Changes coming in p13.02/.03

✓ Calunpdata
  - Zero suppression applied in MC. Correct 2.5 sigma cut applied
  - Versioning to get correct gain path for previous pxx MC
  - Common switching point for gain path for pileup and cal_nlc

✓ Caltables
  - Correct gain path for MC packing
  - Weights for CCMG and ECMG updated and versioned – already done for ICD in p12
  - Corrected format of noise and zero suppression data file
    - channel rmean8 rrms8 rfit8 rsigma8 LMEAN8 LRMS8 LFIT8 LSIGMA8 rmean1 rrms1 rfit1 rsigma1 LMEAN1 LRMS1 LFIT1 LSIGMA1
    - channel rmean8 rrms8 rfit8 rsigma8 rmean1 rrms1 rfit1 rsigma1 LMEAN8 LRMS8 LFIT8 LSIGMA8 LMEAN1 LRMS1 LFIT1 LSIGMA1

⊗ Caldata
  - Modifications made for gain path persistence in pileup

⊗ Pileup
  - Uses the new noise file (LADC sigmas)
  - Sets gain path in persistent way
Initial results

- Zero-bias no beam run
  - 4800-5200 cells in UnpackedDataChunk
  - 450-530 after zero suppression in CalDataChunk

- Simulated electron, pT>20 GeV
  - 4600-4800 cells in UDC
  - 530-590 after suppression in the CalDataChunk

- Naive expectations:
  - 1.0 sigma cut  32% of 47.7k  = 15k
  - 1.5 sigma cut  13.4% of 47.7k = 6.4k
  - 2.5 sigma cut  1.24% of 47.7k = 590
Mods to caltables/rcp/plt_latest.rcp

// calorimeter weights for the pmc03 MC data

// Mods: May-20-02 AST Change ICD weight from 0.0000694 to 0.0000936

// string version = "plt_latest"

int deb_lev=0;

//float ADCtoGeV=(0.0002222 0.0002222 0.0002222 0.00005 0.0002222 0.0002222 0.0002222 0.0002222 0.0002222 0.0002222)

//Factors changed to take care of the switched resistors--factor of 32/23

float ADCtoGeV=(0.0003086 0.0003086 0.0003086 0.0000936 0.0003086 0.0003086 0.0003086 0.0003086 0.0003086 0.0003086)

//

float Weight_cc_em1 = 31.1991 //ilayer = 1, |ieta| <= 12
float Weight_cc_em2 = 9.39923 //ilayer = 2, |ieta| <= 12
float Weight_cc_em3 = 25.715625 //ilayer = 3,4,5,6, |ieta| <= 12
float Weight_cc_em4 = 28.03281 //ilayer = 7, |ieta| <= 12

//

float Weight_cc_fh1 = 24.8846 //ilayer = 11, |ieta| <= 10
float Weight_cc_fh2 = 23.3069 //ilayer = 12, |ieta| <= 10
float Weight_cc_fh3 = 27.913 //ilayer = 13, |ieta| <= 10
float Weight_cc_ch = 95.6707 //ilayer = 15, |ieta| <= 6

//

float Weight_ec_em1 = 32.9612 //ilayer = 1, |ieta| >= 14
float Weight_ec_em2 = 17.0792 //ilayer = 2, |ieta| >= 14
float Weight_ec_em3 = 33.124455 //ilayer = 3,4,5,6, |ieta| >= 14
float Weight_ec_em4 = 39.500565 //ilayer = 7, |ieta| >= 14

//

float Weight_ec_ih1 = 27.4569 //ilayer = 11, |ieta| >= 17
float Weight_ec_ih2 = 26.0789 //ilayer = 12, |ieta| >= 18
float Weight_ec_ih3 = 26.2070 //ilayer = 13, |ieta| >= 19
float Weight_ec_ih4 = 27.9771 //ilayer = 14, |ieta| >= 20
float Weight_ec_ih = 92.0175 //ilayer = 15, |ieta| >= 21

//

float Weight_ec_mh1 = 29.8578 //ilayer = 11, 11 <= |ieta| <= 16
float Weight_ec_mh2 = 24.1944 //ilayer = 12, 12 <= |ieta| <= 17
float Weight_ec_mh3 = 24.6039 //ilayer = 13, 13 <= |ieta| <= 17
float Weight_ec_mh4 = 29.1024 //ilayer = 14, 14 <= |ieta| <= 18
float Weight_ec_mch = 89.3152 //ilayer = 15, 14 <= |ieta| <= 20

//

float Weight_ec_oh1 = 106.651 //ilayer = 15, 8 <= |ieta| <= 12
float Weight_ec_oh2 = 103.618 //ilayer = 16
float Weight_ec_oh3 = 116.791 //ilayer = 17

//

float Weight_ec_mg1 = 45.5699 //ilayer = 8, |ieta|=8
float Weight_ec_mg2 = 39.0468 //ilayer = 8, |ieta|=9
float Weight_ec_mg3 = 39.6183 //ilayer = 8, |ieta|=10
float Weight_ec_mg4 = 42.4049 //ilayer = 8, |ieta|=11

float Weight_ec_mg5 = 35.9218 //ilayer = 8, |ieta|=12

float Weight_ec_mg8 = 129.922 //ilayer = 10, |ieta|=8
float Weight_ec_mg9 = 95.6857 //ilayer = 10, |ieta|=9
float Weight_ec_mg10 = 83.2803 //ilayer = 10, |ieta|=10
float Weight_ec_mg11 = 92.6608 //ilayer = 10, |ieta|=11
float Weight_ec_mg12 = 76.1909 //ilayer = 10, |ieta|=12
float Weight_ec_mg13 = 72.8625 //ilayer = 10, |ieta|=13

//

float Weight_icd1 = 72.6591 //ilayer = 9, |ieta|=12
float Weight_icd2 = 69.5046 //ilayer = 9, |ieta|=13
float Weight_icd3 = 63.4282 //ilayer = 9, |ieta|=14

float Weight_ec_mg8 = 129.922 //ilayer = 10, |ieta|=8
float Weight_ec_mg9 = 95.6857 //ilayer = 10, |ieta|=9
float Weight_ec_mg10 = 83.2803 //ilayer = 10, |ieta|=10
float Weight_ec_mg11 = 92.6608 //ilayer = 10, |ieta|=11
float Weight_ec_mg12 = 76.1909 //ilayer = 10, |ieta|=12
float Weight_ec_mg13 = 72.8625 //ilayer = 10, |ieta|=13

//

float Weight_cps = 11.4154
float Weight_fps = 15.307

Increase by factor 1.95 to 70.04751

Split into
ieta 11,12 29.8578
ieta 13,14 58.2227
ieta 15,16 29.8578
Preamps used in readout 10 pF feedback capacitor rather than the usual 5 pF found at these layers

Increase weight by ~ 10.5/5.5 (actually 1.95)