

PS Report week 45



Many thanks
to the PS OP and coordination teams as well as all equipment experts and support teams!

Beam availability since last meeting



Availability

98.4%

Blocking Faults

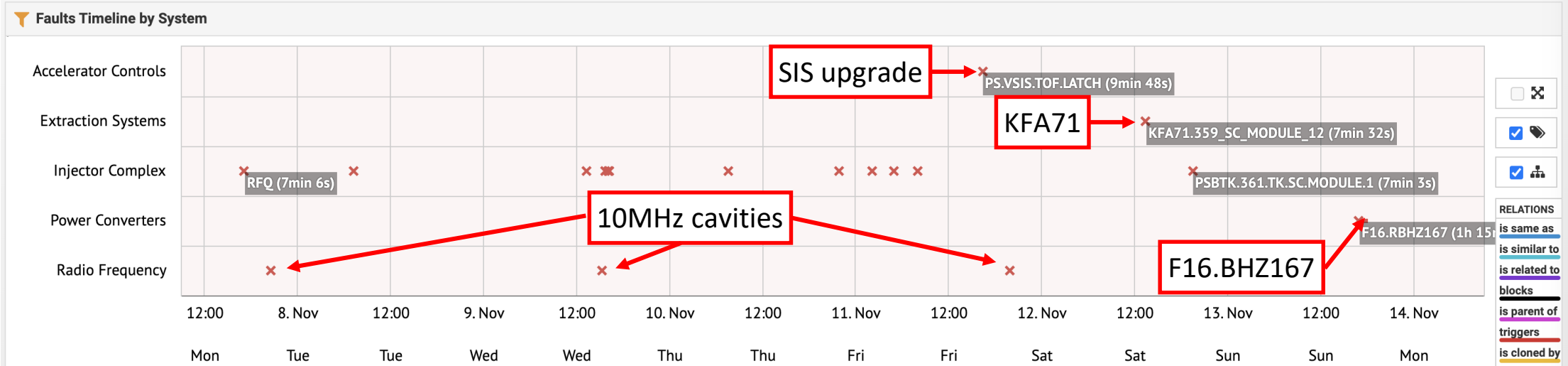
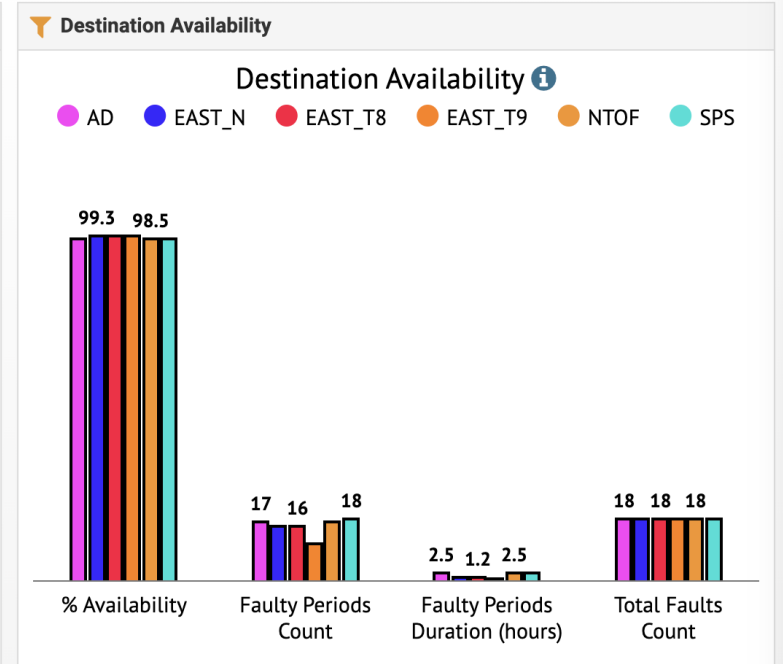
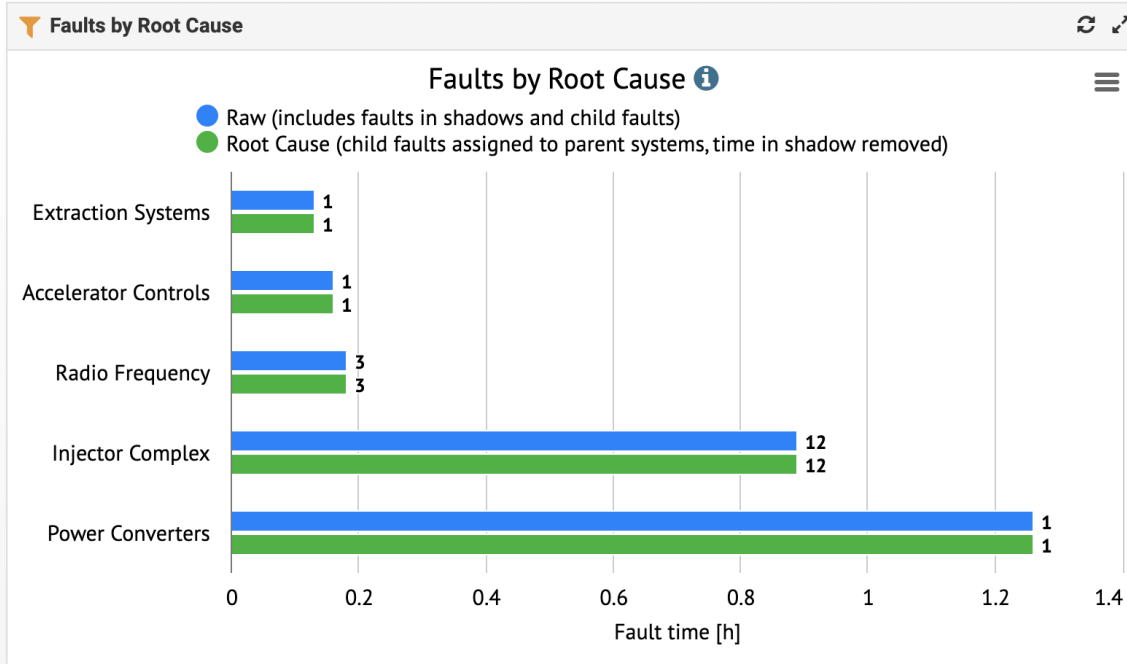
18

Total Faults

18

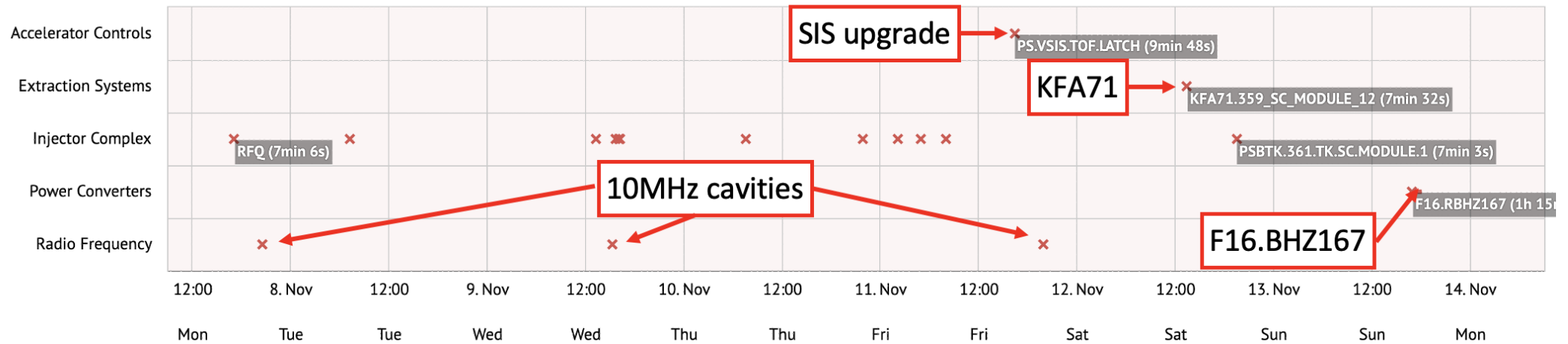
Fault Duration (overlap excluded)

2.6h

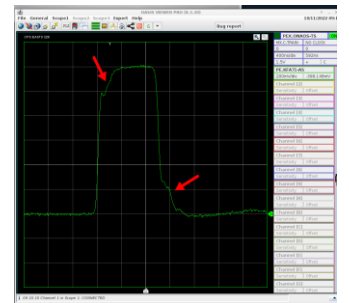


Main issues

Faults Timeline by System



- Several **KFA 71** module trips causing radiation alarms. (mainly module 11 and 12)
 - Module 12 found not synchronized with others (solved by ABT expert)
- Several problems with the 10MHz during the week.
 - 7/11 Reset **C86,91,96** cavities tripping together
 - 9/11 **All 10MHz cavities** tripping together
 - 11/11 radiation alarm due to C91 trip (last active cavity at the end of MTE cycle)
- A water flow issue on **F16.BHZ167** was fixed on Sunday by the SY-EPC piquet. (no beam in TT2 for 1h15).
- **SIS** roll back to previous version on Friday (~10m without beam)



Main activities of the week

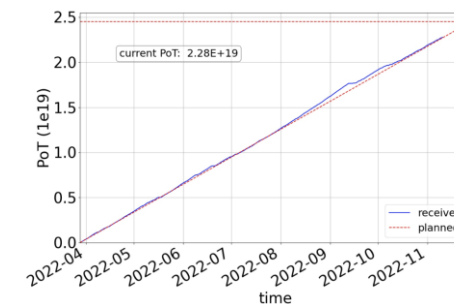
- **AD high intensity beam delivered all along the week**
 - AD would like to keep the same cycle in front of their cycle. (Radiation limit in Aegis area)
- **SFTPRO intensities significantly reduced** (now running at $\sim 1.4E13$ ppp)
 - The barrier bucket cycle **need operational tuning** from time to time (splitting efficiency)
 - **TPS15 is OUT since Monday**. Much less losses in SS15 and SS16 on MTE beam.
 - **Long**. emittance from PSB reduced in order to remove losses at first acceleration.
 - Proton beam stopped on Monday 13/11 at 8am.
- **TOF different version provided all along the week (some period of time with $\frac{1}{2}$ intensity requested by nTOF user)**
 - A issue with **cfv-375-btv1** prevent us to receive any information about beam size and position on target (from Monday night until Tuesday afternoon). Inspector vistar was frozen. SIS need to be checked.
 - Still on track with respect to planned **ProtonOnTarget**.
- **MD6883 oscillation at transition understood**. Triplets have no setting in LSA before 7/11.
 - Cloned from LHC72b_3eVs in May 2022 with settings, however LSA parameters have been deleted end of August. (no setting acquired since)



AD Beam Intensity W45



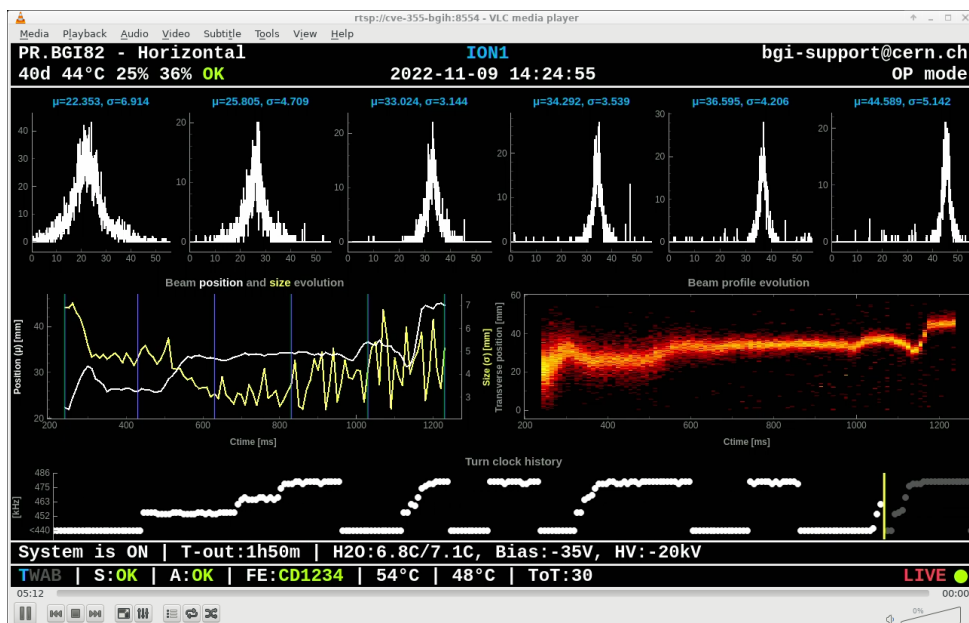
MTE Beam Intensity W45



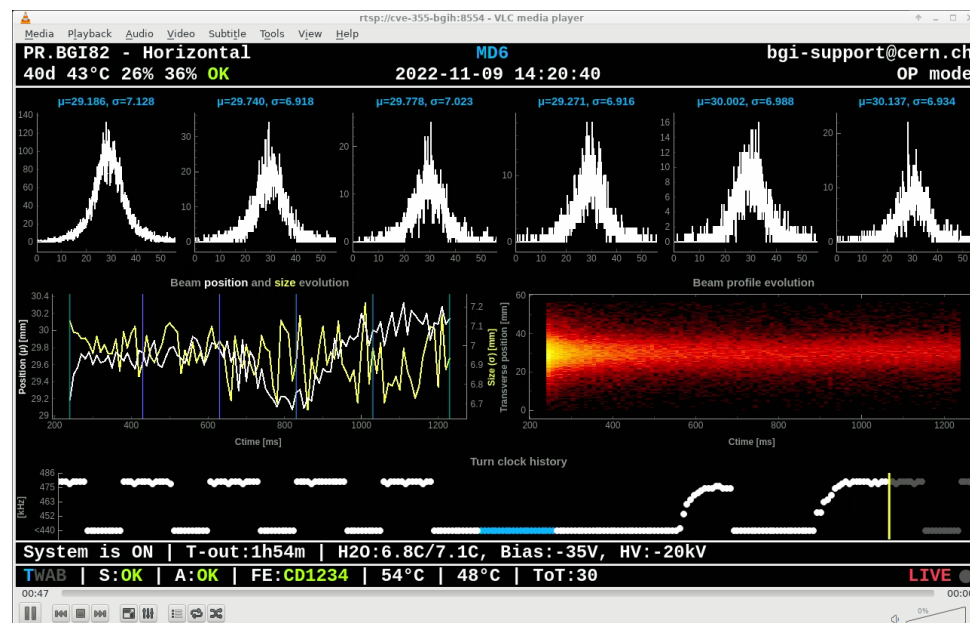
Integrated PoT from user meeting W45

Main activities of the week

- Nice BGI82H measurements on ion cycles. (Vistar pictures below)
 - Even better around 13h during sublimation



NOMINAL



Ion Life time

Questions and Comments

PS Coordinator for week 46 – **Matthew Fraser**



9:00 Daily Zoom meeting (PS-MPC on Monday morning)

Web address: <https://cern.zoom.us/j/9372114100?pwd=L29BcmIHUENCdFBRSyYVcrM1B4Zz09>

Meeting ID : 937 211 4100

Passcode: 525463