PSB Operation: Last 4 Weeks

Availability

96.3%

Blocking Faults
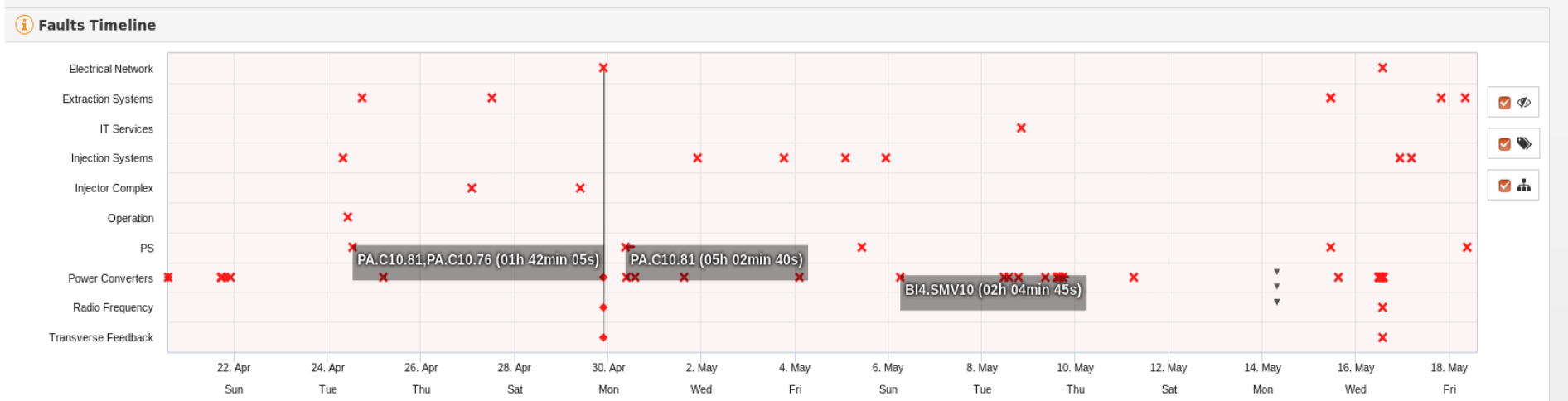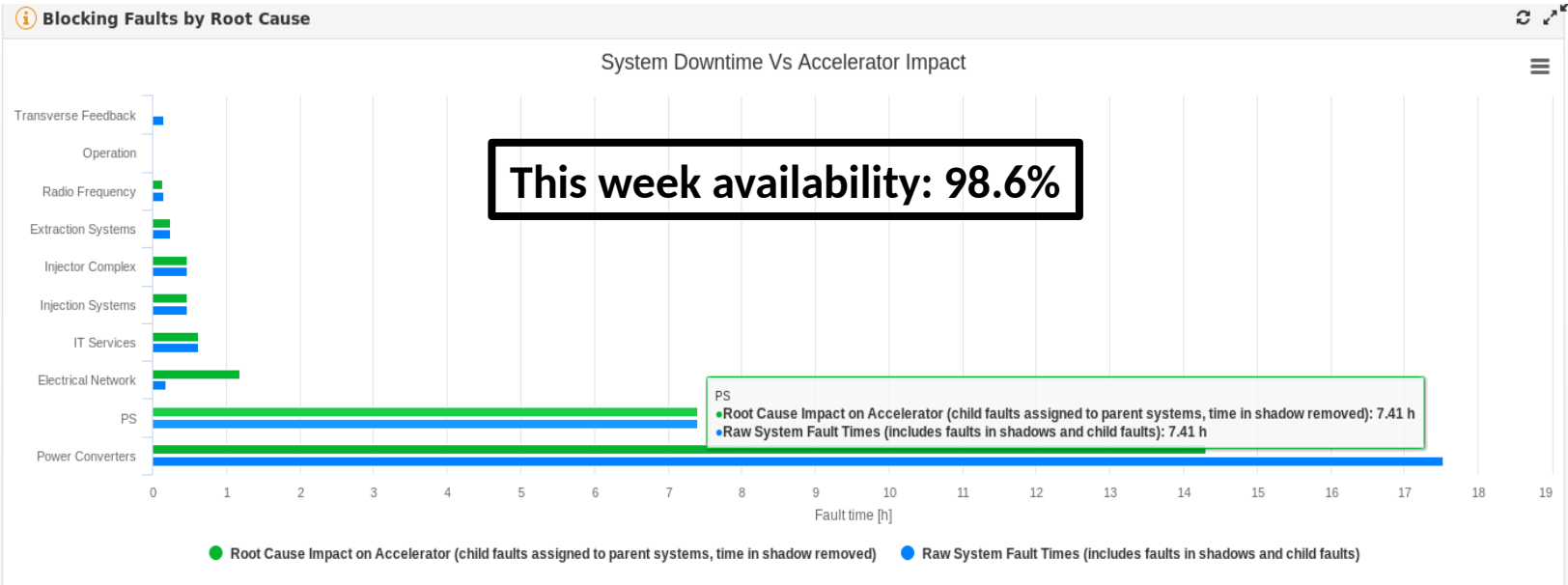
62

Total Faults

62

Fault Duration (overlap excluded)

24.9h

Blocking Faults by Root Cause

System Downtime Vs Accelerator Impact

This week availability: 98.6%

- Root Cause Impact on Accelerator (child faults assigned to parent systems, time in shadow removed)
- Raw System Fault Times (includes faults in shadows and child faults)

PS
- Root Cause Impact on Accelerator (child faults assigned to parent systems, time in shadow removed): 7.41 h
- Raw System Fault Times (includes faults in shadows and child faults): 7.41 h

Fault time [h]

Faults Timeline

PA.C10.81,PA.C10.76 (01h 42min 05s)
PA.C10.81 (05h 02min 40s)
BI4.SMV10 (02h 04min 45s)

Availability

98.6%

Blocking Faults

21

Total Faults

21

Fault Duration (overlap excluded)

1.4h

Blocking Faults by Root Cause

System Downtime Vs Accelerator Impact

- Root Cause Impact on Accelerator (child faults assigned to parent systems, time in shadow removed)
- Raw System Fault Times (includes faults in shadows and child faults)

Faults Timeline

PowerGlitch (10min 07s)

BI.DVT30 (09min 17s)
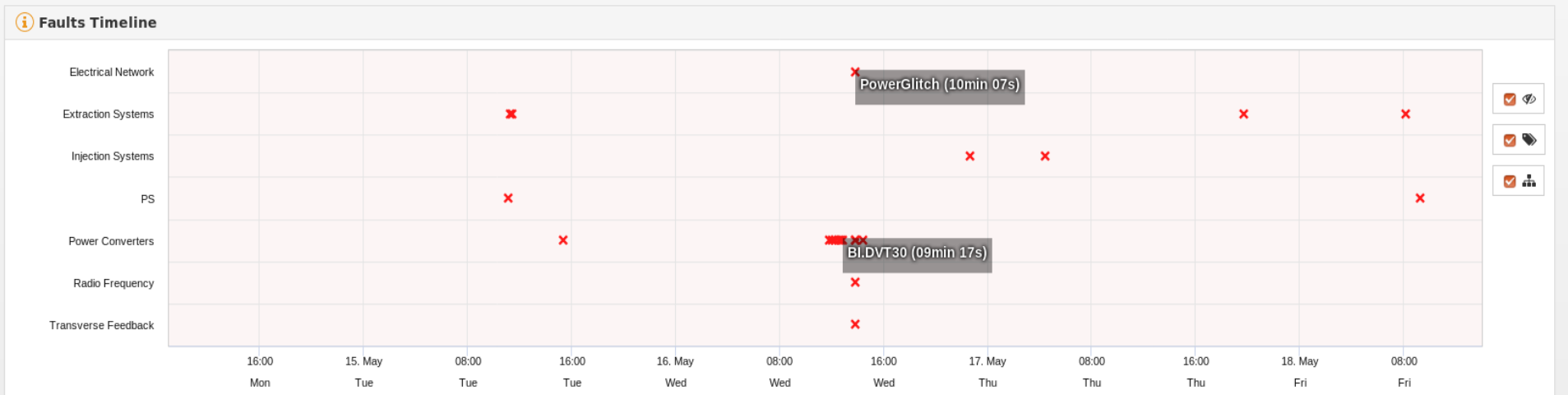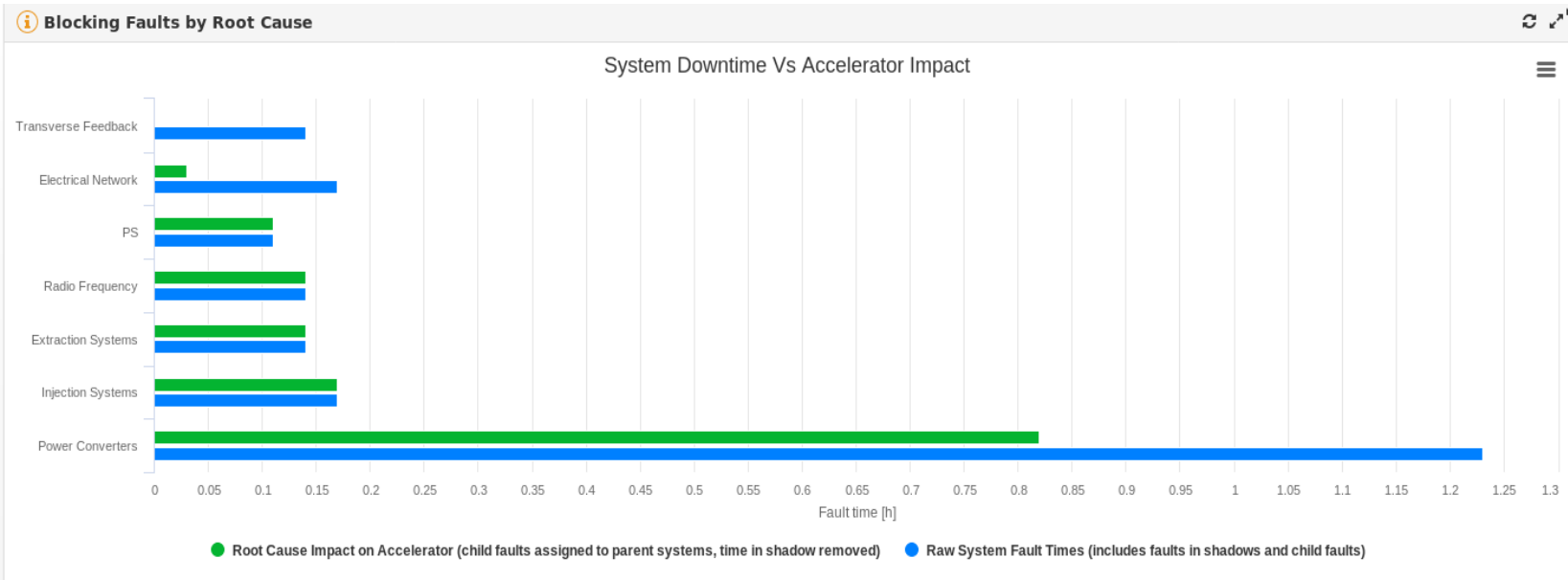
PSB Operation

B-train reliability run

- The B-train reliability run was paused on week 17 due to a white rabbit switch dropping frames unexpectedly.
- Temporary fix was found and the reliability run will be resumed next week. CO and RF working on the firmware issue.

Phase noise reliability run

- The phase-noise reliability run started this week and applied to LHC25, BCMS and MTE beams. Everything works ok. AD also in progress. ISOLDE and TOF to follow.

Qstrip hierarchy

- In preparation of the commissioning of an LIU Q-strip converter (planned to be integrated in operation during TS1)
- The hierarchy of the qstrip have been tested. The aim is to compress in a single graph all 3 hierarchies associated with the qstrips.
- The tests have been successful and the (minor) discrepancies observed have been tracked down to rounding within the makerule.

Hot spot

- Hot spot in section 5 (at the entrance of BHZ502) for all beams.
- Vertical steering in the ring (BR2.DVT13L4) plus other fine tunings effective in the reduction of BLM readings. The steering was applied to most operational beams. Still to be propagated to the MD users.

PSB MDs

- Preparation of LHCINDIV VdM beams (needed by LHC in week 24) in collaboration with PS OP was followed up
- LHC100ns beam prepared and tested in the PS (needed by LHC in week 24)
- High intensity BCMS beam (120E10/ring) prepared for SPS MD 3268
- High intensity LHC25 (300-350E10/ring) prepared for PS MD 3186
- Setting up low intensity bunch with low longitudinal emittance for SPS crab cavity test
- STAGISO declared with Pb53 and mapped for LBS line measurement MD

- **MDs ongoing in the PSB**

    - Optics studies

    - Loss maps

    - MTE optimisation

    - Phase noise studies

    - Brightness studies on BCMS and LHC25

    - PSB Transverse feedback commissioning

    - Finemet cavity setting up

    - Exploring the possibility of Q3 optics