Proton, neutron,deutron in AuAu and ZrZr at STAR 19.6GeV

yulou

Proton, neutron vs Npart(Tprofile)

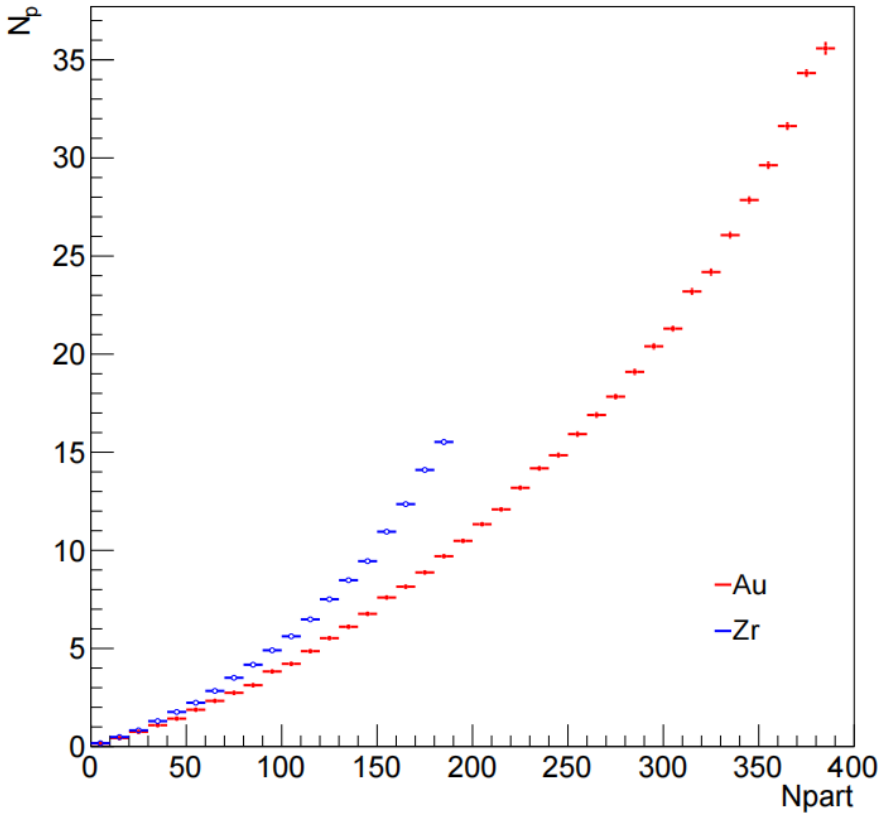
2.3 UrqmdTimestep

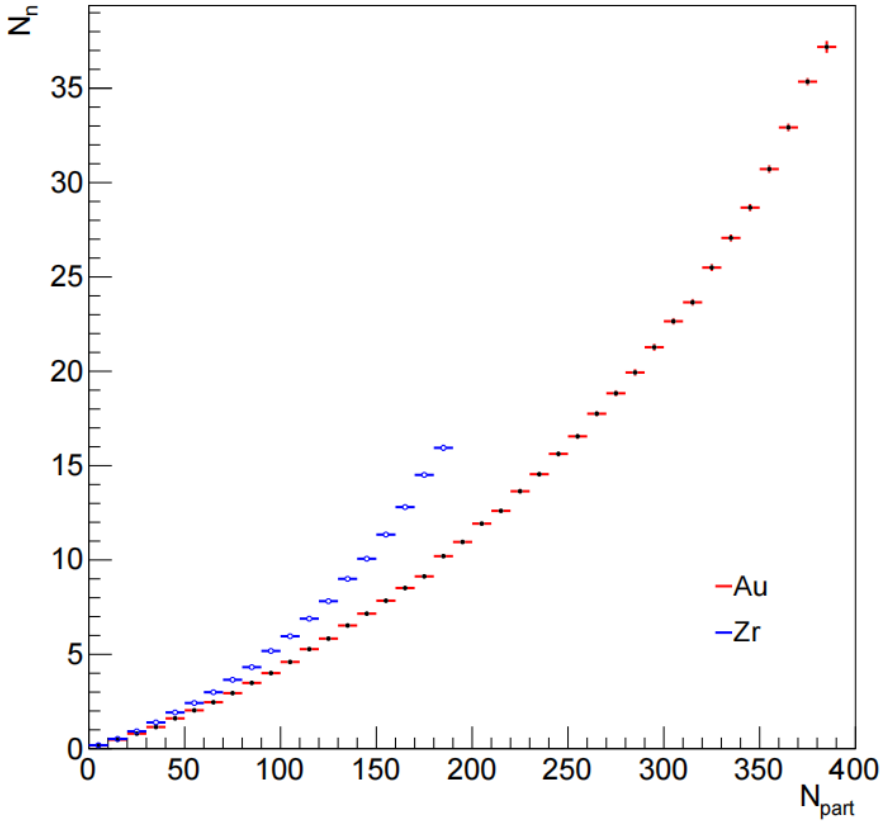
存储 UrQMD 时间步信息的子结构。索引参数按照时间顺序排序。

`UInt_t nPart()`

返回参与者核子数。该值非 UrQMD 原生，计算方法为弹核和靶核的核子总数与 parentCollisionType%100==0 的径迹数之差。

```
//N_part
const UShort_t mNPart = (UShort_t)urqmdDst->timestep(0)->nPart();
```

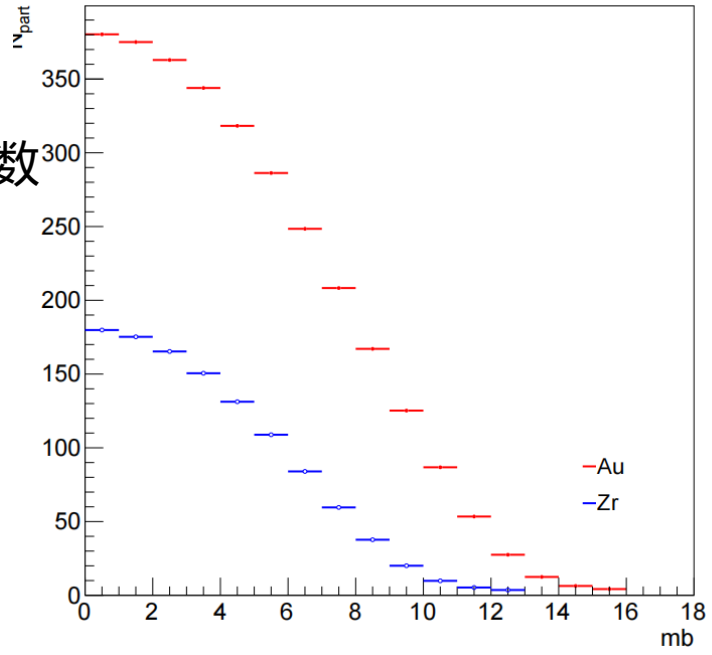




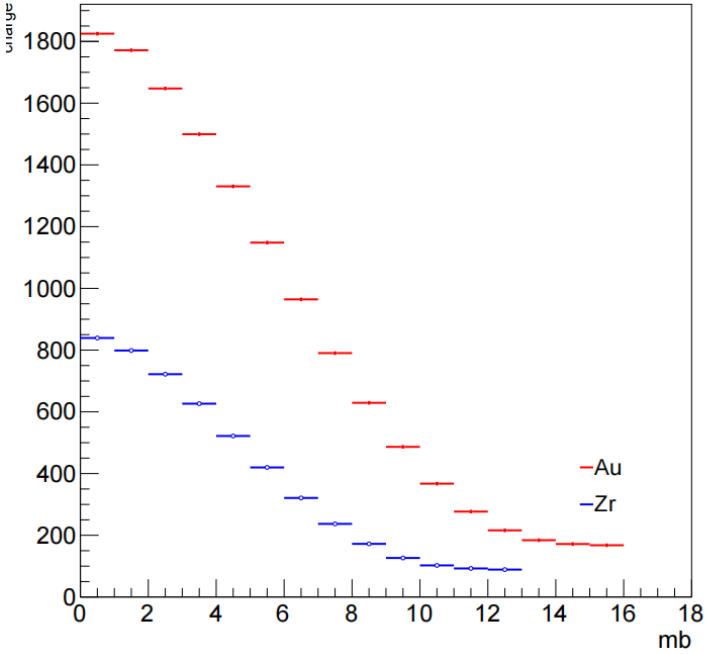
Ncharge, Npart vs mb(Tprofile)

```
for(Long64_t iEntry=0; iEntry<chain->GetEntries(); iEntry++){
    chain->GetEntry(iEntry);// iEntry 数据写入urqmdDst中指针所指向的位置
    //N part
    UShort_t mNPart_mean = (UShort_t)urqmdDst->timestep(0)->nPart();
    //mb
    UShort_t mB_mean=(UShort_t)urqmdDst->event()->b();
    hmNPartvsmb->Fill(mB_mean,mNPart_mean);
    Int_t mNcharge_mean=0;
    UrqmdTimestep* urqmdTimestep_mean = urqmdDst->timestep(urqmdDst->numberOfTimesteps()-1);
    for(UInt_t iTrack=0; iTrack<urqmdTimestep_mean ->nTracks(); iTrack++){
        UrqmdTrack* urqmdTrack_mean = urqmdDst->track(urqmdTimestep_mean ->startTrack()+iTrack);
        if(urqmdTrack_mean->q()!=0){
            mNcharge_mean++;
        }
    }
    hmNchargevsmb->Fill(mB_mean,mNcharge_mean);
}
```

hmNPartvsmb



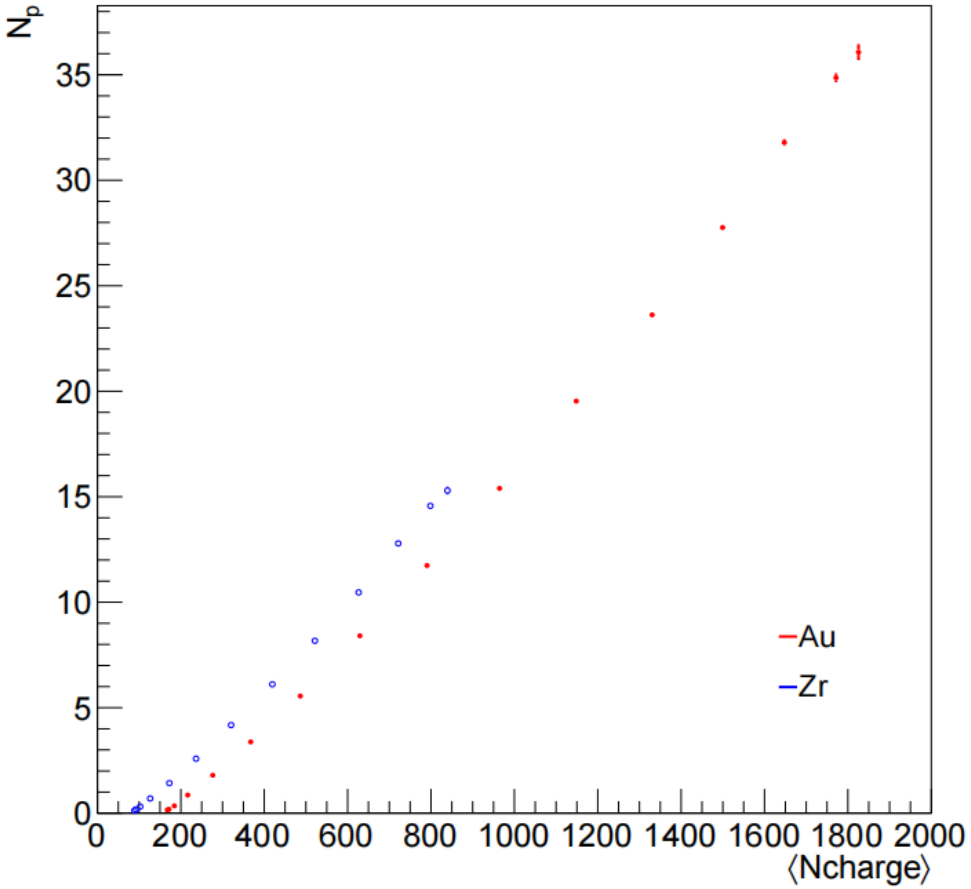
hmNchargevsmb

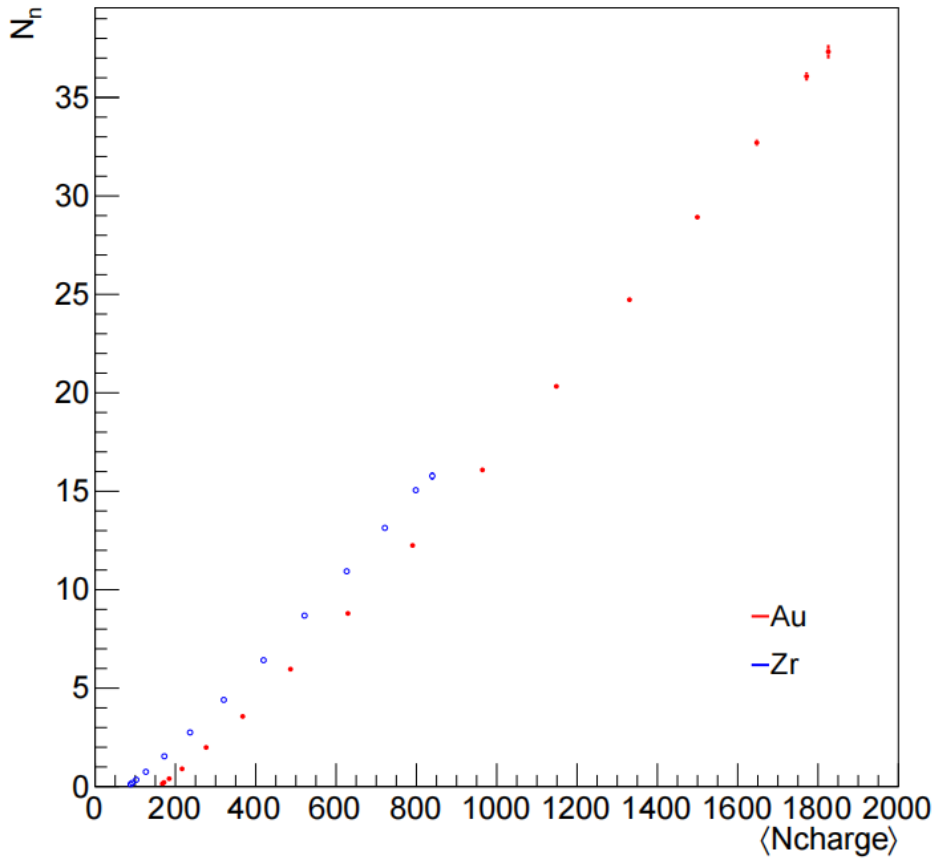


mb:碰撞参数

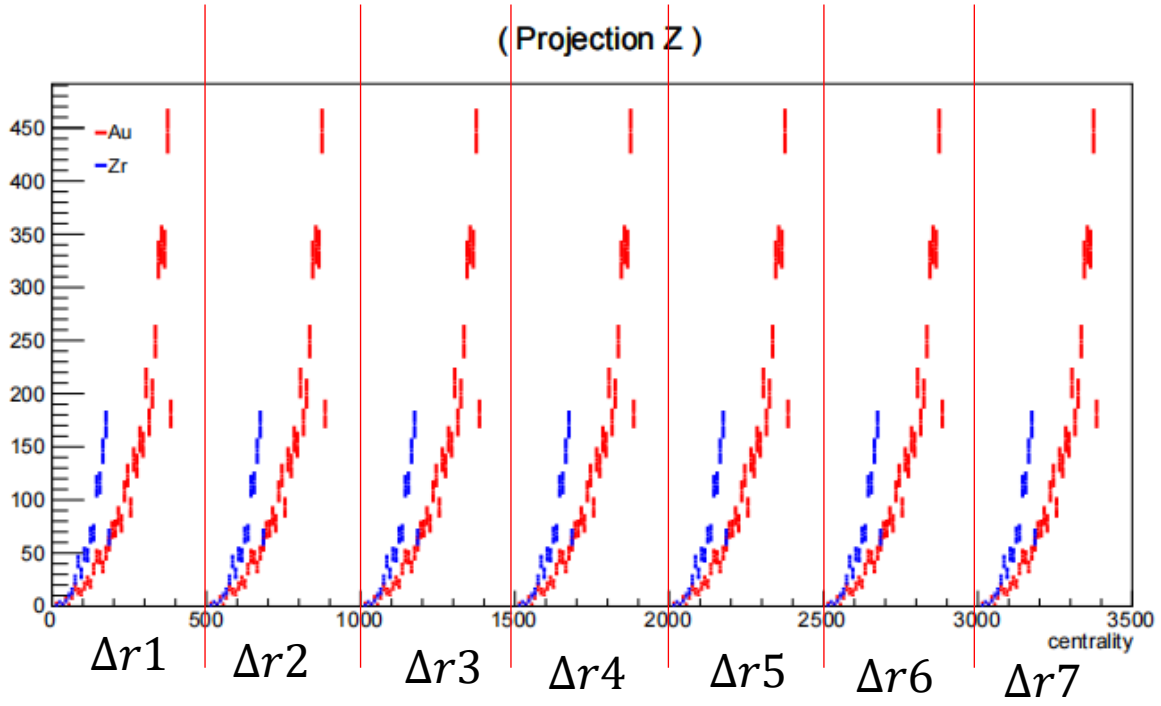
yulou

Proton, neutron vs Ncharge(Tprofile)

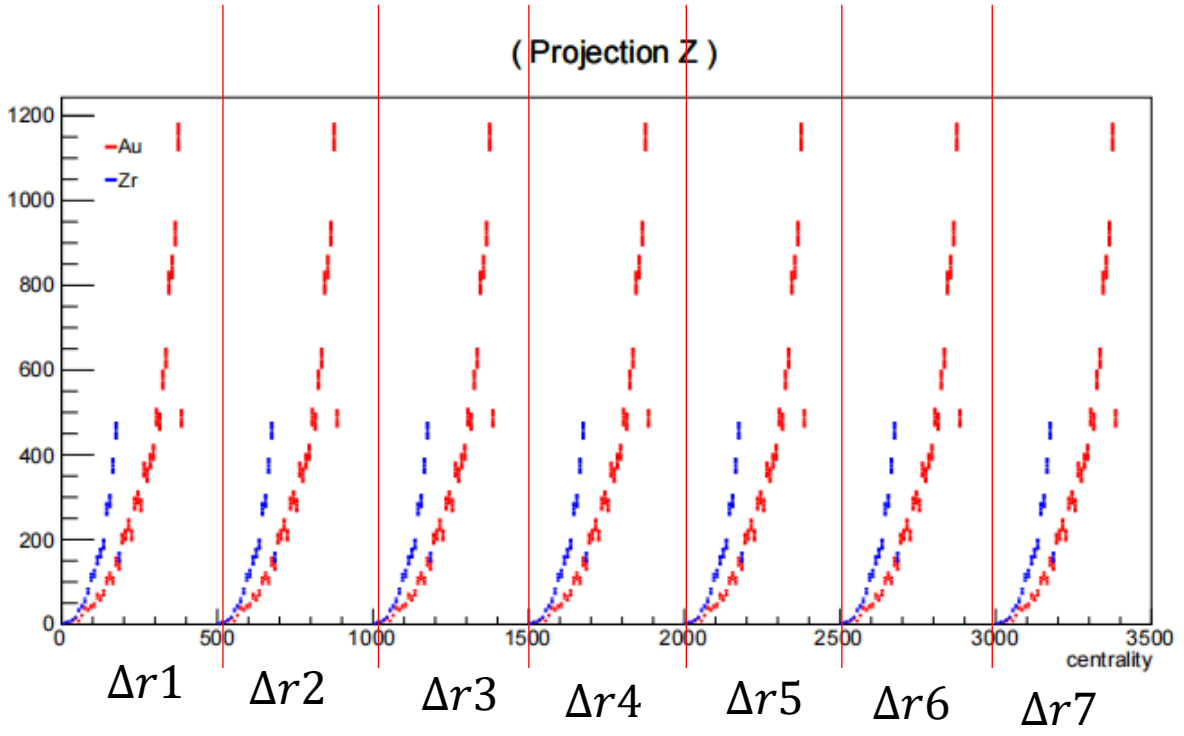




Proton, neutron vs Ncharge(Tprofile)



$\Delta p2$



$\Delta p2$