

First look at the 2007 Electron Data

Cristina Cârloganu









C Cârloganu @ 1.12.08







First Look at the 2007 Electron Data



Energy Response





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First Look at the 2007 Electron Data





10 GeV 330664 20 GeV 330658 330215 330218 331265 30 GeV 330224 330429 40 GeV 50 GeV 330228



- no alignment problems seen
- less energy loss upstream ECAL than in 2006
- less lateral leakage than in 2006
- missing lower slabs in the first stack
- some noisy layers

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- very narrow *y* profile of the beam in some runs
- hold values not checked in DB
- nominal mean momentum of the run missing in the reco files
- beam momentum spread not calculated ...



Data Used and Caveats



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80 100

X (mm)

0 20 40 60





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$$\frac{\Delta E_{\text{beam}}}{E_{\text{beam}}} = \frac{0.12}{E_{\text{beam}}(\text{GeV})} \oplus 0.1\% \oplus 1 \text{ / } E_{\text{beam}}(\text{GeV})$$

Calorimeter for ILC

















2007 data in *rough* agreement with 2006 data (linearity, resolution)

TO DO's:

- read out the collimator settings to calculate beam mean value and spread
- try to estimate the energy fluctuations due to the trigger jitter
- look in detail into the MC simulation ...