Subject: Re: Different results for same information extracted in different ways
Posted by Klaus Götzen on Mon, 10 Nov 2014 16:13:46 GMT
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Hi Mamen,

you are setting the branch addresses with wrong type, feppx and eppid are arrays[ncnd]. If you check, you see

```
root [5] epempi0Tuple.Print("feppx*")
******************************************************************************
*Br    0 :feppx     : feppx[ncnd]/F                                       *
*Entries :   477980 : Total  Size=    3999009 bytes  File Size  =    2757478 *

root [6] epempi0Tuple.Print("eppid*")
******************************************************************************
*Br    0 :eppid     : eppid[ncnd]/I                                       *
*Entries :   477980 : Total  Size=    3999002 bytes  File Size  =    1021207 *
```

The number 477980 is exactly the number of events you see in your second approach.

You should do the loop like this:

```
 float feppx[100];
 int eppid[100];
 int ncnd;

 epempi0TupleReco->SetBranchAddress("feppx", &feppx);
 epempi0TupleReco->SetBranchAddress("eppid", &eppid);
 epempi0TupleReco->SetBranchAddress("ncnd", &ncnd);

 TH1F *Reco2;
 Reco2 = new TH1F("Fill", "Fill", NBINS, BINMIN, BINMAX);

 long NEntriesReco=(long)epempi0TupleReco->GetEntries();

 for (int k=0; k<NEntriesReco; k++)
 {
  epempi0TupleReco->GetEntry(k);

  if (k % 100000 == 0 && k != 0) cout<<"*** Reco Loop *** Getting Entry: "<< k << endl;

  for (int kk=0;kk<ncnd;++kk)
    Reco2->Fill(feppx[kk]);
 }
```

With that I get the output:

File: epempi0-W2-10-Delta0-bw-LargeQ2-Merged.root

Number of events in the Histogram using Project:
Total_int (0-9) Integral (1-8) GetEntries
500104 500104 500104
*** Reco Loop *** Getting Entry: 100000
*** Reco Loop *** Getting Entry: 200000
*** Reco Loop *** Getting Entry: 300000
*** Reco Loop *** Getting Entry: 400000
Number of events in the Histogram looping over TTree:
Total_intF (0-9) IntegralF (1-8) GetEntriesF
500104 500104 500104

Best,
Klaus
