The MINERνA Operations Report
All Experimenters Meeting

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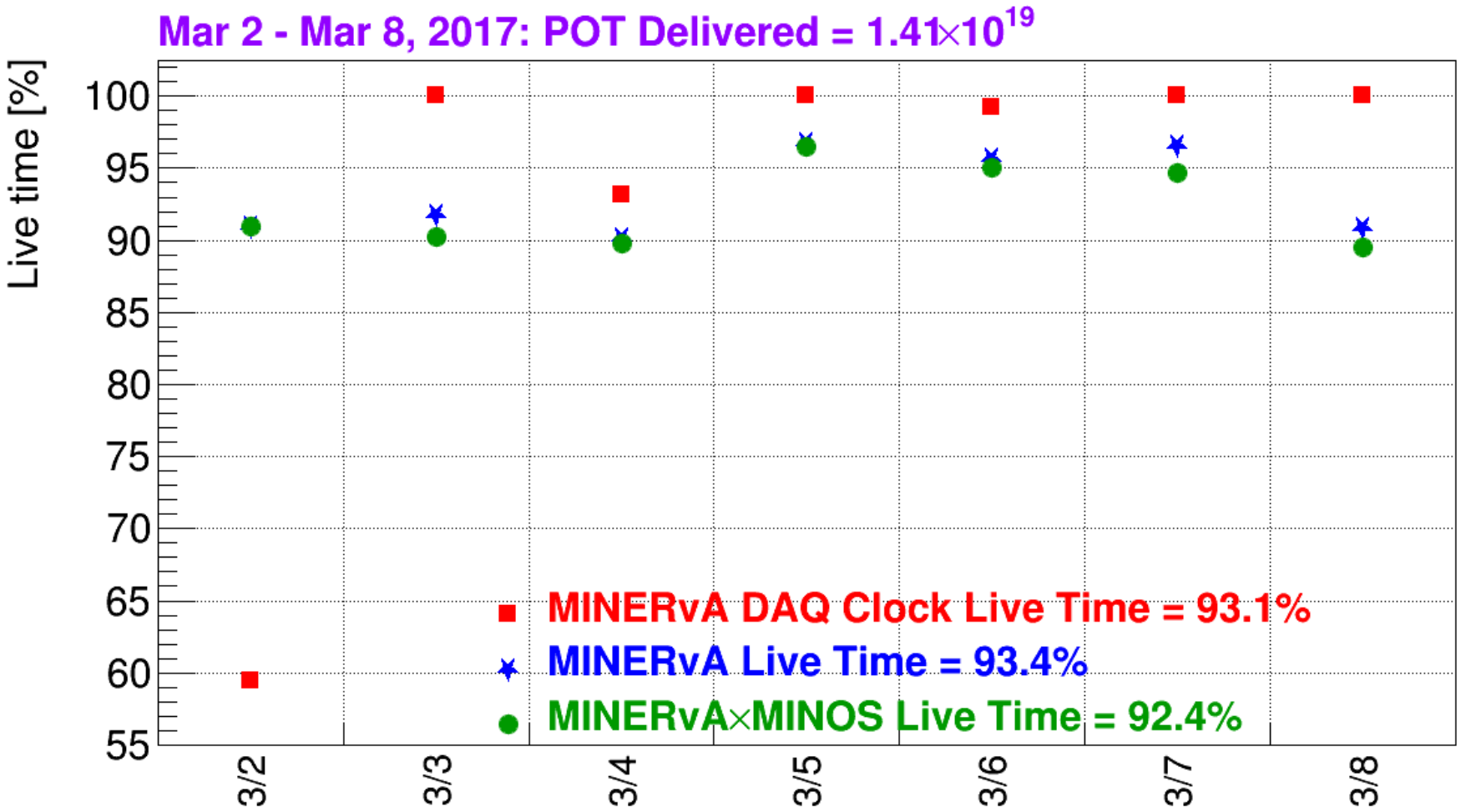
Mar 13, 2017


MELIORA

ν Data

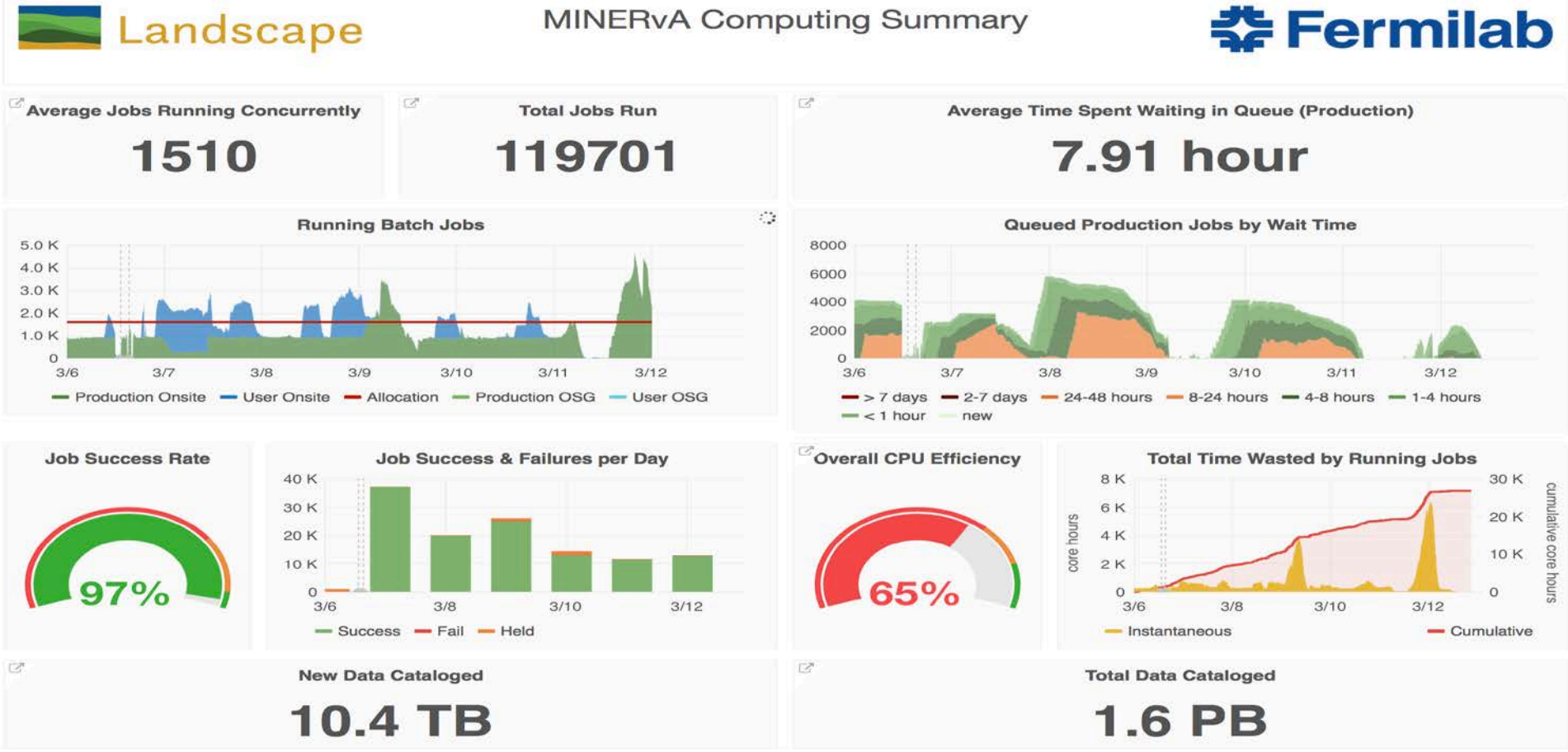

Mar 2 - Mar 8, 2017: POT Delivered = 1.41×10^19
Live time [%]
100
95
90
85
80
75
70
65
60
55
3/2
3/3
3/4
3/5
3/6
3/7
3/8
MINERvA DAQ Clock Live Time = 93.1%
MINERvA Live Time = 93.4%
MINERvA×MINOS Live Time = 92.4%

Mar 1-2 Shutdown

- It took ~ 1 ½ days to bring up MINOS after the Mar 1 power outage.
  - The both MINOS & MINERvA detectors were ready for beam when beam came back on Mar 2.
  - The timing system took longer thanwe expected to come back.
  - The RPS (rack protection system) kept tripping one of the racks.
    - The rack eventually stayed on. We were not sure the reason for the RPS kept tripping the rack off. It was either the RPS system was not setup correctly during the power up or there was a dirty drip monitor in the rack. Neither of these completely explains what we saw.
  - We thank Donatella Torretta, Steve Hahn, & Bill Badgett for resolving these issues.

ν Data

- Mar 2,3,6 & 8 - 92.1% MINERvA live
  - Some keep up jobs failed to process raw digits and these jobs died. This is the same problem we have had for the last 2 weeks.
  - The problem is due to bad data in the HV & timing bank (the FPGA bank) in a board on a gate. The unpacking sees this bad data and exits. A board on the chain is causing this problem. This chain has been reset, but that didn't help.
  - We have modified the unpacking to skip this gate, but it is not yet implemented. This will recover all the data except the bad gate.
- Mar 4 - 90.1% MINERvA live
  - The MINERvA DAQ stopped for ~ 1 ½ hours due to a hardware error.
  - The "Watch Dog" did not go off and page the experts. This was discussed last week.



- Period 03/06/2017 - 03/12/2017
- Average concurrent jobs is ~1500
- Job Success rate is good, but small fraction of held job due to user's analysis job (high memory usage)
- Overall CPU Efficiency is low due to the production job and user's job (high memory usage)