

Cosmics in Muon Spectrometer with Magnet on

Max-Planck-Institut für Physik

ATLAS Meeting, München 20.11.2006



Barrel Toroid Test

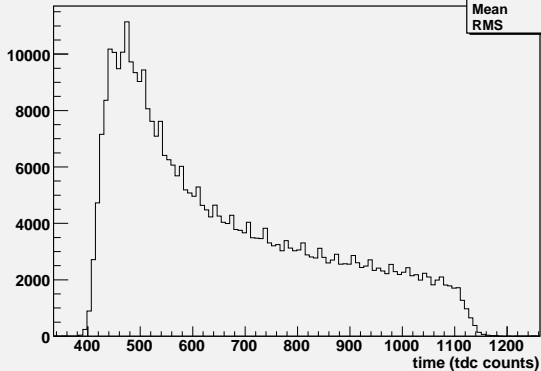
- Magnet ramped up twice to nominal current (20.5 kA)
- Saturday 8:30 - 16:30 ramp up from 0-20.5 kA with 2h stable Field at 16,18 and 20.5 kA
- Slow dump of magnetic field
- Saturday 20:30-23:30 ramp up to 20.5 kA
- Stable nominal field up to Sunday, 17:30
- Fast dump induced by stopping the cooling

Data taking

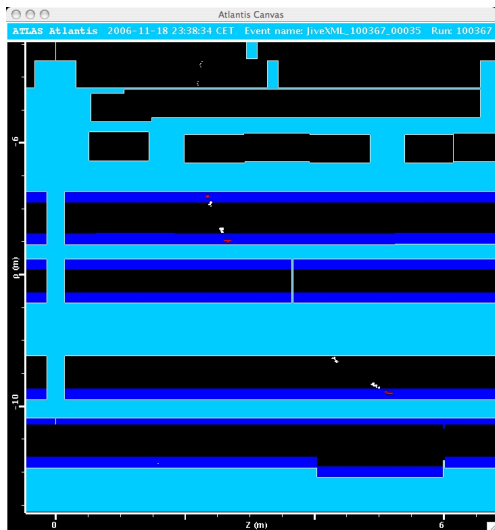
- Connected MDTs: BIL1,2,3, BML1,2,3 and BOL1,2,3 of sector 13 and BOF1,3 sector 12 + 14
- Connected RPCs: BML1,2,3 and BOL 1,2,3
- B-field sensors and parts of optical alignment system read out
- Collected about 700 k events at 20.5 kA
- Few percent of BOL-BOF overlap tracks to test the alignment
- 5/8 MDT-shifts covered by MPI

Drift Time Spectrum

TDC distribution in Chamber BML2A13 with ADC cut



Curved Track



First Summary

- Overall quite successful
- MDTs ran very stable
- RPCs had some HV problems (HV power supplies) and were running out of isobutane once
- DAQ Problems: Stopped after an arbitrary amount of events
- No problems found during fast dump of magnet
 - no dangerous deformations detected
 - no damage to electronics found
 - HV of BOFs was stable during fast dump
- Control system of magnet cooling pumps to slow

Big Wheel

UX15 Geneva Mon Nov 20 13:30:03 2006

