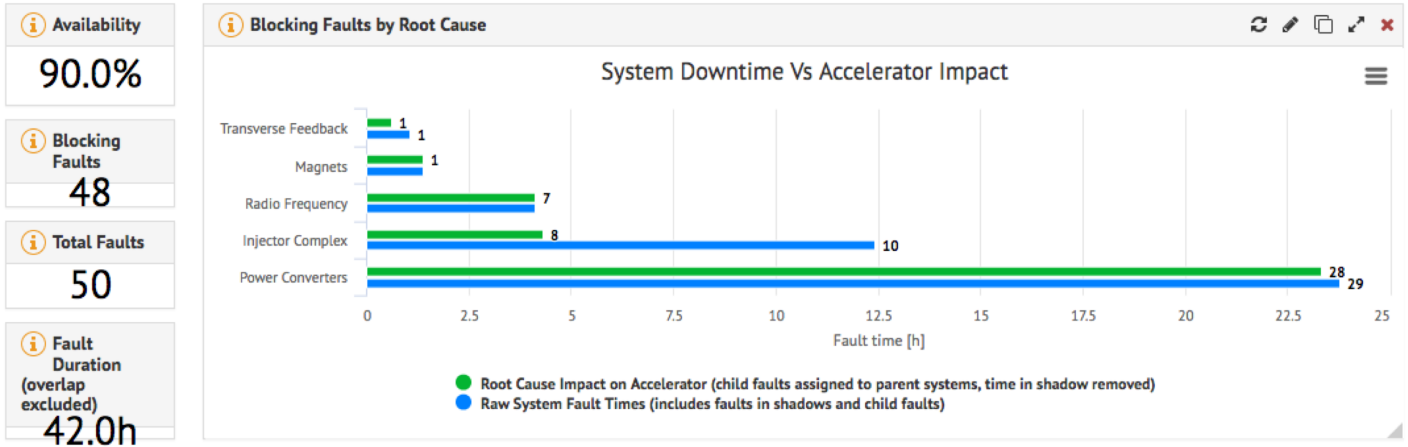
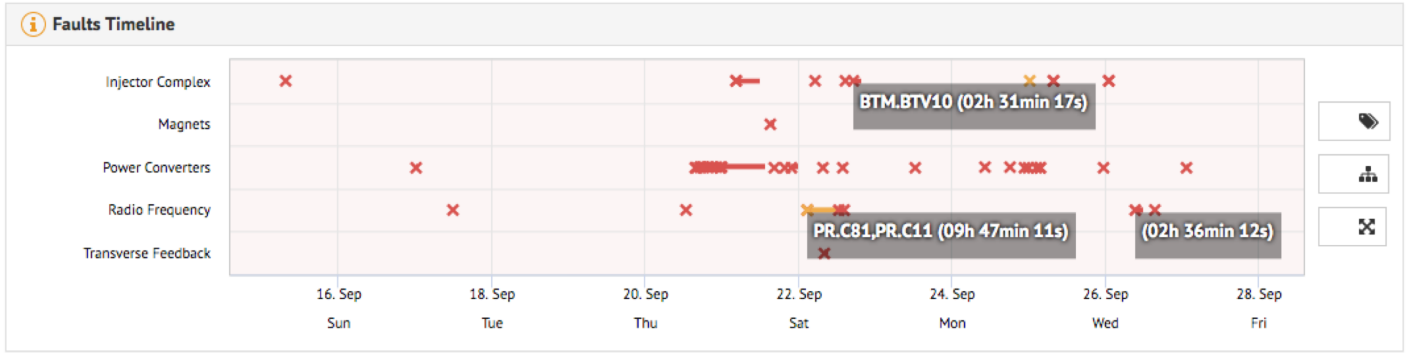
Machine availability and issues





News relevant for MD users

- **Start-up after ITS2 in general OK, although weekend not so smooth for MD's**
  - BTV.BTM10 stuck half-in-half touching large beams and blowing up beams to the dump
  - BSGH54 stuck in undefined state, access needed to remove it: **please do not use!**
  - **RF issues:** PLC issues on TFB, C81 amplifier broke, **lost PS for LLRF FE on Wednesday**
- **PS Pole Face Winding circuit (PR.WFNP) tripping** on LHC beams after ITS2 from Thursday evening due to regulation issues on the ramp-down:
  - Quick fix implemented on LHC cycles by reducing ramp rate
  - Be aware of this issue when mapping older LHC MD cycles, TE-EPC investigations on-going…
- **High intensity LHC BCMS MD beam (48b) up to 2.3E11 ppp this week**:
  - Finemet cavities were off, vertical trims on chromaticity needed, C81 tripping
  - RF expert back from Duty Travel next week
- **Double timings for extraction equipment implemented** (septa, bumpers) for **n-TOF MD's**

Status of operational beams (1)

LHC Beams	Status	Comments
LHCPROBE	OK	
LHCINDIV (nominal)	OK	Various emittances (1, 2 and 3 um) provided for BSRT calibration in LHC at 1.3e11 ppb
LHC25 (12b, 16b, 72b)	OK	16b standard LHC25 is ready for HiRadMat SPS setup
LHC25 BCMS (12b, 24b, 48b)	OK	
LHC25 8b4e BCS (32b)	OK	
iLHC EARLY (Pb^{54+})	OK	
iLHC100 (4b)	OK	
iLHC200 (2b)	OK	
iLHC75 (3b)	OK	

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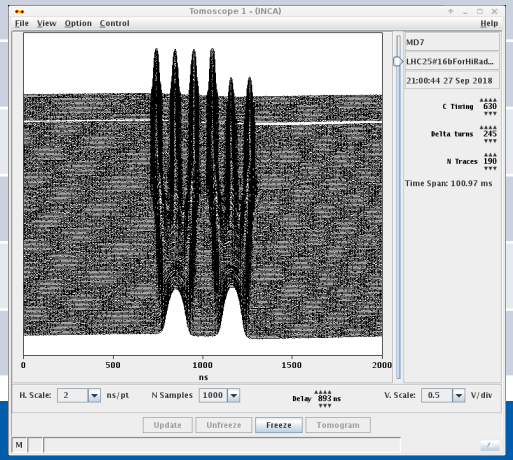

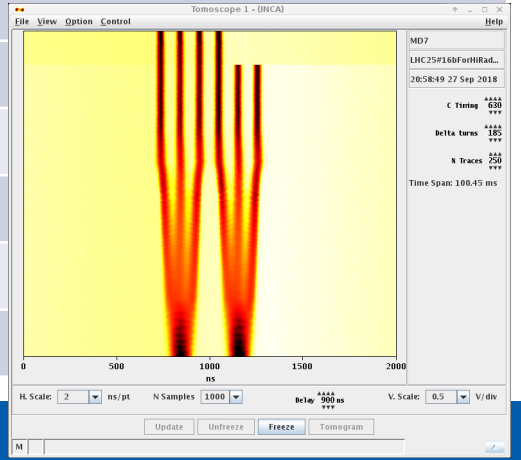

Status of operational beams (2)

FT Beams	Status	Comments
EAST1 (Irrad)	OK	
EAST2 (North)	OK	
TOF	OK	Satellites reported by n- TOF in front of main bunch: indeed observe something at 100 ns from dedicated bunch on dBLM's. Propose test with KFA71 closed around bunch to verify this is the source of reported pre-pulses. Source of satellite likely the bunch rotation: to be optimised
AD	OK	
MTE	OK	~1500E10 ppp
VLI MTE	OK	(Very Low Intensity) 50 – 400 E10 ppp sent to SPS for MD

MDs (1)

MD	Details
MD3368	**PS & AH:** PS optics measurements
MD3105	**AH & MK:** Tune diagram measurements
MD3104	**FA:** Space charge studies
MD3187	**EKP & AH:** nTOF with gamma jump, chromaticity and octupoles
MD3367	**MM:** Transverse tune shift vs intensity (transverse impedance measurement)
MD3808	**MV & HD:** Barrier buckets with Finemet cavity

MDs (2)

MD	Details
MD4486	**AL:** Preparation of long bunches MD in SPS
MD4511	**AH:** Matrix measurement campaign
MD4263	**FA, FA,& TP:** BCMS Brightness Studies
MD4407	**YD:** Brute force PS injection matching
MD4146	**AH:** Impact of fast tuner solenoid on low-energy orbit
MD4404	**ES:** Emittance measurement precision investigation

First turn-by-turn injection SEM grid profiles observed today…