

Introduction

Jamie Boyd, CERN
Maria Jose Costa, IFIC-Valencia



Combined tracking for cosmics
16th January 2008



Cosmics combined runs

- **M3:** TRT, RPC, LAr, Tile
- **M4:** 1 run with TRT, RPC, MDTs synchronized (not calorimeters)
- **M6:**
 - 1st week of March
 - B = 0
 - MDT, RPC, CSC, TGC (partially)
 - SCT, TRT (partially)
 - Tile, LAr (very limited acceptance)
 - Release 13.2.0 (29th Jan)+AtlasPoint1
 - Status of Reconstruction in nightlies:
 - ID and Calos running
 - Muons not yet
- **Global cosmic runs** (if LHC schedule not changed)
 - April on
 - B ON/OFF (solenoid or toroid or both)
 - Full detector (Pixels!)



Cosmics simulation

- **B field ON** (both solenoid and toroid) requiring ≥ 1 hit in the TRT (~17K events):

`/castor/cern.ch/user/l/lytken/cosmic_13010/digitization/TRTBarrel/misaligned/`

- **B = 0** requiring ≥ 1 hit in the TRT (~300K events) :

`/castor/cern.ch/user/l/lytken/cosmic_13010/digitization/NoField/TRTBarrel/misaligned/dig.trtbarrel_ma*.root`



Combined reconstruction

- Could be tested:
 - with real data from M3, M4 (it would help to run over filtered ESDs, once available)
 - with simulated data for global cosmic runs (not yet for M6)
- We should send you detailed instructions on how to run from RecExCommission:
 - <https://twiki.cern.ch/twiki/bin/view/Atlas/AtlasOfflineCommissioning>
 - A working and stable release is 13.0.35.X but developments should go into 13.X.0 (as usual one has to deal with nightlies)