SPS beams – LHC beams

- Last fill for the LHC BCMS up to 3 x 48 bunches: bunch intensity 1.15e+11, 1.4 um emittance
- HiRadMat taking 288 bunches new emittance measurement tool ~ 2.5 us emittance, 1.15e+11 ppb



Logging details window

Total intensity

Beam type

2.7

2.6

2.5

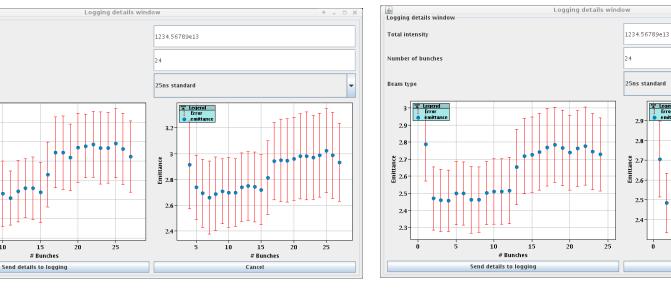
E 2.4

2.3

2.2

Number of bunches

Legend



V flattop – 300 ms between scans

20

25

10

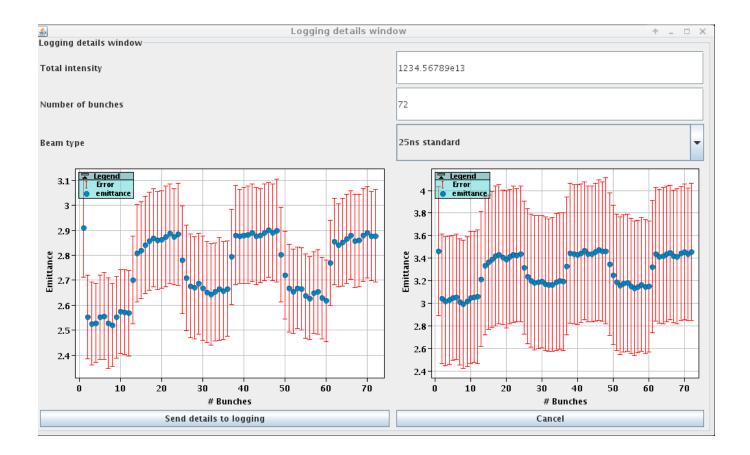
Cancel

Bunches

15

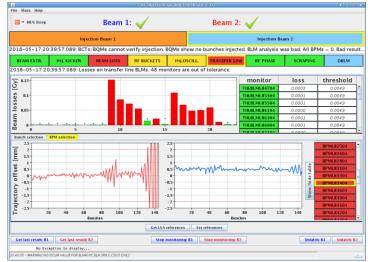
↑ _ □ ×

• Vertical emittances 25 ns standard...other example



Extraction of unstable beam from SPS – 17th of May

- Quenched Q7R8
- Increased afterwards horizontal Chroma by 0.1 end of ramp and on FT



- Other issue with injections into LHC:
 - Orbit changes in the SPS due to FGC rebooting in BA2 and not reloading correct settings.
 - Large transfer line trajectory oscillations

Fixed target beam

- Back at last year's QF regulator for spill quality: less low
- ZS4 broken high voltage feedthrough. Secondary vacuum and ZS4 disconnected.
 - Extraction with only 4 ZS tanks; higher losses on MST, but acceptable

