Period report 3.09.04-10.09.04

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General comments

- 3.9 - 6.9 transverse target polarization
- First-Last runs : 39896-39997
- PS/SPS efficiency 82.2%
- COMPASS efficiency 91.6%
- 7.9 - 10.9 longitudinal target polarization
- First-Last runs : 40082-40222
- PS/SPS efficiency 71.7%
- COMPASS efficiency 85.1%

Efficiency for Transversity

Time interval with usable T6 current but no beam in 888 : Sun, 05 Sep 2004 14:00 14.6 minutes, 53 spills

Period From: Fri, 03 Sep 2004 16:00 To: Mon, 06 Sep 2004 08:23 Calculated At: Thu, 09 Sep 2004 21:49

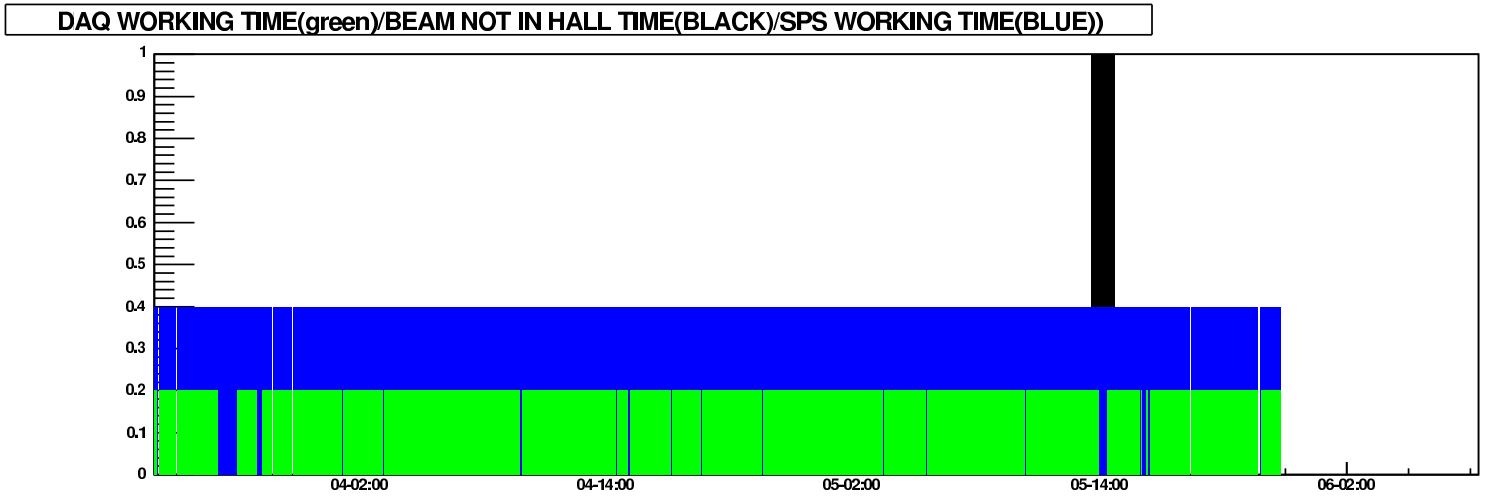
Length of time excluding scheduled MD: 64.38 hours

**** Efficiency of PS/SPS
a: Total SPS Circle (exclude scheduled MD): 13773.0
b: SPS spill with T6 current >30.0: 11320
c: Sum of T6 current 1460636.2
d: (=b/a) PS/SPS Efficiency: 82.2%

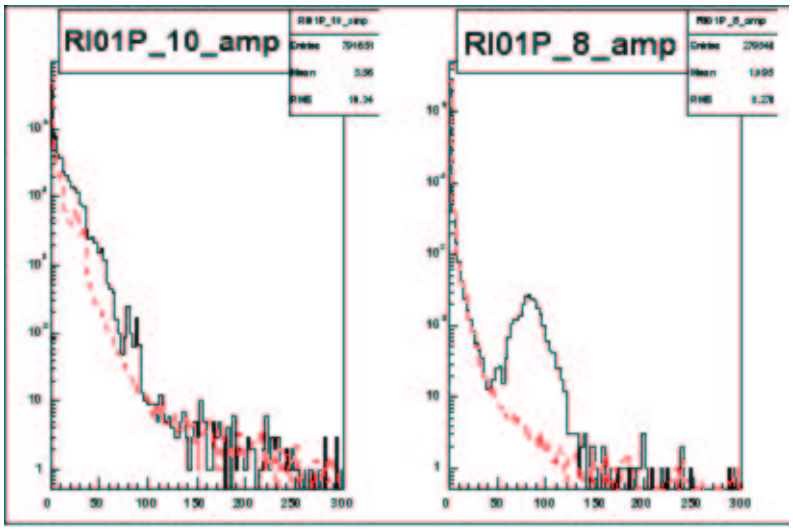
**** Muon Beam In HALL 888
f: SPS spill In Hall with Muon Count >100000.0: 11265
g: Sum of In Hall Muon Count: 2215198927860.0
h: (=f/b) SPS Spill Get in 888: 99.5%

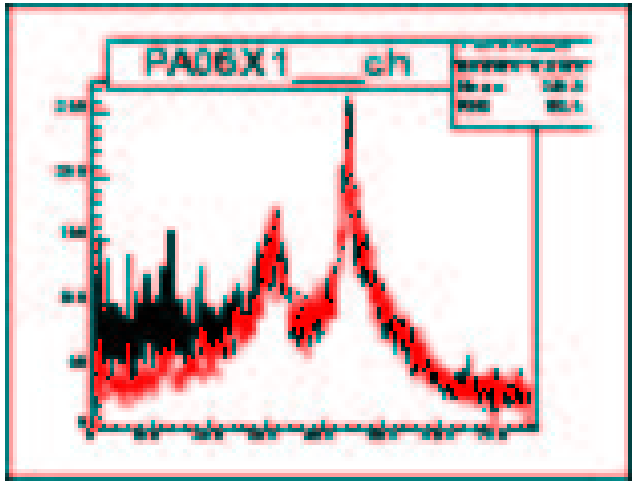
**** Use of SPS/Inhall Spill in COMPASS
i: Spill used with ion chamber counting >100.0: 10315
j: (=i/f) Inhall spill used: 91.6%
k: (=i/b) SPS spill used: 91.1%

Distribution of used spills:
transversity runs used 10315 spills, 100.0%



- RICH control; PD-8/10 amplitude bad shapes
- MWPC - noise in PA06X1
- STRAW trips (DL09 ST04X1 6mm 5)
- microMega trips (MM03V, MM03Y)
- Trigger: catch 67 (MT) was broken and changed
- water from DAQ air condition and an accident with the spokesperson
- no BEAM for last 9 h





Monday Machine Development

- TARGET
  The support of the magnet has been strengten by additional aluminium beam.
  Due to this modification target's vertical position changes to 1mm downstream
  and -0.3mm upstream, respectively, and the target movement after the field
  rotation becomes 3 times less
- Silicon
  GeSiCA ADC for 05V exchanged, manipulation to get rid of the noise in
  station 01XY
- DAQ/STRAW
  new thresholds for U3, V3 adjusted
- Trigger
  exchanged photomultipliers for HM4X down 2 and 6

Efficiency for Longitudinal

Period From: Tue, 07 Sep 2004 00:00 To: Fri, 10 Sep 2004 13:25 Calculated At: Fri, 10 Sep 2004 13:26

Length of time excluding scheduled MD: 85.42 hours

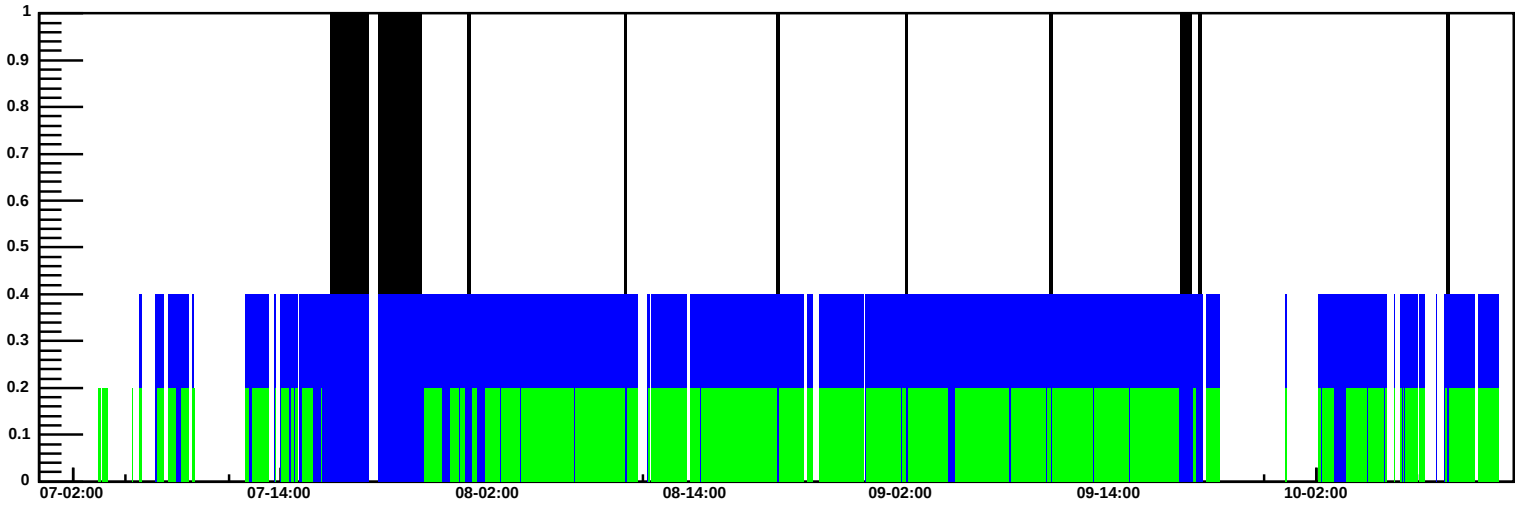
****** Efficiency of PS/SPS**
a: Total SPS Circle (exclude scheduled MD): 17079.0
b: SPS spill with T6 current >30.0: 12250
c: Sum of T6 current 1521885.1
d: (=b/a) PS/SPS Efficiency: 71.7%

****** Muon Beam In HALL 888**
f: SPS spill In Hall with Muon Count >100000.0: 10992
g: Sum of In Hall Muon Count: 2064398001220.0
h: (=f/b) SPS Spill Get in 888: 89.7%

****** Use of SPS/Inhall Spill in COMPASS**
i: Spill used with SF2X counting >100000.0: 9358
l: Sum of Used Spill SF2X count: 1783708445985.0
j: (=i/f) Inhall spill used: 85.1%
k: (=i/b) SPS spill used: 76.4%

Distribution of used spills:
field_rotation runs used 460 spills, 4.9%
random_trig runs used 139 spills, 1.5%
physics- runs used 3696 spills, 39.5%
physics+ runs used 5145 spills, 55.0%
calibration runs used 191 spills, 2.0%
detector_test runs used 16 spills, 0.2%
DAQ_test runs used 204 spills, 2.2%
alignement runs used 101 spills, 1.1%
physics runs used 20 spills, 0.2%

DAQ WORKING TIME(green)/BEAM NOT IN HALL TIME(BLACK)/SPS WORKING TIME(BLUE))



Efficiency for Longitudinal 2

List of Time intervals with usable T6 current but no beam in 888

1. Tue, 07 Sep 2004 16:55, 130.2 minutes, 432 spills

2. Tue, 07 Sep 2004 19:40, 149.7 minutes, 490 spills

3. Wed, 08 Sep 2004 00:49, 10.5 minutes, 26 spills

4. Wed, 08 Sep 2004 09:55, 9.0 minutes, 31 spills

5. Wed, 08 Sep 2004 18:45, 9.0 minutes, 31 spills

6. Thu, 09 Sep 2004 02:11, 9.0 minutes, 31 spills

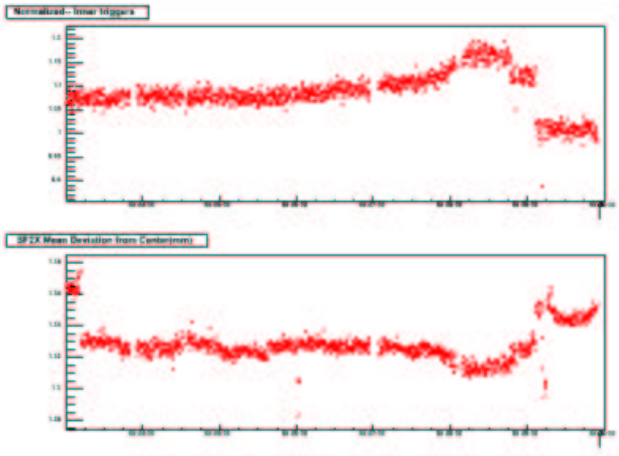
7. Thu, 09 Sep 2004 10:34, 8.7 minutes, 30 spills

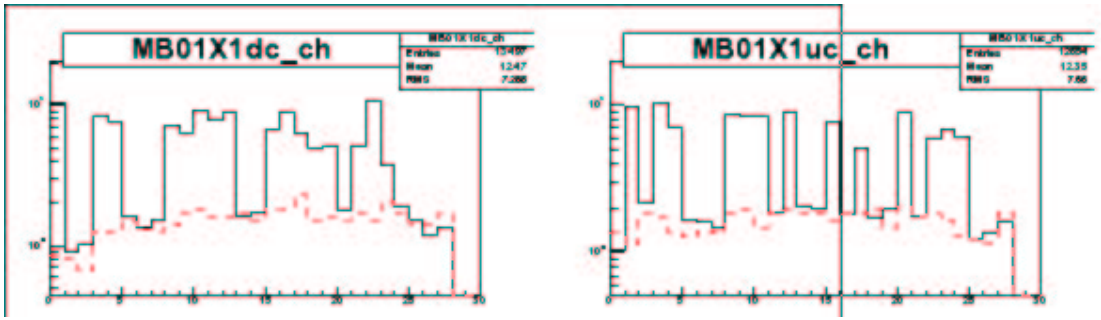
8. Thu, 09 Sep 2004 18:08, 37.8 minutes, 127 spills

9. Thu, 09 Sep 2004 19:10, 9.6 minutes, 32 spills

10. Fri, 10 Sep 2004 09:34, 8.7 minutes, 28 spills

- BEAM : properties and stability; Trigger rates
- RICH : 07.09 (16:50 - 22:30) access to exchange BORA for PD05/10
- GEM noise : LV for GM01X1neg was changed from 4.28V to 4.13V
- MW2 noise (LV power supply); BMS missing channel BM05P1-ch36
- ECAL2 : missed raw - solved by fuse changing
- STRAW, MWPC, RICH, GEM01X1 - noise, microMega MM03 trips
- GAS alarm 09.09 night TCR called, pump restarted





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