

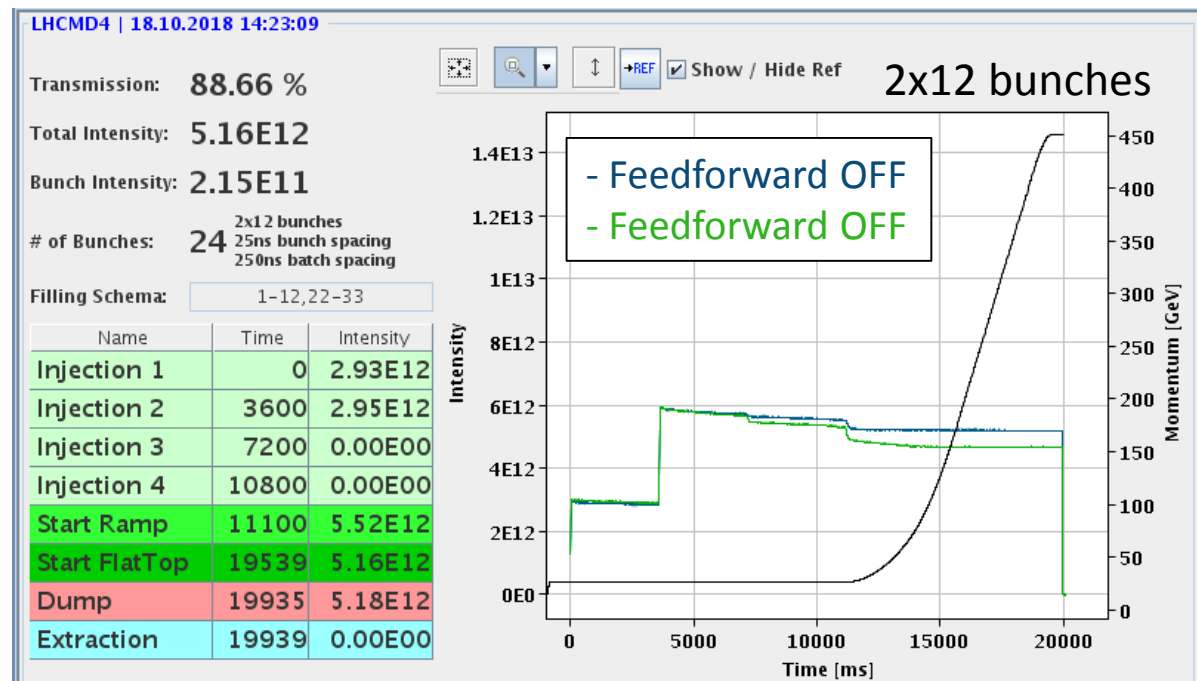
# SPS status

SPS operations team

MSWG, 19.10.2018

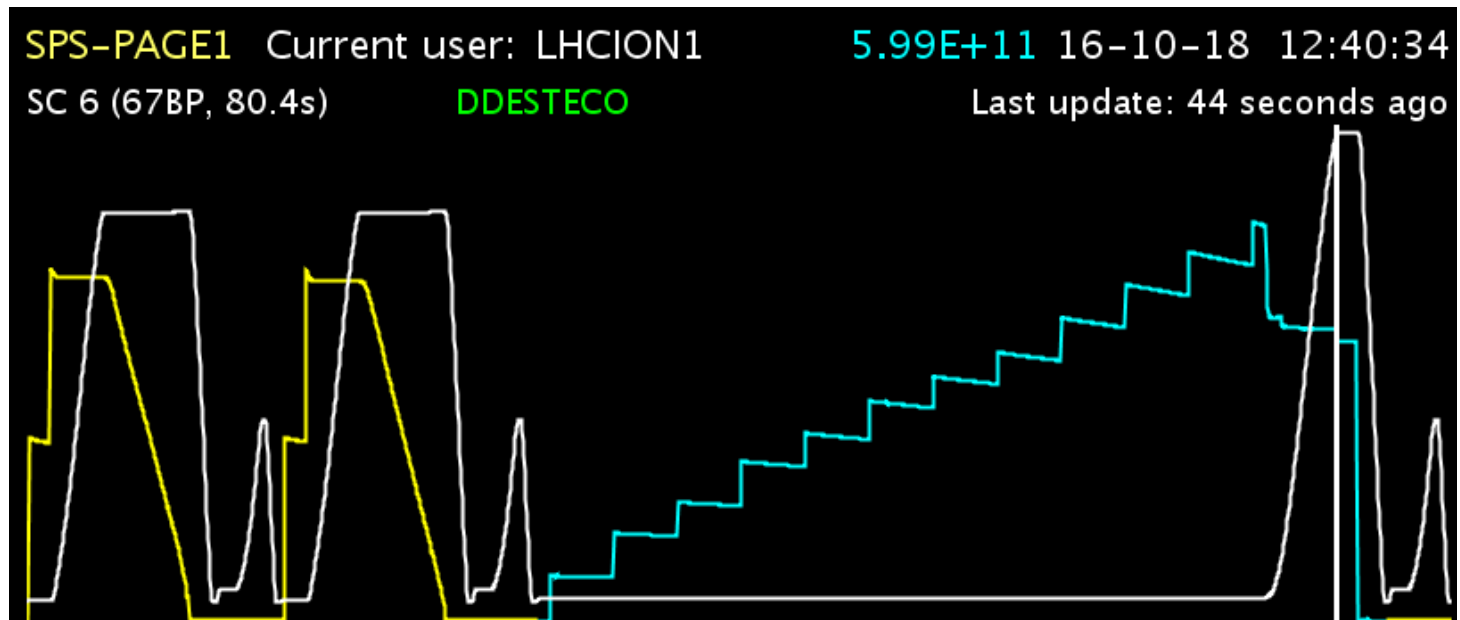
# SPS overview – LHC beams

- Successfully competed high beta run last week with excellent quality of van der Meer beams – thanks to the injectors
- BCMS beams for LHC filling – nothing special
- Preparation of LHC MD beams ongoing
  - 8b4e with  $1.6 \times 10^{11}$  p/b prepared yesterday
  - 4x12 bunches with  $2 \times 10^{11}$  p/b ongoing – struggling with longitudinal stability

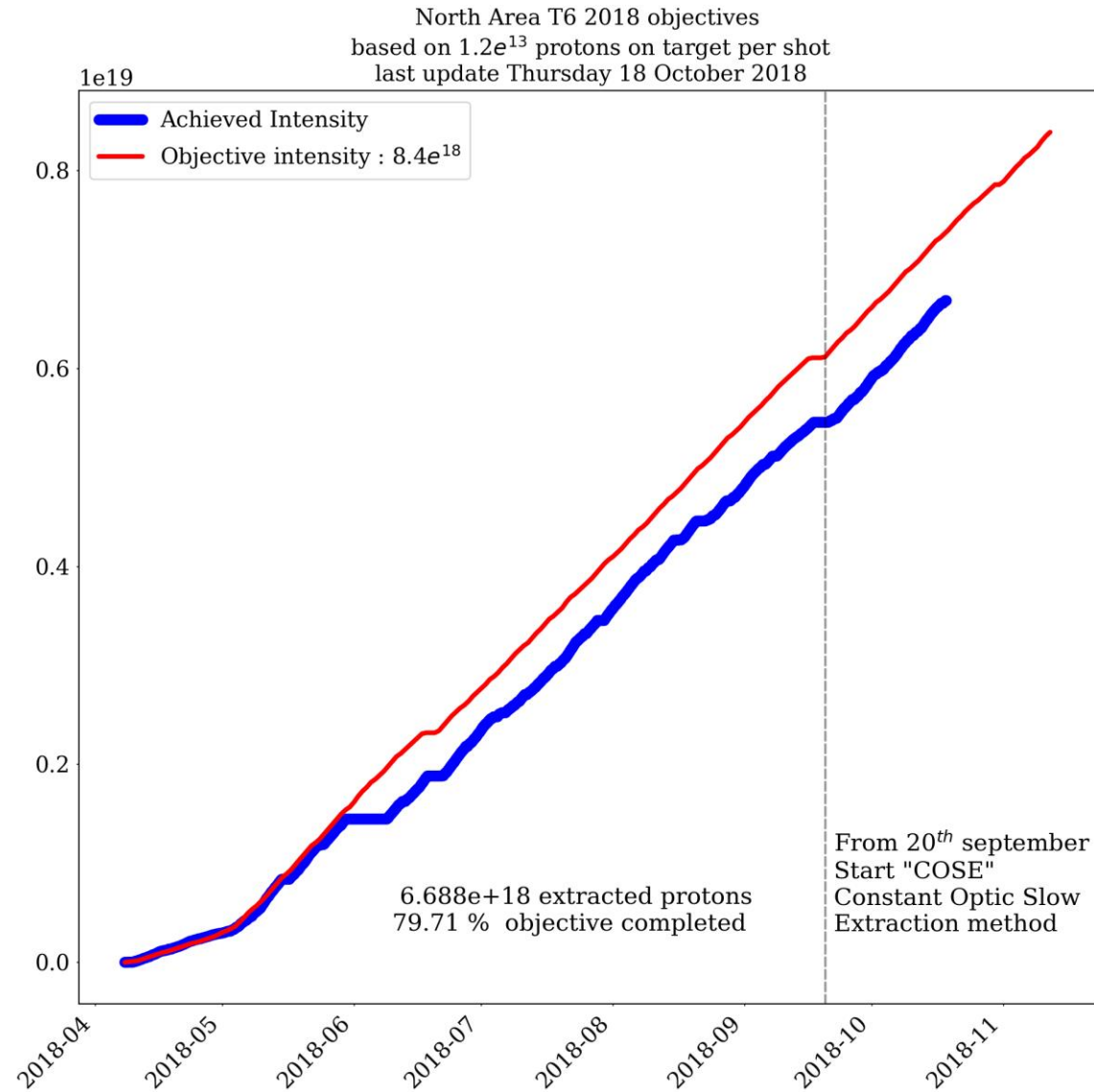


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- Preparation of LHC ion cycle progressing well

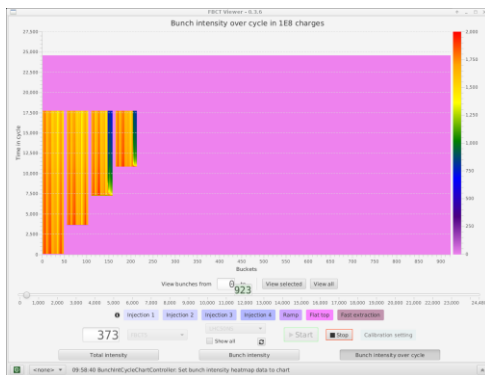
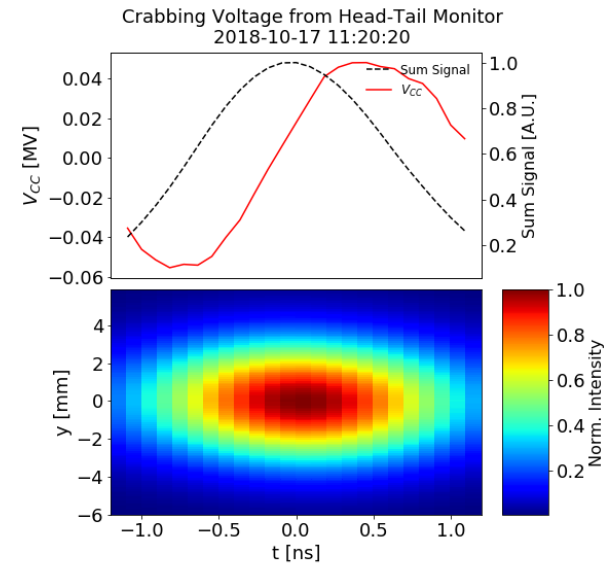


# SPS overview - SFTPRO

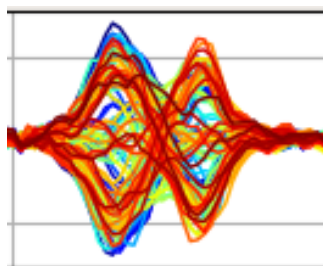


# MD highlights

- Crab cavity MDs
  - 1 MV in both cavities
  - Transparency shown (with 1 MV in each cavity)
  - Measurement of HOMs, beam loading
  - “Scrubbing” with 25 ns beam at 26 GeV
- High intensity LHC beams
  - Horizontal instability with 4x48 bunches ( $>2e11$  p/b)
  - New damper settings with wide tune acceptance
  - Headtail mode 1 and mode 2 observed depending on chroma settings
  - Stabilization with high chroma or medium chroma and octupoles



Headtail monitor



ADT data

