



General improvements Upgrades

Loose collection of items

Changed – being changed – to be changed

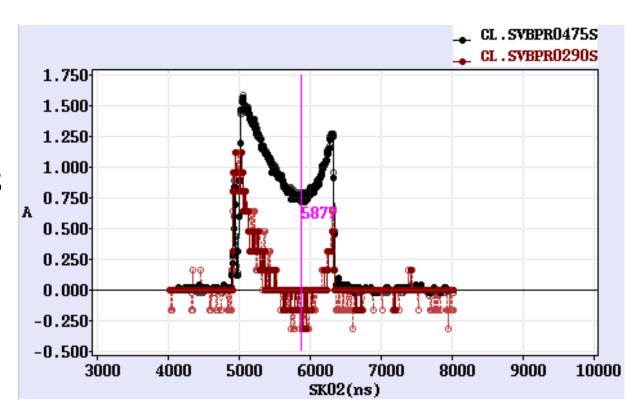


BPMs: BPR sensitivity – DL BPIs



- BPRs 0290 and 0475 have low sensitivity for phase measurement
- BPR0290: whole range ~8 ADC counts
- BPR0475: whole range ~32 ADC counts
- Asked for increase by factor 100/10 if possible

- 2 adjacent DL BPIs missing - 0292/0308
- 0308 taken out to replace another
- 0292 to be checked



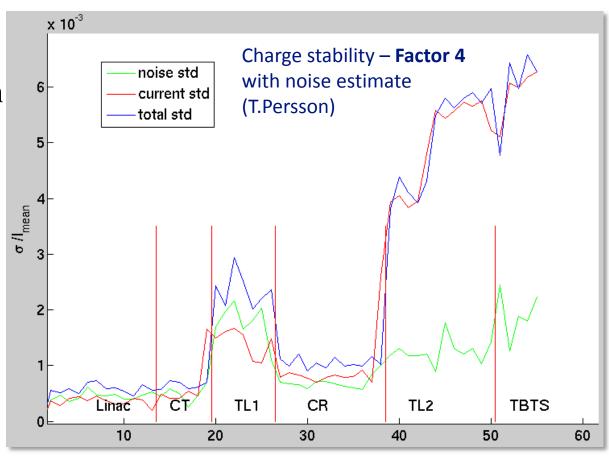


BPMs: Gain separation TL1 and CR



- Noise on the BPIs in TL1 very high
- Set to low gain with attenuator on as in the CR (high current)
- Can we separate them for the gain setting?

Can we have the calibration application for the CR to load calibrations for different gain settings





BPMs: Sampler



- Asked CO for proxy for TL2 and CLEX BPMs
- HW trigger of Sampler acquisition to be installed
- Properly separated for Drive and Probe beam for CLEX
- Should fix timestamp uncertainties
- Can we include the droop correction for (DL) BPIs in the real-time software?



LLRF / PLC upgrades



- PLC upgrade and software upgrade for phase control
 - Should avoid slow phase response as we had last year
 - Includes remote reset of PEI interlock
 - Start with a few and upgrade gradually
 - Remote setting of CK.GUN-AUTH RF interlocks
 - Will need to stop ½ 1 day beginning of March during CR safety chain test?
 - Should be transparent for the control system
- PLC upgrade and maintenance of CK.MKS02-ATTN/PHAS
 - Will fix the limited range for pre-buncher phase
 - Foreseen for next shut-down



TWTs for SHBs



- One back from repair soon with phase droop modification
 should decrease stored energy and improve failure rate
- Need to program I/Q modulator to correct phase
- Others to be sent one at the time for modification
 still left with two SHBs
- New systems will be ordered one to test, more after success
- What to do against changing power level??? Use I/Q amplitude?
- On/Off remote indication / switch?



High power RF



- Splitter and load being installed for CR RF deflector network
 => can optimize deflector bump
- New charging supplies for MKS11/MKS15 (+heater supplies)
 => can go to higher repetition rate (10 Hz)
- MKS PLC control for old CAMAC system in development
- Stability of MKL02 (low power)
 - Install higher power amplifier / wave guide splitter and load?
 - Install WFG (but standing wave cavity)
- New klystron for ACS14 foreseen for next shutdown



Various



- Power supply for Frascati bend CT.BHB0205 upgraded
- CR/DL light interlocked with access system
- Local shielding around DL/CR access door
- DL injection region survey campaign next week
- Faster radiation level reading for software gun interlock
- Can we improve the water station regulation for RF pulse compression?
- Segmented dump in CTS line when?





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