

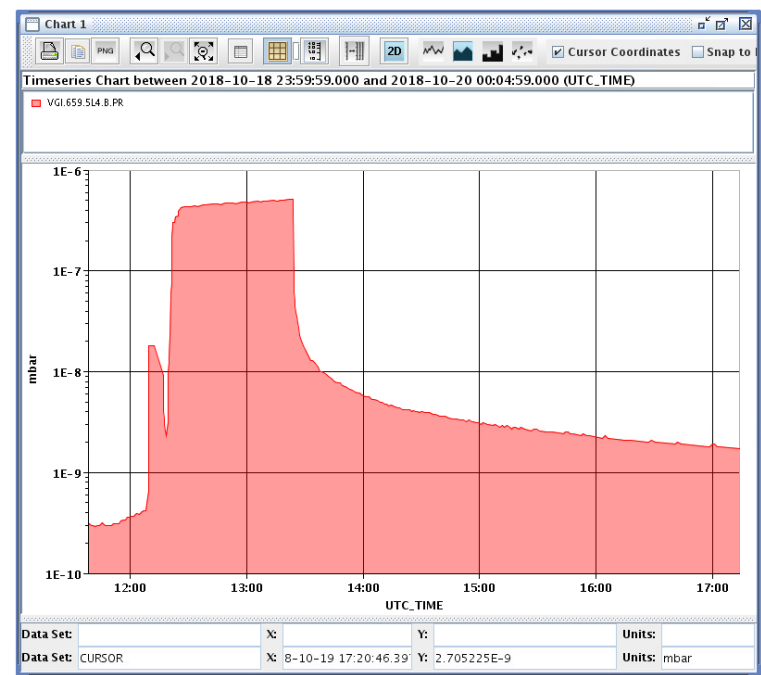
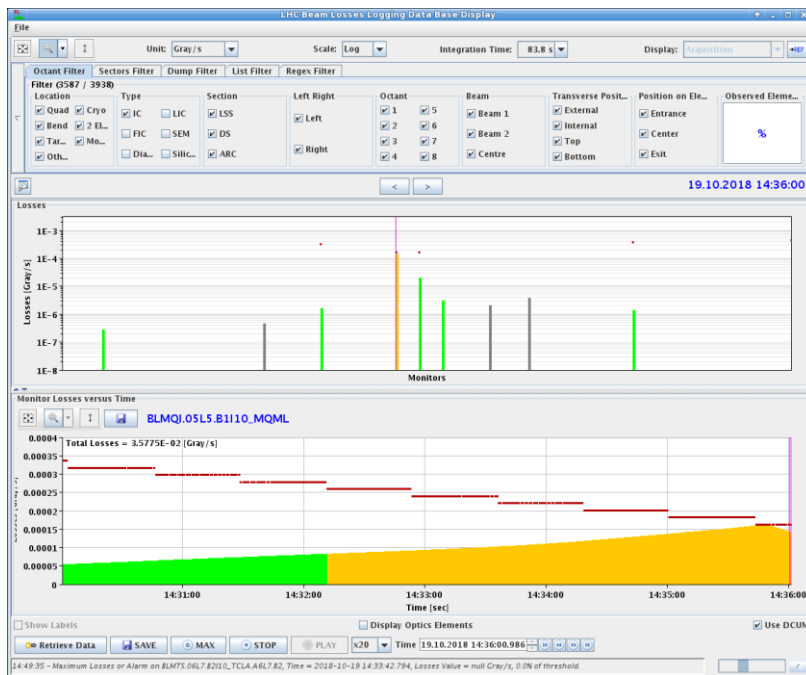


# LHC BIF test setup - update

S. Mazzone, 15/11/2018

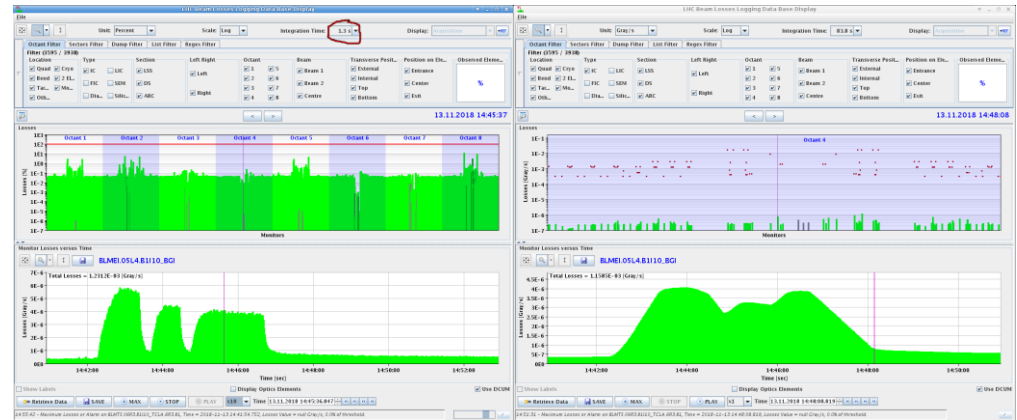
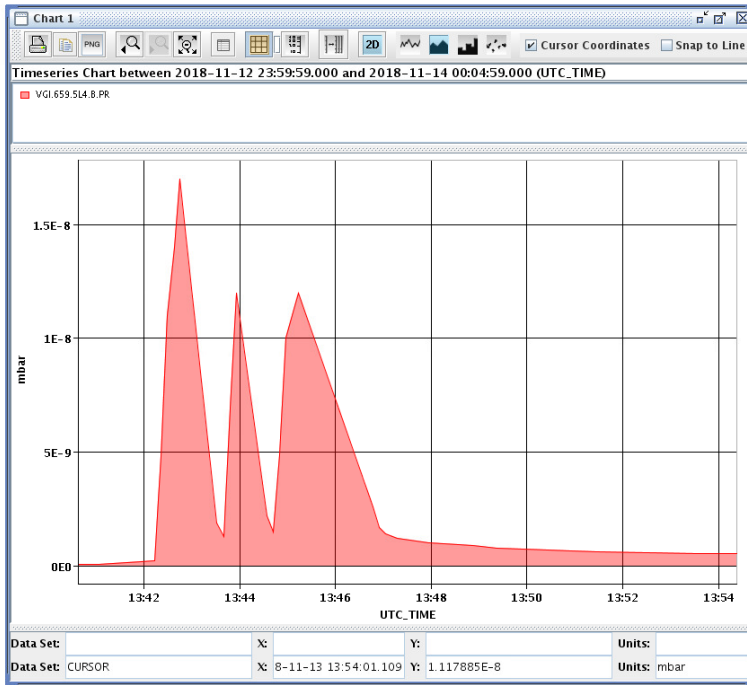
# Status

- On 19/10/2018, 'manual' injection of Ne at  $4 \times 10^{-7}$  mbar caused the LHC beam to dump due to losses on tertiary collimators of point 5 (20 s integration time).
- No significant losses on primary collimator (point 7)



# Status

- Test injection with Pb ions performed on Tue 13/11. Nominal injection around  $10^{-8}$  mbar.
- Low (<1%) losses in Pt. 4, almost not distinguishable losses in pt. 5.
- OK to continue injection during Pb run.



# Status

- Data acquisition during Pb ion run:
  - $Z^2 = 82^2 = 6724$  light yield Pb<sup>+</sup> vs p<sup>+</sup>
  - p<sup>+</sup> intensity:  $1E11 \times 2556b = 2.5e14$  p+ per fill
  - Pb<sup>+</sup> intensity:  $1.2E8 \times 600b = 7.2E10$  Pb+ per fill
- Got inelastic scattering data form BGV team. Comparison between noise level in present configuration vs gas jet (collab meeting?)
- Beam dynamics simulations needed for evaluating effect of gas curtain on LHC beam

} x2 light yield