Period From: Fri, 06 Aug 2004 11:30 To: Fri, 13 Aug 2004 11:30 Calculated At: Fri, 13 Aug 2004 11:28

Length of time excluding scheduled MD: 144.00 hours

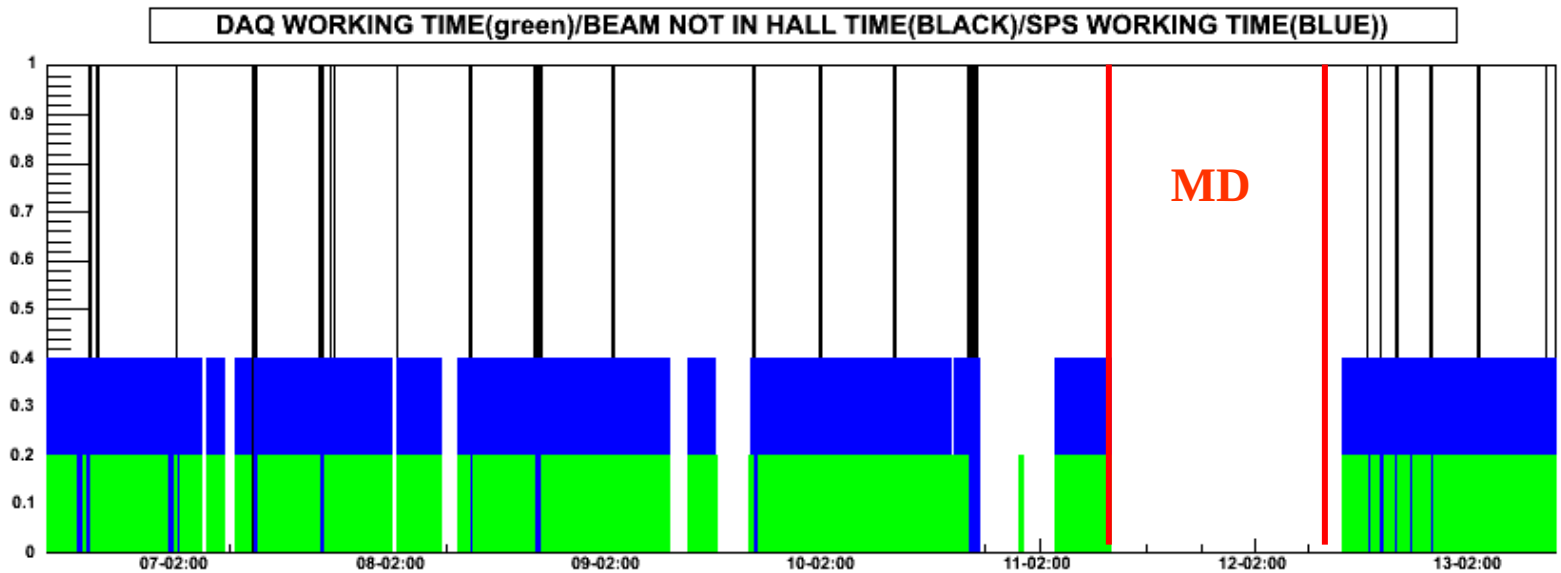
**** Efficiency of PS/SPS
a: Total SPS Circle (exclude scheduled MD): 31016.0
b: SPS spill with T6 current >30.0: 25654
c: Sum of T6 current 3136820.7
d: (=b/a) PS/SPS Efficiency: 82.7%

**** Muon Beam In HALL 888
f: SPS spill In Hall with Muon Count >100000.0: 24641
g: Sum of In Hall Muon Count: 4662001348460.0
h: (=f/b) SPS Spill Get in 888: 96.1%

**** Use of SPS/Inhall Spill in COMPASS
i: Spill used with ion chamber counting >100.0: 21604
j: (=i/f) Inhall spill used: 87.8%
k: (=i/b) SPS spill used: 84.2%

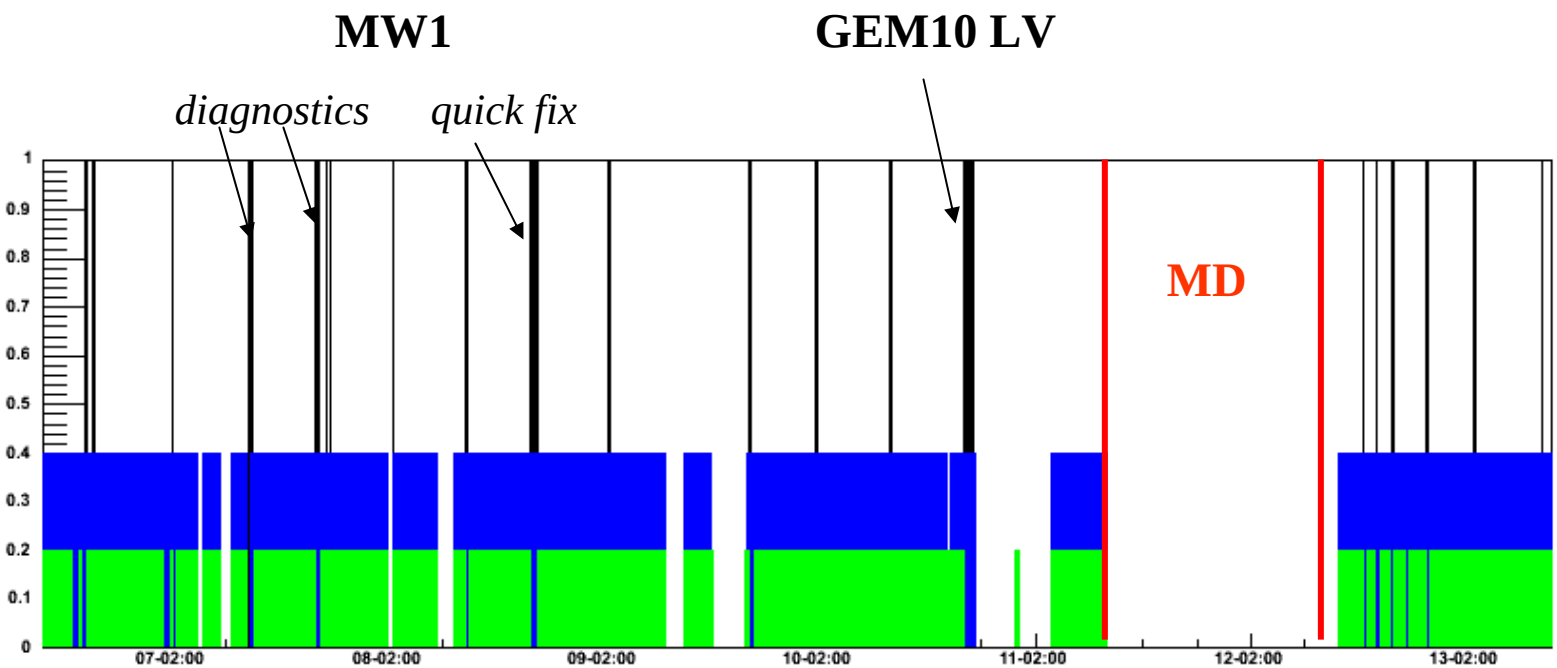
SPS: 82.7%
Phys: 84.2%
Total: 69.7%

Distribution of used spills:
field_rotation runs used 709 spills, 3.3%
physics- runs used 10812 spills, 50.5%
physics+ runs used 9723 spills, 44.5%
detector_test runs used 160 spills, 0.7%
DAQ_test runs used 60 spills, 0.3%
alignement runs used 114 spills, 0.5%



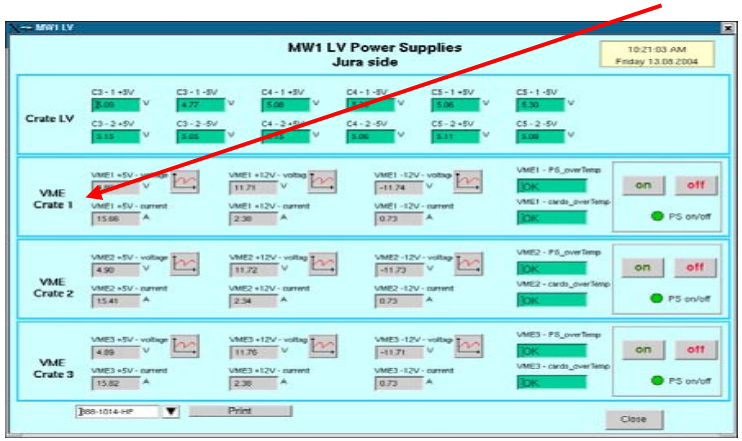
Hall accesses during 18h field rotation

(to fix overheating problems)



MW1 overheating problem

•First appears on Friday 6 afternoon; symptom: VME crate Trip + MTV errors



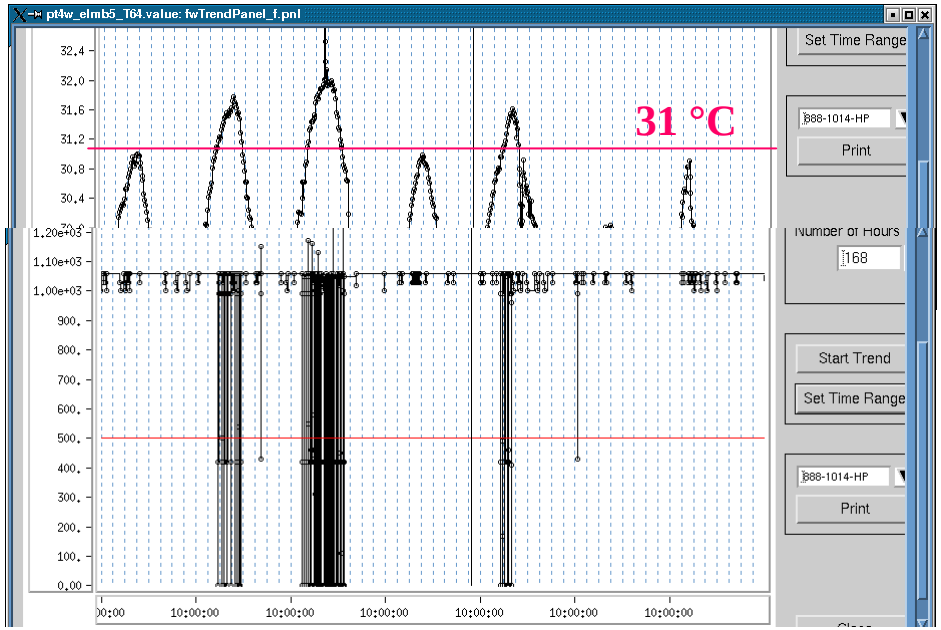
•Saturday afternoon: again a lot of MW1 VME crate 1 trips:
1st tentative fix with adding big fan in front of crate 1 fails - PVSS ELMB mismatch

•Sunday afternoon: move big fan to right crate (3) cures problem

•Wednesday (MD): source of problem is fans blocked in VME fan trays, all cleaned.

GEM10U overheating problem

•First appears on Saturday 7 afternoon; symptom: GEM10U LV trip + MTV errors



Temp Hall SM2

GEM10U LV

•Clear correlation with Temp Hall > 31 C

•Tuesday afternoon: GEM10U LV not optimally cooled in Caen crate, tried to screen empty slots.

•Wednesday MD: moved above crate up to have more air flow around Caen crate

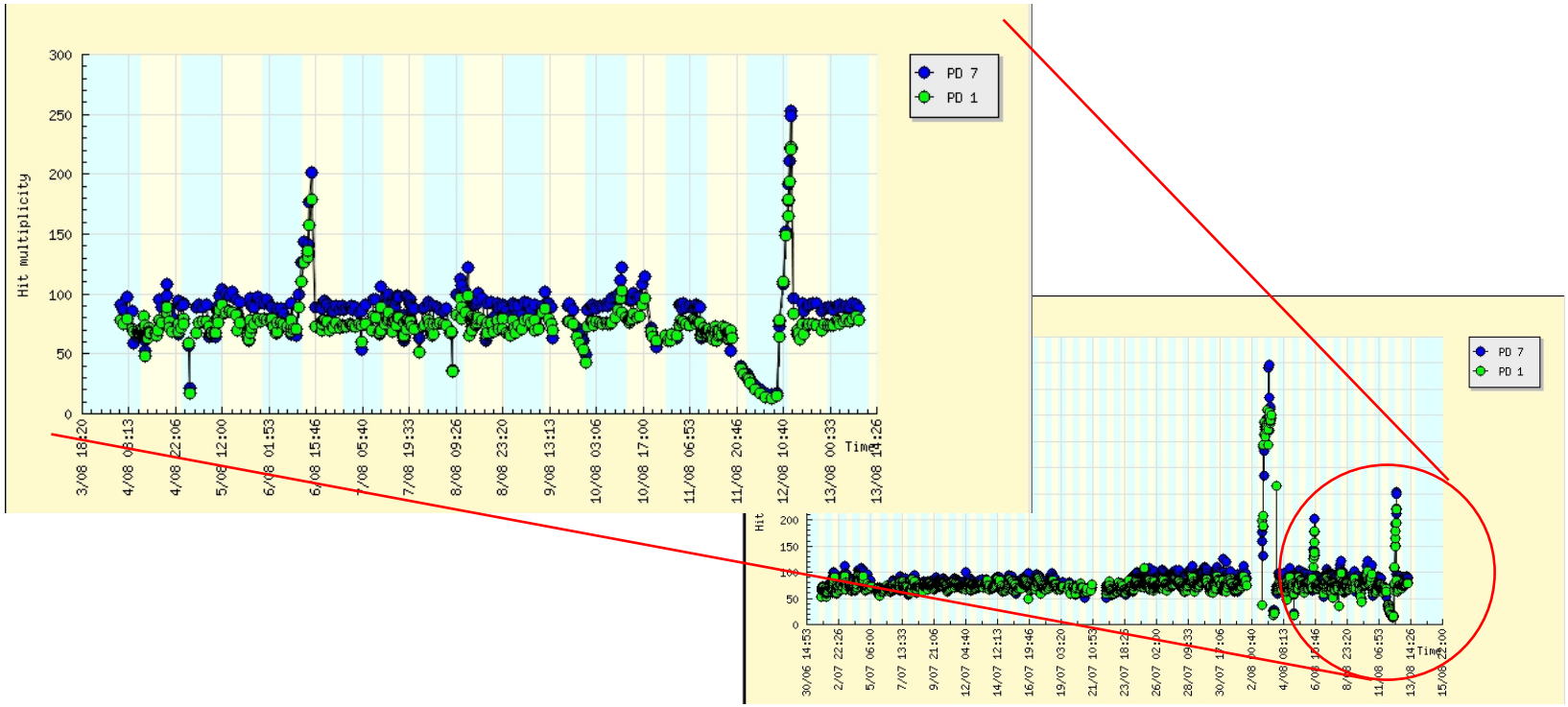
Other small problems during the week

•Several losses of GEM7 UV: ADC card changed on MD

•A lot of RICH ctrl server problems

happens since August 2, after « improvements » in SOR scripts

cause sometimes lack of pedestal measurements

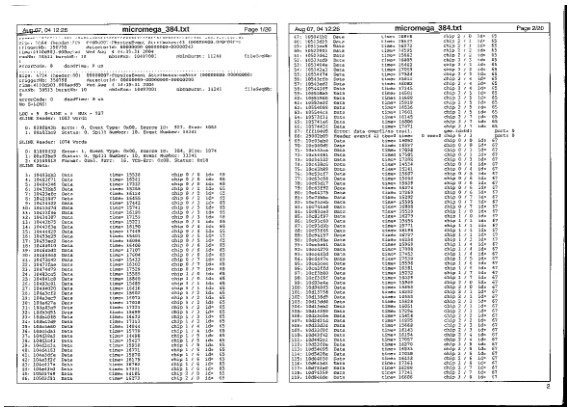


•Small rate of MM 384 Murphy TV errors…..

How to diagnose FE Murphy TV errors

•Initial observation: MM 384 MTV errors (source ID missing)

« High end special Catch diagnostics »: some events with all strips fired on MM1U



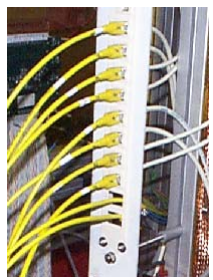
Sparks on 1U

Special noise

(after some tests with increased threshold)

•But problem disappears by disabling by « chance » port 15

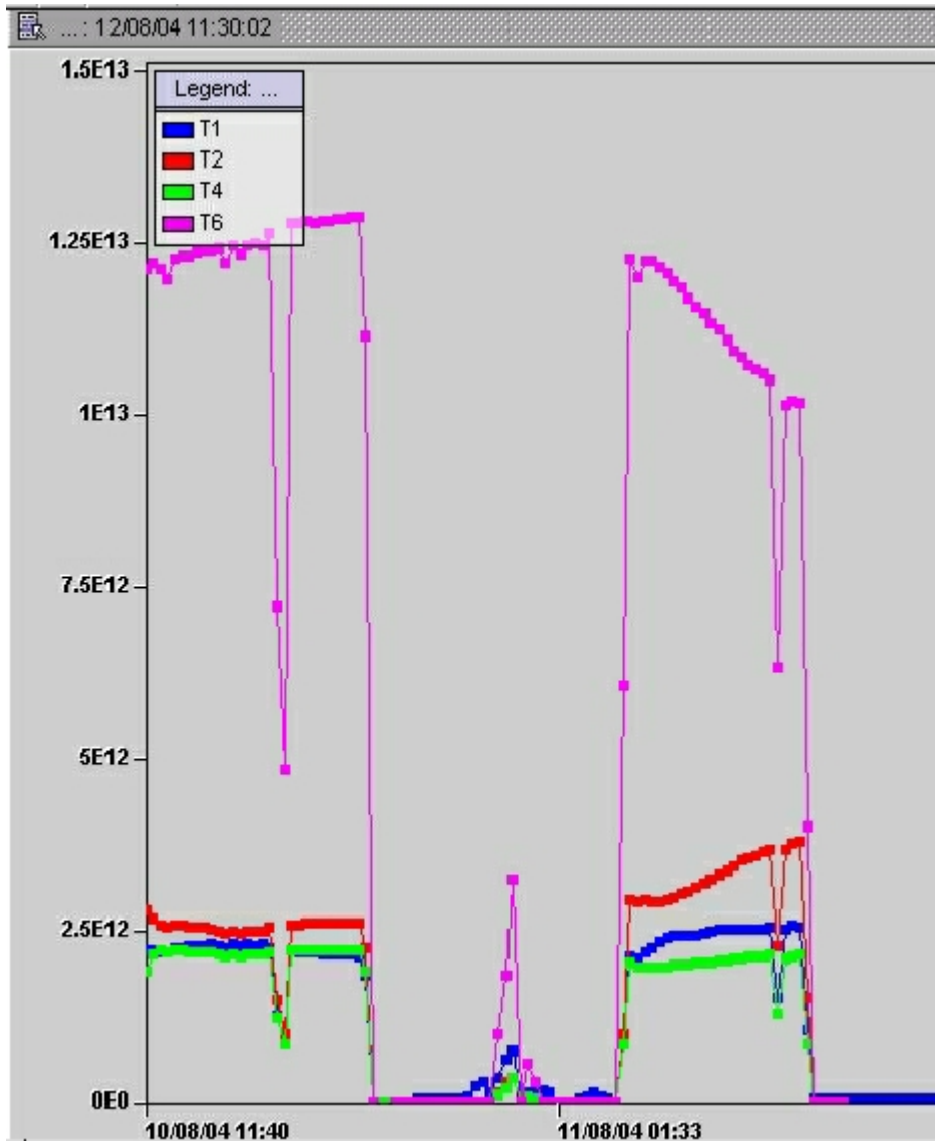
Good ’ol HL connections?



YES, not fully plugged HL

•Conclusion: need to revisit diagnostic tools

Beam « stealing »



Summary

•MW1 Vme crate overheating fixed
•GEM10U LV overheating localized, may need more work?
•GEM7 UV ADC card fixed
•RICH ctrl problems most probably due to SOR scripts
•MM 384 errors cured

•MWPC PA03X triplet cleaned, no more noise
•RICH bad optical connection (Bora 17, PD5) cured
•TRIG some dead channels fixed
•PT movement: additionnal measurements taken during MD

•PT micro-wave reversal during MD

Overall smooth week, tank you all