```
struct TupMcEntry
{
  //first track quantities
  float pt;
  float eta;
  float phi;
  float mass;

  //Number of hits left in tpc, ist, hft, etc
  int nGeantTpc;
  int nGeantIst;
  int nGeantHft;

  //Ist geant global coordinates
  float mcGx;
  float mcGy;
  float mcGz;

  //event number
  int evnum;

  //Ist reco global coordinates
  float mcRx;
  float mcRy;
  float mcRz;

  //Ist/Hft specifics
  int isInIst;//0 if no, 1 if yes
  int isInHft;//0 if no, 1 if yes
  int layer;
  int ladder;
  int wafer;

  //Was this added to track?
  int onTrack;//0 if no, 1 if yes

  //if so, store properties of reco track
  float recoPt;
  float recoEta;
  float recoPhi;
  int recoNhitsTpc;
  int recoNhitsIst;
  int recoNhitsHft;
  int recoNhits;
  float recoTrackChi2;
  float recoVertexX;
  float recoVertexY;
  float recoVertexZ;
  float recoVertexChi2;
  int rTrackType; //0=global,1=primary,2=tpt,3=secondary,4=estGlobal,5=estPrimar
y

  //is this hit on the track that best matches to the mc track?
  int rightTrack;//0 if no, 1 if yes

  //how well does this hit's track match to the mc track?
  int sharedTpcHits;
  float percentSharedTpcHits;
```