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Atlas.EtMiss and Taus in ATLAS

mailing list:
atlas-jets-combined@cernNOSPAMPLEASE.ch

* Back to General Jet/Etmiss/Tau page

Etmiss

Meetings

* JetETmiss meetings each two Wednesday at 17.00 CERN time (phone) [↗](#)

* also dedicated phone Fake Etmiss meetings when needed [↗](#)

* CSC Etmiss Note meetings

Etmiss reconstruction and calibration

Etmiss reconstruction and calibration is performed in the MissingEt package [↗](#).

ETMiss is calculated from the energy deposited in all calorimeter cells and from muons. A correction is applied for the energy lost in the cryostat (`MET_EtMissFinal` [↗](#)).

- The calorimeter cell energy can be calibrated in various different ways:
 - ◆ H1-style calibration: an H1 weight is applied, depending on cell energy density (E/V) and on the calorimeter region. H1-weights are optimized from jets. Different H1-weights are available for G3 and G4 simulated data and for different detector configuration
- - ◆ weights from Local Hadron Calibration of Topoclusters are applied
 - ◆ Refined calibration: apply different weights to cells owning to different reconstructed objects (electrons, jets,...)
- Muons reconstructed from Moore or from MuonBoy can be used.
- The correction for the energy lost in the cryostat is calculated from the energy deposited in cryostat by jets (NOT added in case of Local Hadron Calibration, where the weights correct also for energy lost in dead materials)

- The electronic noise suppression in calorimeters can be done or applying a cell energy threshold in term of number of sigma noise (default: $\text{abs}(E) > 2\sigma(\text{noise})$), or using only cells in Topological clusters [↗](#)

- H1-weights to be used, Muons choice, cryostat correction, Noise suppression method , criteria for the Identification of rec objects in Refined calib can be changed via `jobOptions`.

Default `MET_EtMissFinal` calculation in various releases [↗](#)

Starting from release 12.0.4 the Etmiss to be used for Physics is: `MET_EtMissRefFinal` [↗](#)

ETmiss is also calculated from truth particles for reference (`MET_EtMissTruth`).

More on MissingET

* MissingET Basic quantities [↗](#)

* How To Retrieve MET objects from AOD [↗](#)

* ESD/AOD MET Keys

* CBNT MissingET quantities till 12.0.0 [↗](#) , CBNT MissingET quantities in 12.0.1 [↗](#) , CBNT/AACBNT MissingET quantities in 12.0.4 [↗](#)

* Shift, Resolution, Tails...

* MissingET package Doxygen Documentation [↗](#)

* MissingETEvent package Doxygen Documentation [↗](#)

Fake ETmiss studies

* Fake muons study - Frank Paige talk at SUSY meeting 31 May 2006 [↗](#)

* Proposal to study Etmiss tails in main calorimeter crack region

* Etmiss significance in D0 - Ariel Schwartzman thesis (pag 187) [↗](#)

* CaloCells "killer" code, etc

* Compare Etmiss in ATLFAST with Etmiss in fullsim

Documentation

* Performance Documentation

* ATLAS ETmiss Talks at Conferences

Taus

mailing list

hypernews forum: hn-atlas-Atlas.TauWG@cernNOSPAMPLEASE.ch

Meetings_Tau

- * Tau meetings on third Tuesday of each month at 14.00 CERN time (phone) [☞](#)
- * Tau Mini-Workshop in Cracow, Poland, 27-28 February 2007 [☞](#)

tauRec calo-based algorithm ()

tauRec track-based algorithm ()

* A parametrisation of the Tau1P3P performance for fast simulation has been included in ATLFAST for release 12.0.4. Instructions on its use and other information can be found on the [Tau1P3Pfastsimulation](#) page.

RTT

The RunTimeTester [☞](#) (RTT) framework is used for testing of the tau reconstruction software in an automatic manner in the NICOS nightly builds. The tests for the tauRec and tau1p3p algorithms are described here.

Documentation_Tau

- * Tau Talks
- * ATLAS notes involving Taus [☞](#)

Taus in other experiments

- * Sarah Demers - CDF Thesis [☞](#)
- * Zongru wan - CDF Thesis [☞](#)
- * H1 Thesis [☞](#)
- * H1 Tau paper [☞](#)

Trigger Decision page

Tau trigger page

Useful Data Samples

* here the info about all MC samples

Major updates:

-- Main.cavalli - 30 Mar 2005 -- MichaelHeldmann - 17 May 2005 -- MichaelHeldmann - 09 Jun 2005

%RESPONSIBLE% DonatellaCavalli

%REVIEW%

- tr44vstr42.ps: tr44vstr42.ps
- 1205vs1204.ps: Validation of kit 12.0.5
- Tau1p3pNNandCuts.tar.gz: Example of using Tau1p3p NN and new cuts

This topic: AtlasArchive > TauEtMiss

Topic revision: r116 - 2007-10-19 - MPilarCasado



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