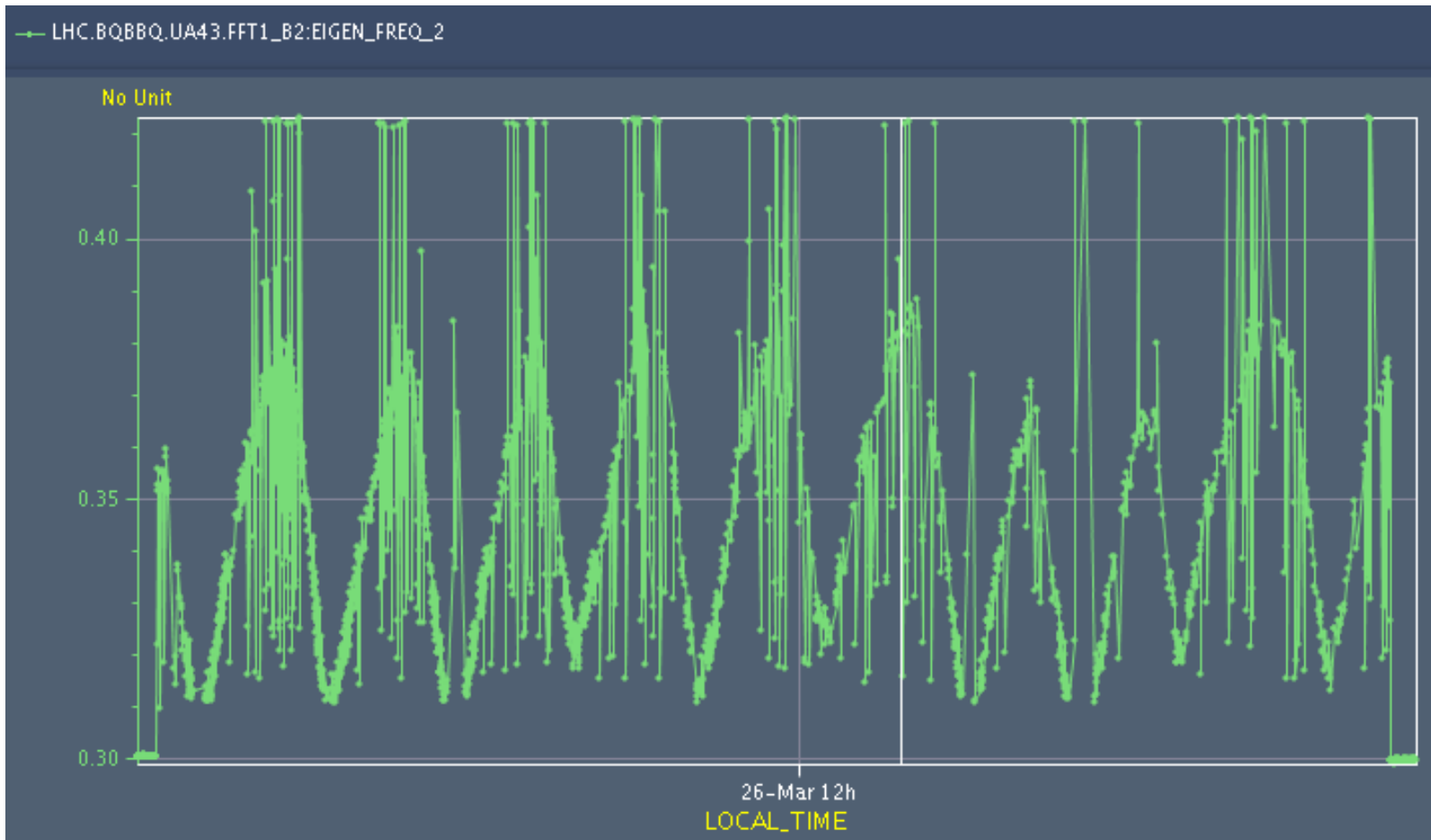


- Friday:

- Morning:
 - 48 collimators set up
 - Beam dumped by ATLAS during IR1 TCT adjustment around noon
- Afternoon:
 - continue with collimator setup; TCTs with collapsed separation almost done
 - Beam dumped by ATLAS during IR1 TCT adjustment late evening
 - finished repair-tests of ALICE compensator PC
- Night:
 - Trying to setup high intensity for 450 GeV collisions
 - stopped by vacuum leak in TI2

- Hump frequency @ 3.5 TeV – periodicity of ~ 7 minutes

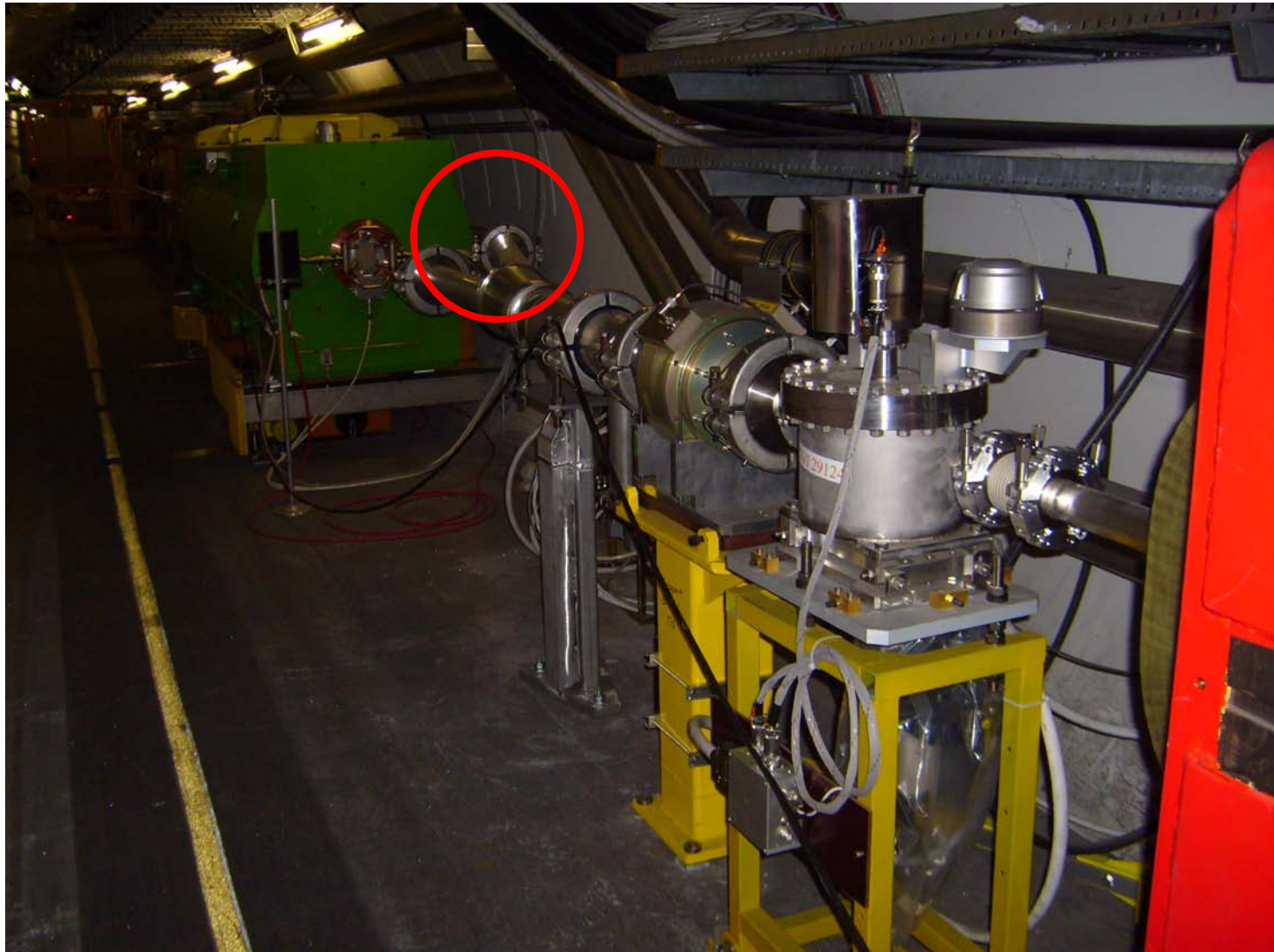


- **Saturday:**

- Vacuum leak near TED in TI2 could be fixed with varnish
- TED will not be moved before final replacement of bellow
- Temporary measures for access via SPS extraction interlock

- Essentially whole day without beam; long list of small problems:
 - Vacuum leak near TED in TI2
 - Quench heater for RB in S12
 - Water cooling for energy extraction resistors in IR3
 - Temperature sensor on current lead RSD1.34B1
 - Loss of cryo OK for RQT13.R5B2 in S56 (fuse to be changed)
 - Problems with temperature readings for 120 A circuit next to Q7 in S81
 - ATLAS patrol box
 - Kicker fault for MKD Beams

- TED bellow in TI2



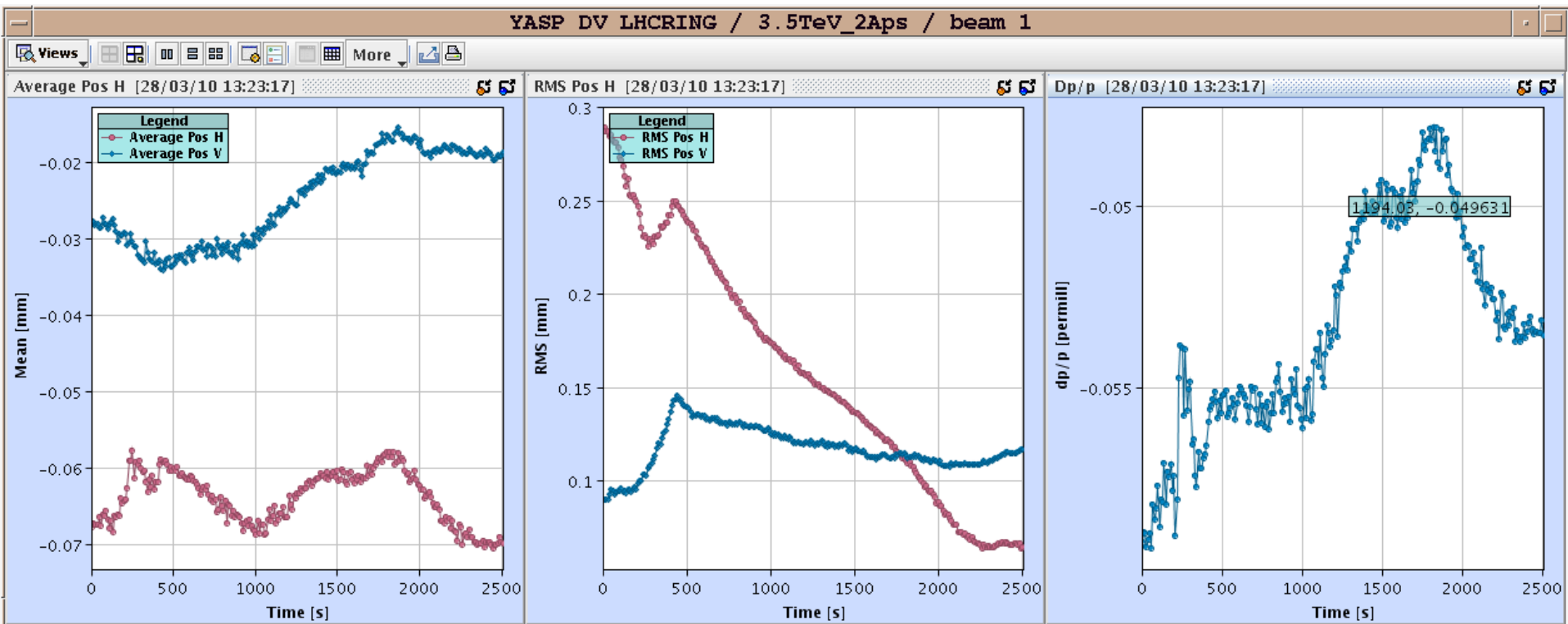
- 10:00 Intervention for LBDS kicker finished; start pre-cycle
- 11:30: Beams back in the machine
 - inject 2 bunches per beam
- 12:30: Ramp to 3.5 TeV
 - inject 2 bunches per beam
 - Collimator and TCDQ setup
- 16:30: Collimator and TCDQ setup finished
 - testing tune adjustment for collision tunes via trim application
- 17:00: ‘End of fill’ tests
 - Both beams on horizontal and vertical $1/3^{\text{rd}}$ resonance
 - RF off for remaining beam to simulate asynchronous beam dump
- 22:00: Continue ‘End of fill’ tests with new beams
 - test of the ‘stable beams’ flag at 3.5 TeV
 - RF off for remaining beam to simulate asynchronous beam dump

- 22:30 Trip of RQX.R2
- 23:00 Test of SAFE STABLE BEAMS flag @ 450 GeV
- 23:40: Beams back in the machine
 - Chromaticity all over the place.
 - The Chromaticity knobs are clearly inverted between H and V planes (at least for beam2).
- 1:30: Ready to ramp to 3.5 TeV... again trip of RQX.R2
 - Quench signal far from threshold. Does not seem to come from QPS. Not understood...
- 6:00: Beam back at 3.5 TeV.
 - TCDQs still at injection settings → move them by hand to dump protection settings
 - BPMs in IR6 were not masked and beam was dumped immediately → beam not yet de-bunched & test needs to be redone

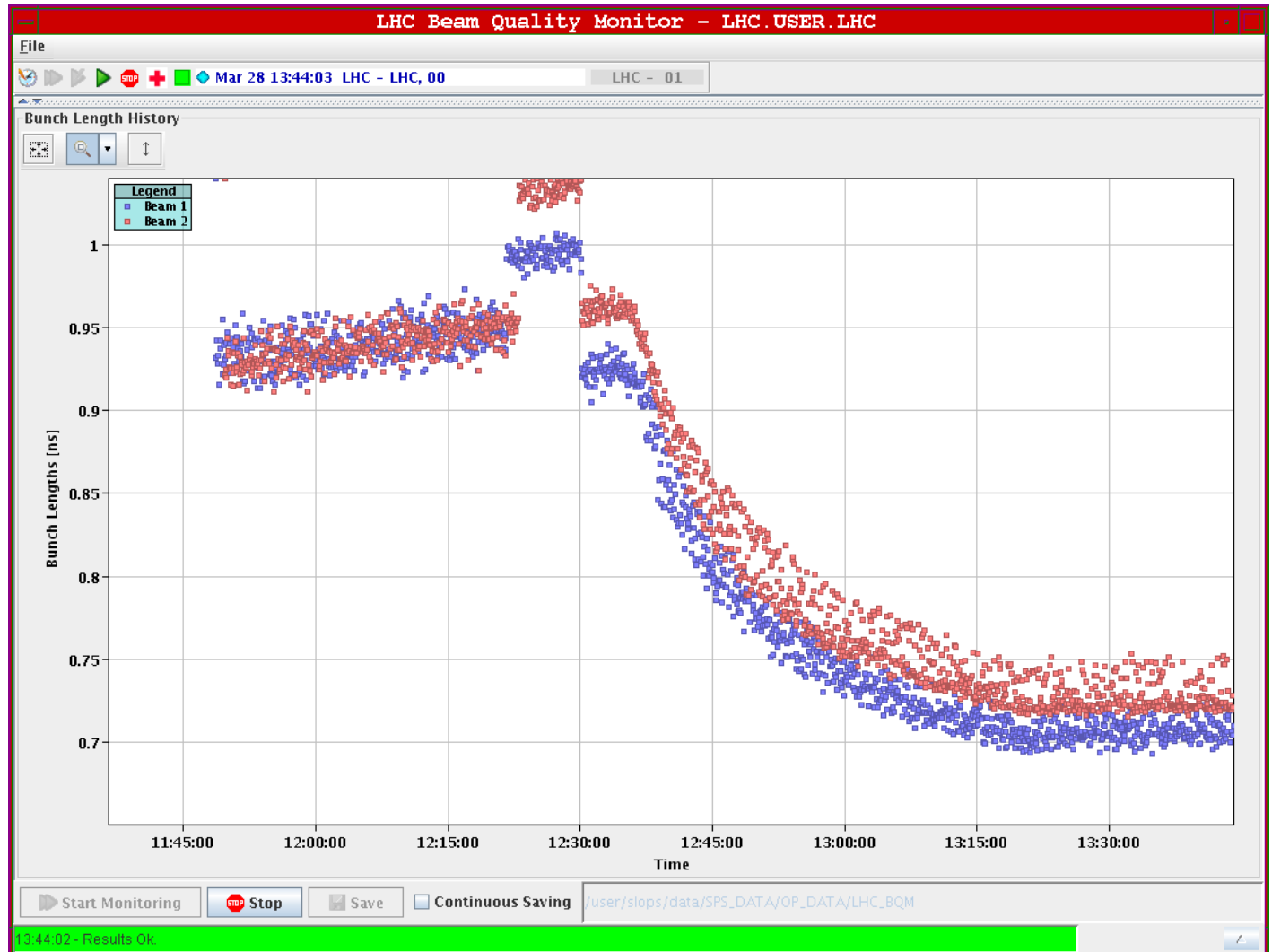
- Program for today:

- Ramp to 3.5 TeV with 'non-colliding' bunch pattern
- Continue 'End of fill' tests:
 - simulation of asynchronous beam dump
 - Energy off set to verify containment of off-momentum losses in IR3
- Test IR steering at 3.5 TeV with 'stable beam' flag off
- Test IR steering at 3.5 TeV with 'stable beam' flag on
- Long fill with 'stable beam' flag
- Prepare fill with 'colliding' bunch pattern at end of the day

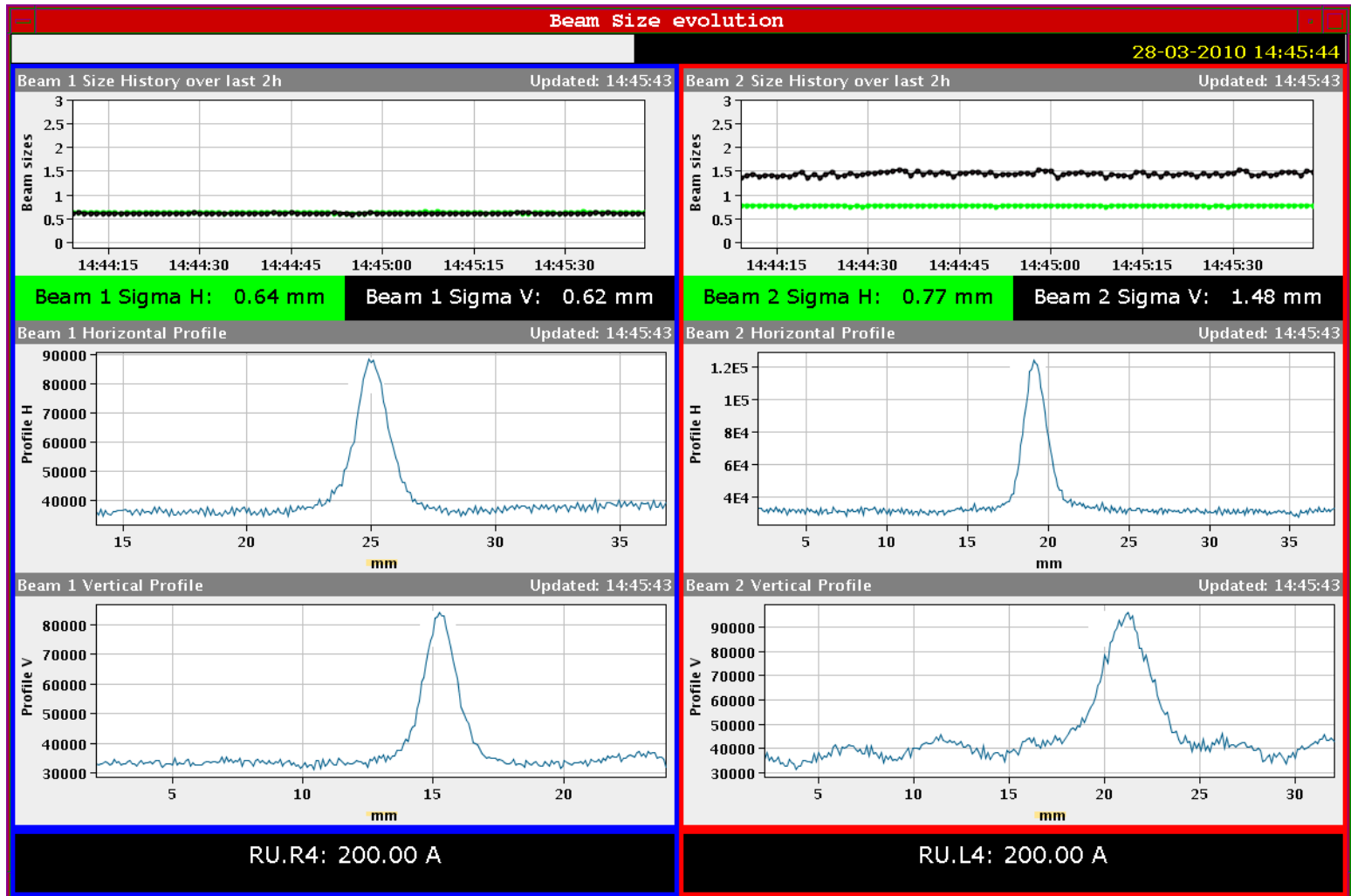
- Orbit history from 3.5 TeV ramp Sunday noon:



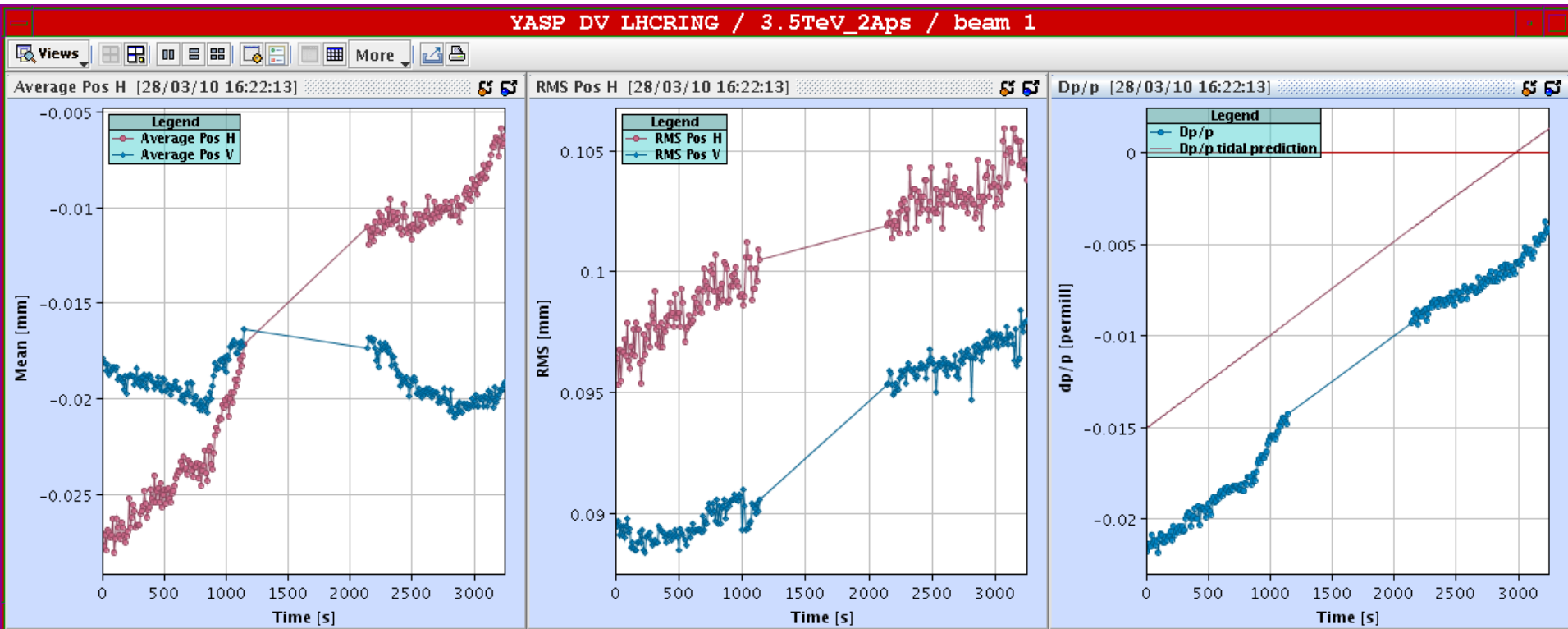
- Bunch length during 3.5 TeV ramp Sunday noon:



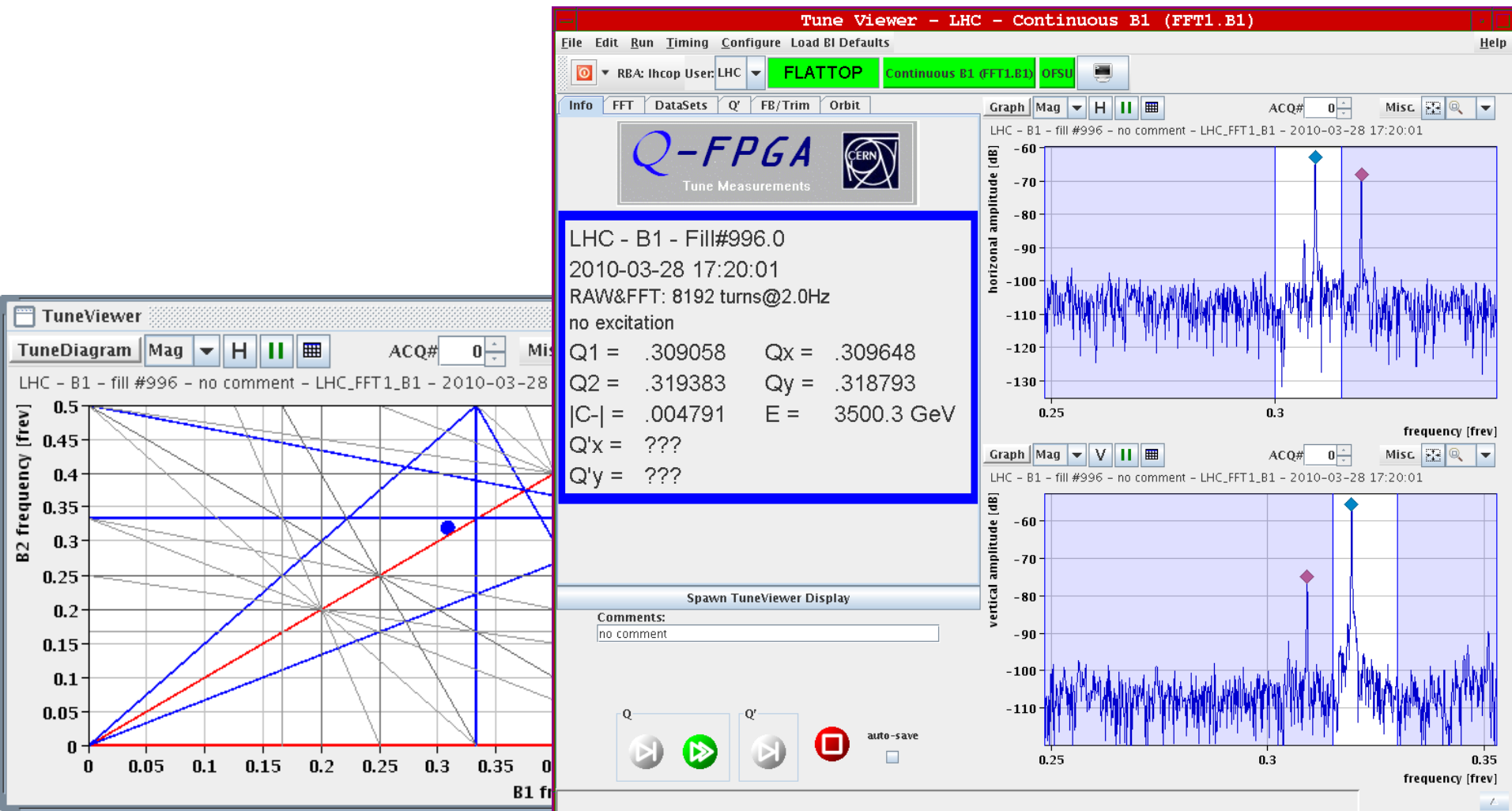
- Beam size during collimation setup on Sunday:



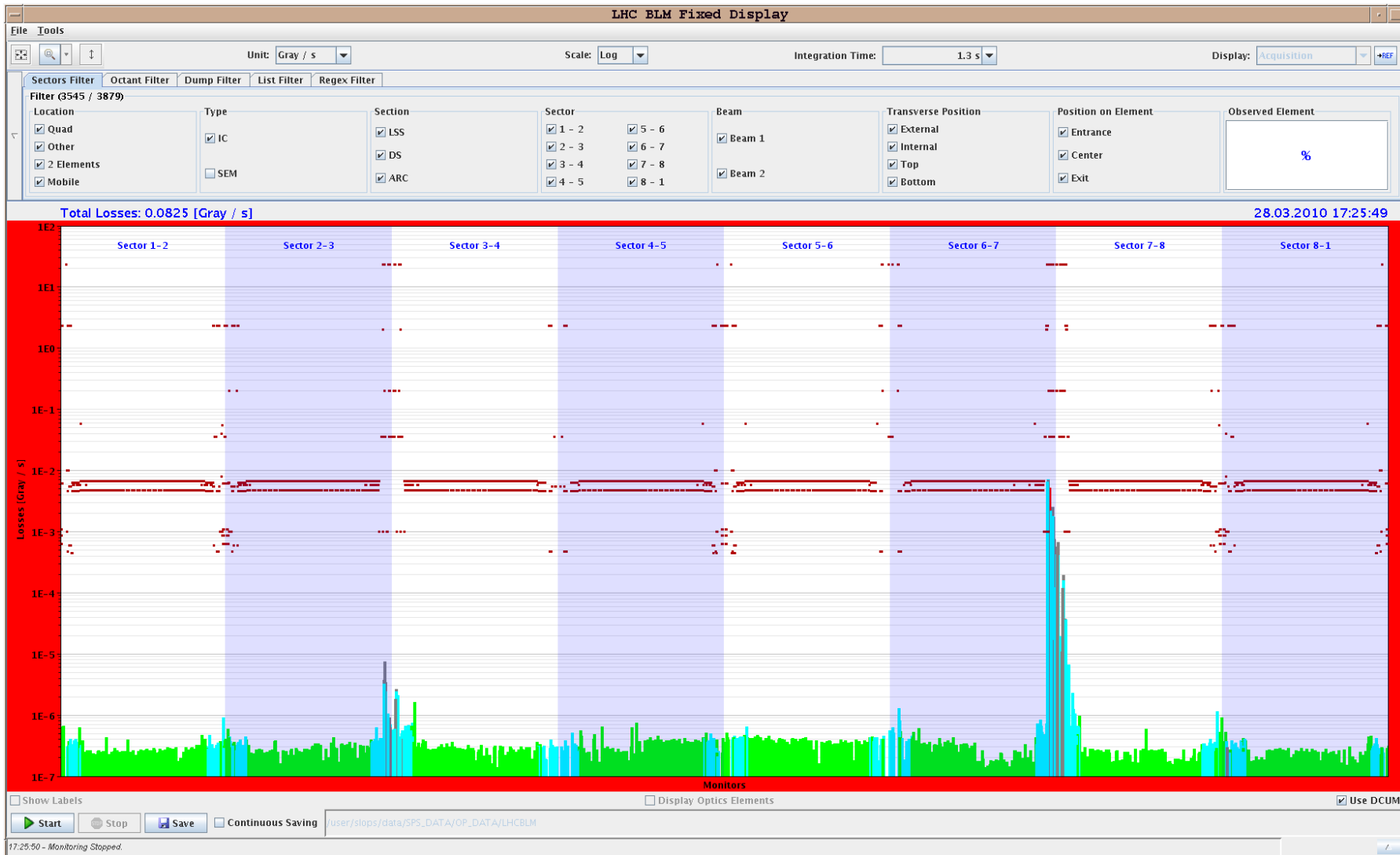
- Orbit stability during collimation setup on Sunday:



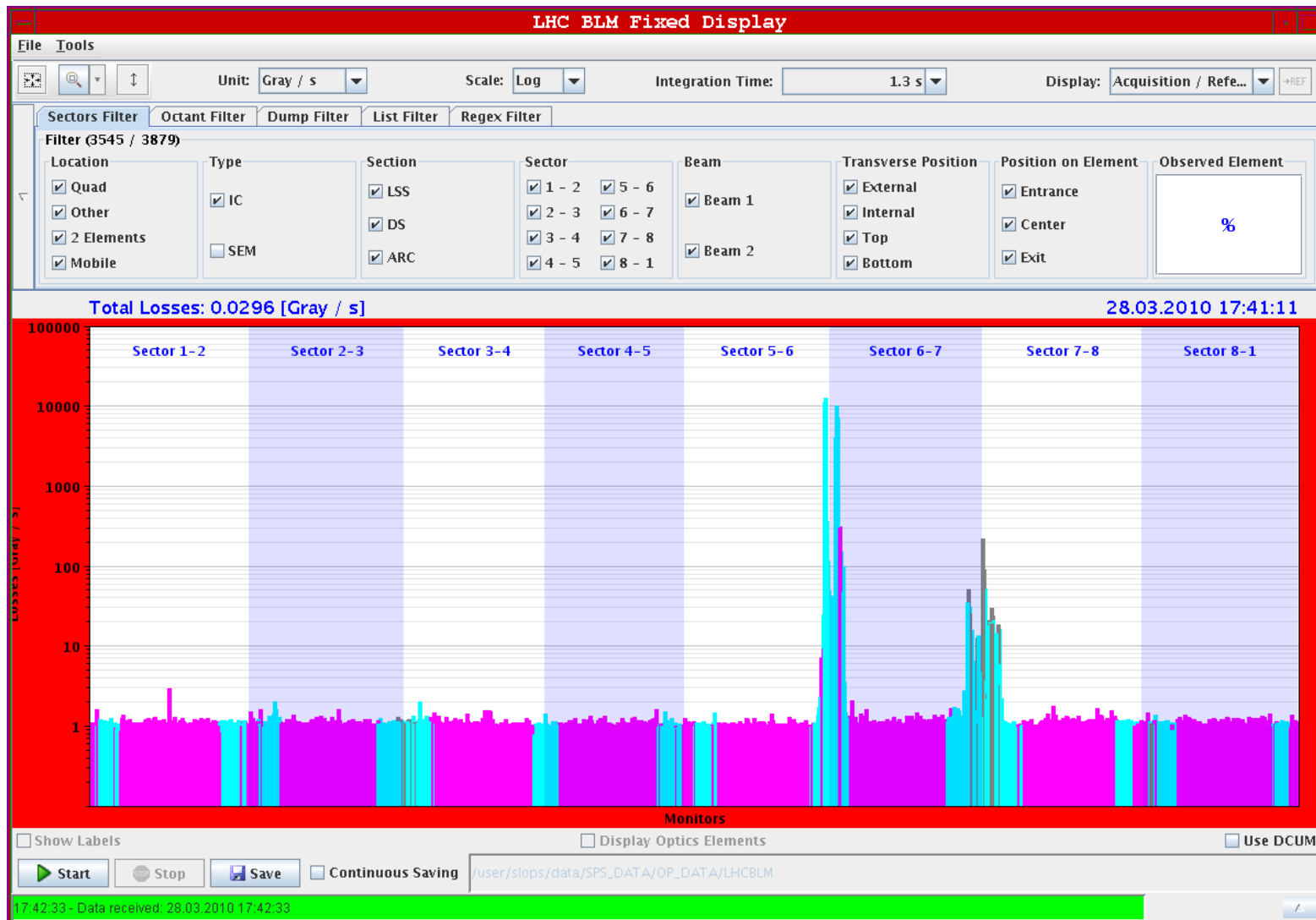
- Tunes moved to collision tunes via tune trims:



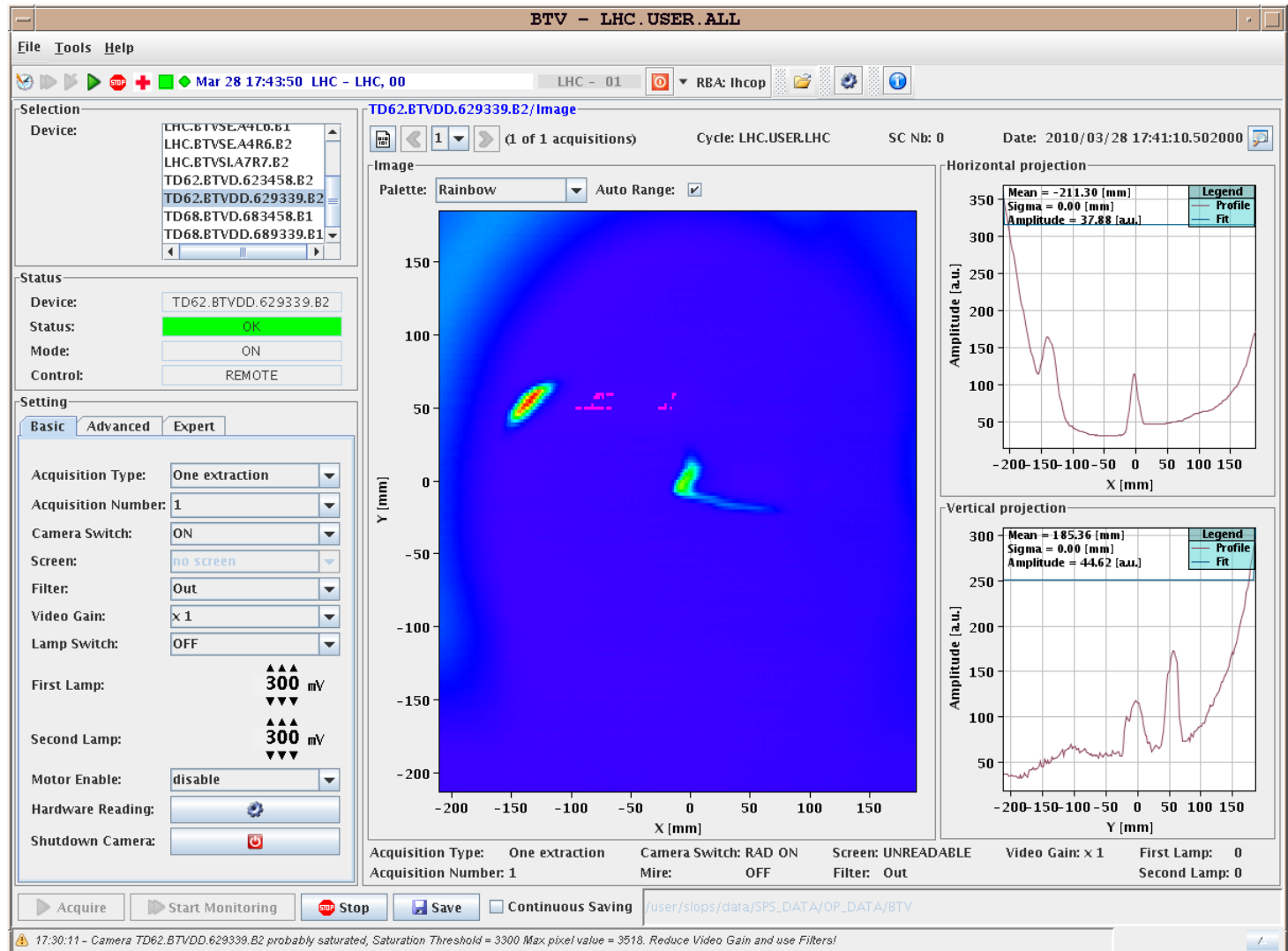
- Loss distribution Beam1 when crossing vertical 1/3rd resonance:



- Loss distribution for dump of de-bunched beams:



- Beam2 on BTV screen after de-bunched beam dump:



- Still not finished:
 - High intensity beam setup at 450 GeV
 - RF tuning at 3.5 TeV?
 - damper studies

- Open issues:
 - Temperature sensor for RSS.A81B1
 - Bellow near TED in TI2
 - Instrumentation cable on current lead for RSD1.34B1