

-- FedericaTarsitano - 19 Mar 2014

---+!! Ecal Calibration with the PhiSymmetry method

---++ Laser Corrections and IC Constants in Ecal Endcap Rings

---+++ Laser Correction Distribution

| **Figures and Captions** |

| <p> **Examples of Laser Correction Constants Distributions in Ecal Endcap** </p> <p></p> <p>
</p> |

| <p>Each point/error bar in the following Graphs is the Mean/RMS value of the Laser Correction distribution histograms above</p> <p>
</p> |

---+++ IC Constants Distribution

| **Figures and Captions** |

| <p> **Examples of Intercalibration Constants Distributions in Ecal Endcap** </p> <p></p> <p></p> |

| <p>Each point/error bar in the following Graphs is the Mean/RMS value of the IC const distribution histograms above</p> <p></p> |

---+++

---+++ Comparison between Laser Corrections and IC Constants Trends

| **Figures** |

| |
 | |
 | <p> **Endcap Noise with laser correction (Zoom)** </p> <p></p> |

---++ Ecal Endcap (EE)
 ---+++ Noise Distributions and Trends in (GeV) (laser correction included)

| **Figures and Captions** |

| <p>Digi Distributions in (z,ix,iy=1,71,12) (left) and (z,ix,iy=-1,41,24) (right)</p> <p></p> |

| <p>Noise Distributions in (z,ring=-1,17) (left) and (z,ring=1,23) (right)</p> <p></p> |

| <p>Each point/error bar in the following Graphs is the Mean/RMS value of the noise (Sigma Digi Ring) distribution histograms above</p> <p>
</p> |

---+++ Noise Distributions and Trends in (GeV) (laser correction excluded)

| **Figures and Captions** |

| <p>Digi Distributions in (z,ix,iy=-1,41,24) (left) and (z,ix,iy=1,71,12) (right)</p> <p></p> |

| <p>Noise Distributions in (z,ring=-1,17) (left) and (z,ring=1,23) (right)</p> <p></p> |

| <p>Each point/error bar in the following Graphs is the Mean/RMS value of

the noise (Sigma Digi Ring) distribution histograms above</p> <p></p> |

---+++ Noise Distributions and Trends in ADC Counts

| **Figure | Caption |**

| | <p> </p> <p>EE Digi in ADC Counts</p> <p>in channel (zeta,x,y)=(1,10,35)</p> <p></p> |

| | <p> </p> <p>EE Digi noise in ADC Counts</p> <p>in channel (zeta, Ring)=(1,10)</p> <p></p> |

| | <p>EE+ Noise in ADC Counts</p> <p>Each point/error bar in the Graph is the Mean/Sigma value from the gaussian fit of the noise (Sigma Digi Ring) distribution histograms above</p> <p>Compare with DPG Results</p> <p>Bad fit for Rings 37, 38, 39</p> |

| | <p>EE- Noise in ADC Counts</p> <p>Each point/error bar in the Graph is the Mean/Sigma value from the gaussian fit of the noise (Sigma Digi Ring) distribution histograms above</p> <p>Compare with DPG Results</p> <p></p> Bad fit for Rings -37,-38, -39 <p></p> |

---++ <code>NEW </code>NEW ECAL ENDCAP RESULTS

---+++ <code>NEW </code>EE Noise in GeV

| **Figures and Captions ||**

| <p> Each point/error bar in the following Graphs is the Mean/RMS value of the noise (Sigma Digi Ring) distribution histograms</p> <p>Compare with DPG Results <code>📊</code>
</p> <p></p> ||

---+++ <code>NEW </code>Laser Correction Distribution

| **Figures and Captions ||**

| <p>Each point/error bar in the following Graphs is the Mean/RMS value of the Laser Correction distribution histograms</p> <p></p> ||

---++ Ecal Barrel (EB)

---+++ Noise Distributions and Trends in ADC Counts

| Figure | Caption |

| Error: (1) can't find EB_ADCDigi.png at /Sandbox.PhiSymmetryOldAlphaTag | <p> </p> <p>EB Digi in ADC Counts</p> <p>in channel (,)=(25,227)</p> <p> </p> |

| Error: (1) can't find EB_ADCSigma.png at /Sandbox.PhiSymmetryOldAlphaTag | <p> </p> <p>EB Digi noise in ADC Counts</p> <p>in channel (=25)</p> <p> </p> |

| Error: (1) can't find EB_ADCPlus.png at /Sandbox.PhiSymmetryOldAlphaTag | <p>EB+ Noise in ADC Counts</p> <p>Compare with DPG Results</p> <p> </p> |

| Error: (1) can't find EB_ADCMinus.png at /Sandbox.PhiSymmetryOldAlphaTag | <p>EB- Noise in ADC Counts</p> <p>Compare with DPG Results</p> <p> </p> |

---+++ Noise Distributions and Trends in GeV

| Figure | Caption |

| | <p>EB Digi in GeV</p> <p>in channel (,)=(25,227)</p> |

| | <p>EB Digi noise in GeV</p> <p>in channel (=25)</p> |

| | <p>EB+ Noise in GeV</p> <p>Each point/error bar in the Graph is the Mean/RMS value of the noise (Sigma Digi Ring) distribution histograms above</p> |

| | <p>EB- Noise in GeV</p>
 <p>Each point/error bar in the Graph is the Mean/RMS value of the noise (Sigma Digi Ring) distribution histograms above</p> |

---+++ File List

```
<pre><verbatim>'file:3A68B847-F259-E211-AACB-003048D2C0F2.root',
'file:56CAA923-CF59-E211-B6D0-001D09F25479.root',
'file:84C319D1-C159-E211-B174-001D09F28F25.root',
'file:D0216695-E859-E211-B15B-001D09F2905B.root',
'file:C8E036B1-E059-E211-BC9E-001D09F26C5C.root',
'file:A20150FA-D859-E211-AB49-001D09F2915A.root',
'file:EA9E6FD9-035A-E211-BF63-001D09F2B30B.root',
'file:8C1A52D9-035A-E211-BD21-001D09F24353.root',
'file:ECDD2293-F159-E211-BED2-001D09F2AD84.root',
'file:08B6C425-8859-E211-8B72-001D09F2B30B.root' </verbatim>
</pre>
```

---+++ Analyzer and Output Files

---+++ Ecal Endcap

| Subject | Analyzer | Output File |

| Laser Distribution and Trend | EELaser.cc |

/data1/ftarsita/ECALData/CMSSW_5_3_5/src/Results/EELaser.root |

| IC const. Distribution and Trend | ICconstEE.cc |

/afs/cern.ch/work/f/ftarsita/EnergyPedEcal/CMSSW_5_3_5/src/Results2/EEICconst.root |

| Digi and Noise in ADC Counts | EEADC.cc |

/data1/ftarsita/ECALData/CMSSW_5_3_5/src/Results/EE_ADC.root |

| Digi and Noise in GeV with Laser Correction | EEGeV.cc |

/afs/cern.ch/work/f/ftarsita/EnergyPedEcal/CMSSW_5_3_5/src/Results2/EEGeV_withLaserCorrection.root |

| Digi and Noise in GeV (no Laser Correction) | EEGeV.cc |

/data1/ftarsita/ECALData/CMSSW_5_3_5/src/Results/EEGeV_noLaserCorrection.root |

---+++ Ecal Barrel

| Subject | Analyzer | Output File |

| Digi and Noise in ADC Counts | NewHistoAnalyzer.cc |

/data1/ftarsita/ECALData/CMSSW_5_3_5/src/Results/EB_ADC.root |
| Digi and Noise in GeV | EBGeV.cc | /data1/ftarsita/ECALData/CMSSW_5_3_5/src/Results/EB_GeV.root |
---++ Useful links and Analyses

CMS-DP-2013/007, 2012 ECAL detector performance plots 

CMS AN AN-10-215, Intercalibration of the ECAL Barrel using the azimuthal symmetry method on 2009/2010 data 

Set ALLOWTOPICVIEW = FedericaTarsitano

Set ALLOWTOPICCHANGE = FedericaTarsitano

Set ALLOWTOPICRENAME = FedericaTarsitano

This topic: Sandbox > PhiSymmetryOldAlphaTag
Topic revision: r1 - 2014-05-31 - FedericaTarsitano



Copyright &© 2008-2021 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.
or Ideas, requests, problems regarding TWiki? use Discourse or Send feedback