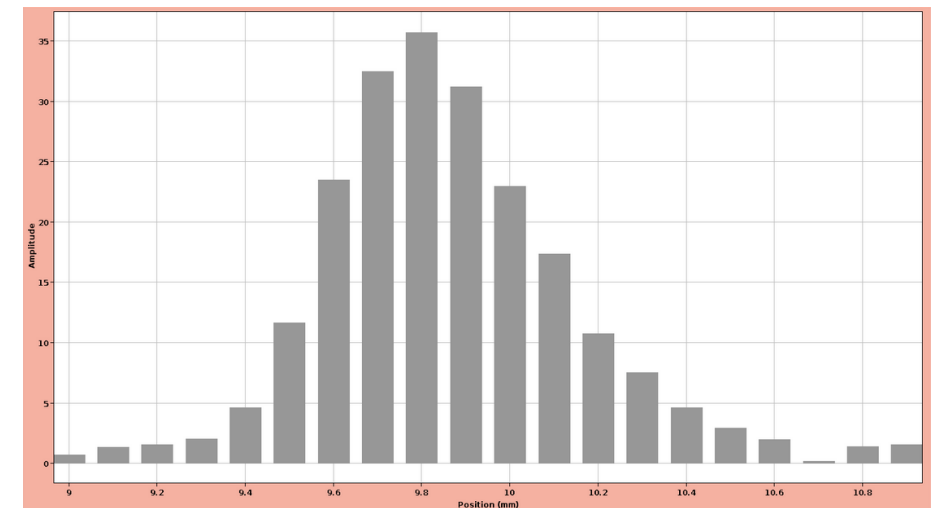
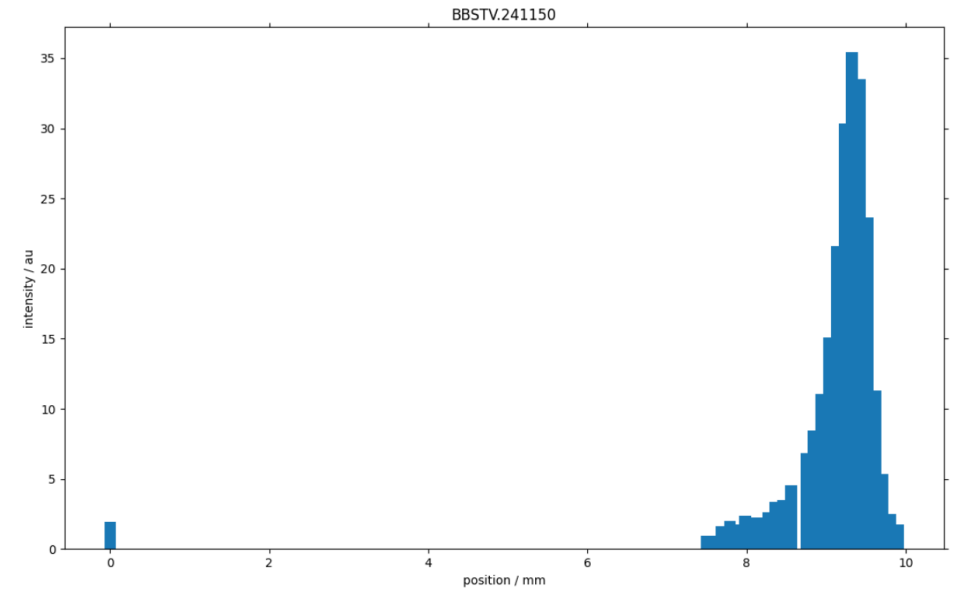


SPS summary for user meeting

F.M. Velotti, G. Papotti for the SPS team

SFTPRO status

- Intensity up to $1e13$ ppp as requested
- Availability not so great so far: very much dominated by the access system issues (see next slide)
- Crystal in since the beginning providing lower (45%) losses at ZS
 - Need careful checks to ensure beam transmission through TT20
 - Temporarily rolled back to volume reflection (20%) for HI
- Mini-scans done along the line and beam very similar to pre-LS2
- So far run in dedicated mode – AWAKE started yesterday evening
 - First part of commissioning will request 2 cycles in the SC, then to be seen
- T10 instrumentation checked multiple times and all seems to work
 - Scans of BSM done to hunt for the missing beam on T10...



Other users

- AWAKE:
 - First beams being delivered since last evening
 - Nominal beam ready in the SPS – it will be extracted when experiment ready
- HiRadMat:
 - Accelerated to 440 GeV 4 batches up to $1.1e11$ ppb
 - Still need work on RF side to push the intensity per bunch as now limited by longitudinal stability
 - Losses at flat bottom still need a solution (not clear the source yet)
 - Kickers conditioned well, although still time needed to ramp up energy for intensity step

Access system issue

- Recurrent issue with the access system control cards (Siemens IO cards) => 31 h downtime over 10 days
- 7 times loss of patrol in different accelerator zones last week: 4 x BA1, 1 x BA6 (different issue), 1 x BA2 and on Saturday evening BA80
- The access system relies on 2 redundant loops that guarantee that there is nobody in the machine, a PLC system and the cabled loop that checks the envelope of the zone. The faults concern the PLC system and the access system piquet has to reset the controls card and OP has to perform the patrol
- Procedure to speed up the recovery not possible at moment – access system expert checked this and not found technical solution yet
- In collaboration with RP, EN/AA will study the dose rate and the shielding possibilities of the intermediate communication rack located at the bottom of the BA1 where several failures have been noted ("single event upset" suspected)
- **News from yesterday:** new cards will be delivered end of next week
 - Then test cards will be put in BA3 to evaluate them
 - For the moment, shielding put on the rack in BA1 as suspected single event upset (done today)
 - **This is becoming a real issue now...so we need to really follow this up closely**