```
        CALL ValOrdr(Qcrr,Ncharg)
C
C------ Calculated Truncated Mean
        Nft = Ifix(0.70*Ncharg)
        CALL AvgStd(Qcrr,NFT,PHAVG,RMS,SD)
C
C       Get standard diveation of truncated mean of pulse heights from one
C       of pulse heights in a sample per track
        XNFT = NFT
        PHSD = SD/SQRT(XNFT)

        IF(IRUN .LE. 0) GOTO 8000
C
C -----   Applying Run-By-Run Correction
C   ---   Entry piont of Run_stdPh array for the current run--IRUN
          IEP = IRUN - IR_Start + 1
          Scal = Run_StdPh(IEP)/StdPh
          PH_RUN_CRR = PHAVG/Scal
C
C ----    Convert the standard Pulse height from Fermi-Plateau particles
C         to one from min-I particles. Currenty the releativistic rise in
C         energy loss is 0.****
CSSJ31/1/94 PHAVG_STD = 0.682 * Run_StdPh(IEP)     !PH for M.I.P.
          PHAVG_STD = 0.651 * Run_StdPh(IEP)     !PH for M.I.P.
C
C ----    Calculate nomorlized pulse height and diveation.
8000      IF(IRUN .GT. 0) THEN
            PHAVG_Nml = PHAVG/PHAVG_STD          ! Nomorlized Pulse Height
          ELSE
            If(Scal_E2Adc .LE. 0.0) Then
              PhAvg_MCStd = 1D-9*dEdx_Std*Scal_E_To_ADCs
             Else
              PhAvg_MCStd = 1D-9*dEdx_Std*Scal_E2Adc
            End If
            PHAVG_Nml = PHAVG/PhAvg_MCStd       ! Nomorlized Pulse Height
C        -- Divide by 0.93 to make the averaged normalized pulse height
C           is around 1.0
            PHAvg_Nml = PHAvg_Nml/0.93    ! For temp. test

C*** MHK 931119  TEMPORARY FIX so PHAVG_STD is defined for
C*** MHK 931119  Monte Carlo data.
            PHAVG_STD = PHAVG_MCStd
          END IF
C
C ----  Calculate Particle Weight
C    ---  Loop for all particles here
C      ---  Select Method of Density Crection first. Meth = 1 indicates
C           using Sternheimer Crection.  Meth .NE. 1 indicates using
C           experimental data correction.
          Meth = 2
          Pmt = Pmont * 1000.0              ! In MeV/C Unit
          Do M = 1, 5
            Call MPdEdX(Meth,Mass(M),Pmt,Smp_lngth,PdEdX)
            E_NMLZ = PdEdX/dEdX_STD    ! Nomorlized energy loss
            Shift_dEdX =  - 0.32828 + 0.23939*E_NMLZ
     &                    + 0.01152*E_NMLZ**2 + 0.0*E_NMLZ**3
            If(Shift_dEdX .GE. 0.005) Then
              E_NMLZ = E_NMLZ - Shift_dEdX
C For  electron, another shift will be made to fit M.C..
C                       ----- Shijun Sun   Apr.14 1995
              If(Irun .LE. 0 .AND. M .EQ. 1 ) E_NMLZ = E_NMLZ - 0.05
            End If
```