

SPS Hardware Commissioning

13th April 2021

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and SPS operations

Summary W14

- SBDS reliability run – Good progress – ongoing
- Re-testing of RING and Injection BIS and timing on BHZ377, BHZ378 and MDSH.1197
- BT working on an auto soft start if the SBDS doesn't pulse at high energy for a given time to avoid a vacuum spike in the MKDV1
 - Not yet implemented. Will be done shortly
- DSO tests
 - SPS ring phase 2, Ion interlock and WANF neutrino pits on 7 April – Done, OK
 - North area primary chain 8, 9th April - Done, OK Completed ahead of schedule on 8th
- Remove all jumpers on the BISs – All removed

Summary W14

- 4 FMCs need to be checked and two others need to be rechecked because of power convertor instabilities – All tested
- Continued interlock checks - Ongoing
- Installation and test of the fast interlock from the WIC to fire beam dump if a main circuit trips
 - SMD all OK. SMQF and SMQD All OK however an issue remains on spare which requires a modification. In progress
- Prepare beam permit to inject the beam on 12 April – OK as of Friday 9
 - TEDs consigned at each extraction channel
- Thermal checks on enlarged quads confirmed as inversed cooling pipes and will be resolved during TS
- Vac spikes and closed valves due to RF cavity conditioning in LSS3

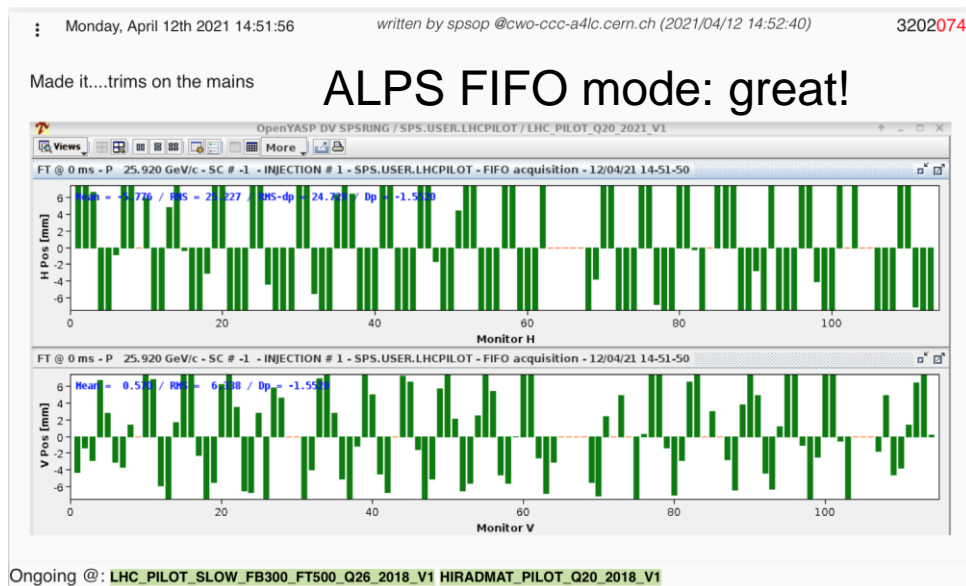
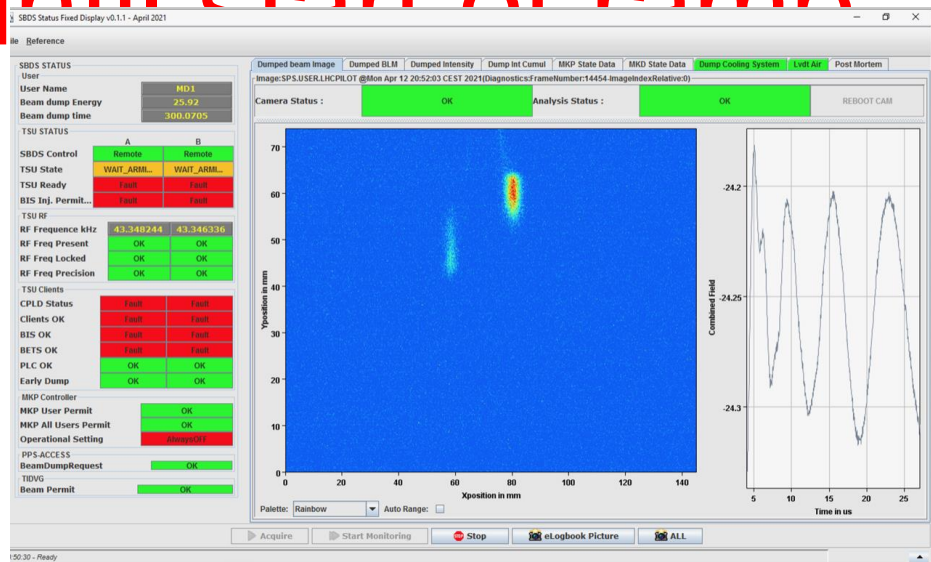
Planning W15

- Beam Commissioning for one day
- Objective:
 - Inject and circulate low intensity INDIV without capture to check trajectory and aperture clear
- Back to HWC for RF: cavity controllers, WR
- Follow up a several aspects until TS:
 - Crab cavity aperture check, QS WIC installation, SBDS reliability run, ...

SPS first beam 2021 BHZ 377/78 wrong current: 1012 A vs 1530 A

Lost all morning

Injection steering done; **LHCINDIV**
until start of ramp



SPS OP Zoom

- 8h30 every weekday morning

<https://cern.zoom.us/j/6929444357?pwd=bFk2OHdYUXA4NnhiQjcyQ2p0VGxnZz09>