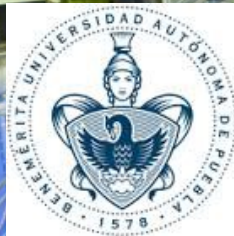


ALICE



Weekly report

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ACO
meeting

10 de septiembre 2016

Outline

- I send the Abstract for the poster at XVII Mexican School of particles and Fields.
- I write on the spherocity technical note: plots of z_{vtx} , Eta , ϕ , Pt efficiency, d_{caxy} , d_{caz} (d_{ca} not needed).
- I Start looking for visualizations at extreme values:
 - $S_0 < 0.02$, $dN/d\eta > 40$
 - $S_0 > 0.9$, $dN/d\eta > 40$

Analysis and run selection

Software: Aliroot:v5-07-20 Aliphysics:vAN-20160204

Event shape classes: (PWGLF/SPECTRA/Spherocity)

Analysis macros: AddTransverseEventShapeTask.C

AliAnaTransverseEventShapeTask.cxx

AliAnaTransverseEventShapeTask.h

LHC15f pass2: (44.6 mill of evts) (after all ev selection)

LHC15g3a3 Monash Tune (43.2 mill of evts) (after all ev selection)

good runs*:

226500, 226495, 226483, 226476, 226472, 226468, 226466,
226452, 226445, 226444, 226225, 226220, 226170, 226062,
225768, 225766, 225763, 225762, 225757, 225753, 225719,
225717, 225716, 225710, 225709, 225708, 225707, 225705,
225587, 225586, 225579, 225578, 225576, 225322, 225315,
225314, 225313, 225310, 225309, 225307, 225305, 225106,
225052, 225051, 225050, 225043, 225041, 225037, 225035,
225031, 225026

(*) <http://twiki.cern.ch/twiki/bin/viewauth/ALICE/PWGLF13TeVanalysis>

Event, track and physics selection

Event Selection

Trigger: KINT7

Rejection of AliESDEvent::IsIncompleteDAQ

Vertex selection

SPD Pile-up rejection

Background rejection

Multivertex Pile-up rejection

low diagonal cut OFO & V0M applied

Vertex conditions for 2015 data (**NEW added**) (this reduce the sample of evts)

<https://twiki.cern.ch/twiki/bin/view/ALICE/PWGPPEvSelRun2pp>

******https://twiki.cern.ch/twiki/bin/view/ALICE/AliceHMTFCODESnippets#Physics_Selection

Physics Selection

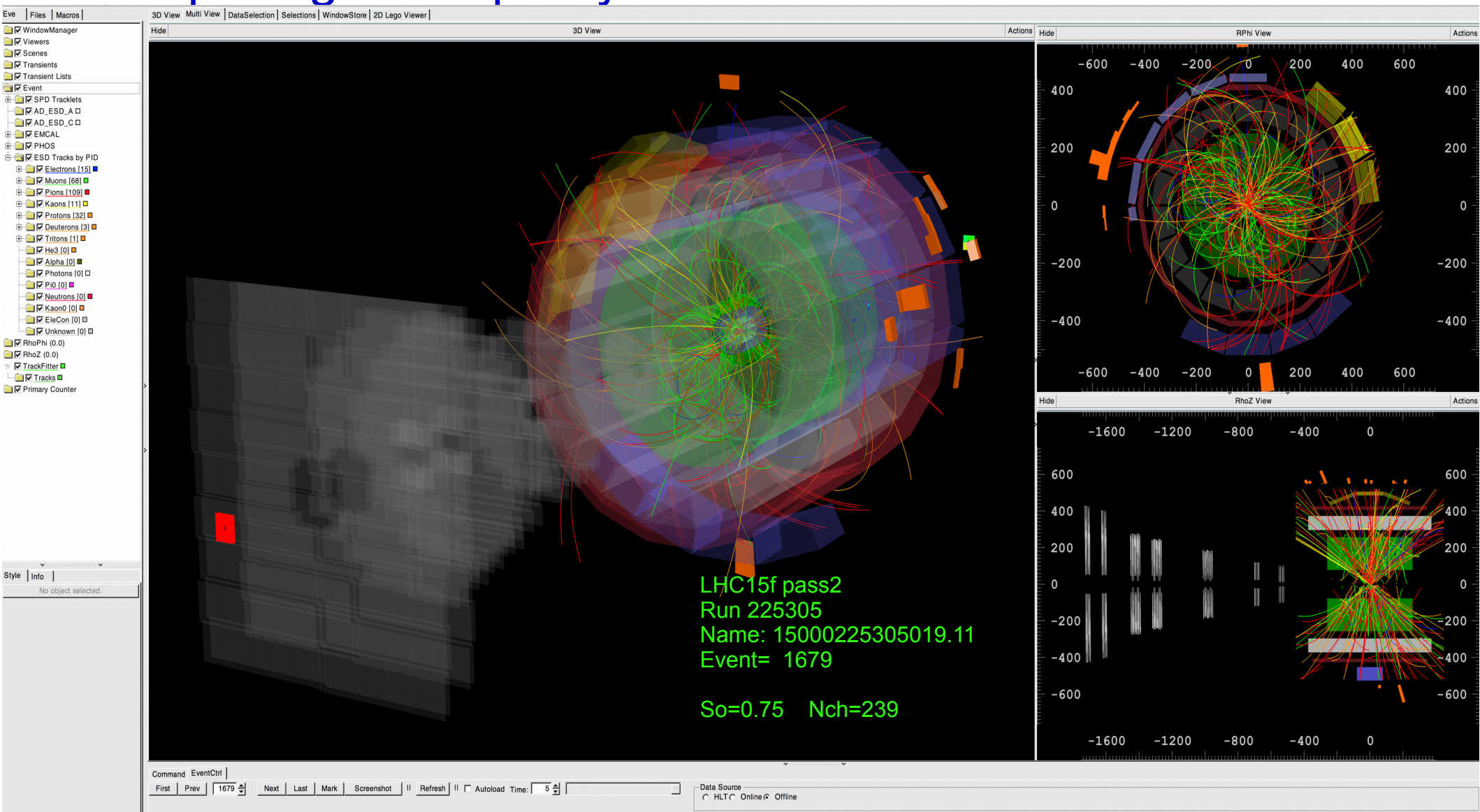
- MinNCrossedRowsTPC = 120; *
- MinRatioCrossedRowsOverFindableClustersTPC=0.8;
- MaxFractionSharedTPCcluster = 0.4;
- Maxchi2perTPCcl=4.;
- Max dcaz ITSTPC=2.0;
- SetDCAToVertex2D(kFALSE);
- SetRequireSigmaToVertex(kFALSE);
- RequireTPCRefit(kTRUE);
- RequireITSRefit(kTRUE);
- AcceptKinkDaughters(kFALSE);
- MaxDCAToVertexXYPtDep("0.0182+0.0350/pt^1.01"); *
- SetMaxChi2TPCConstrainedGlobal(36.);

Track selection taken for each analysis

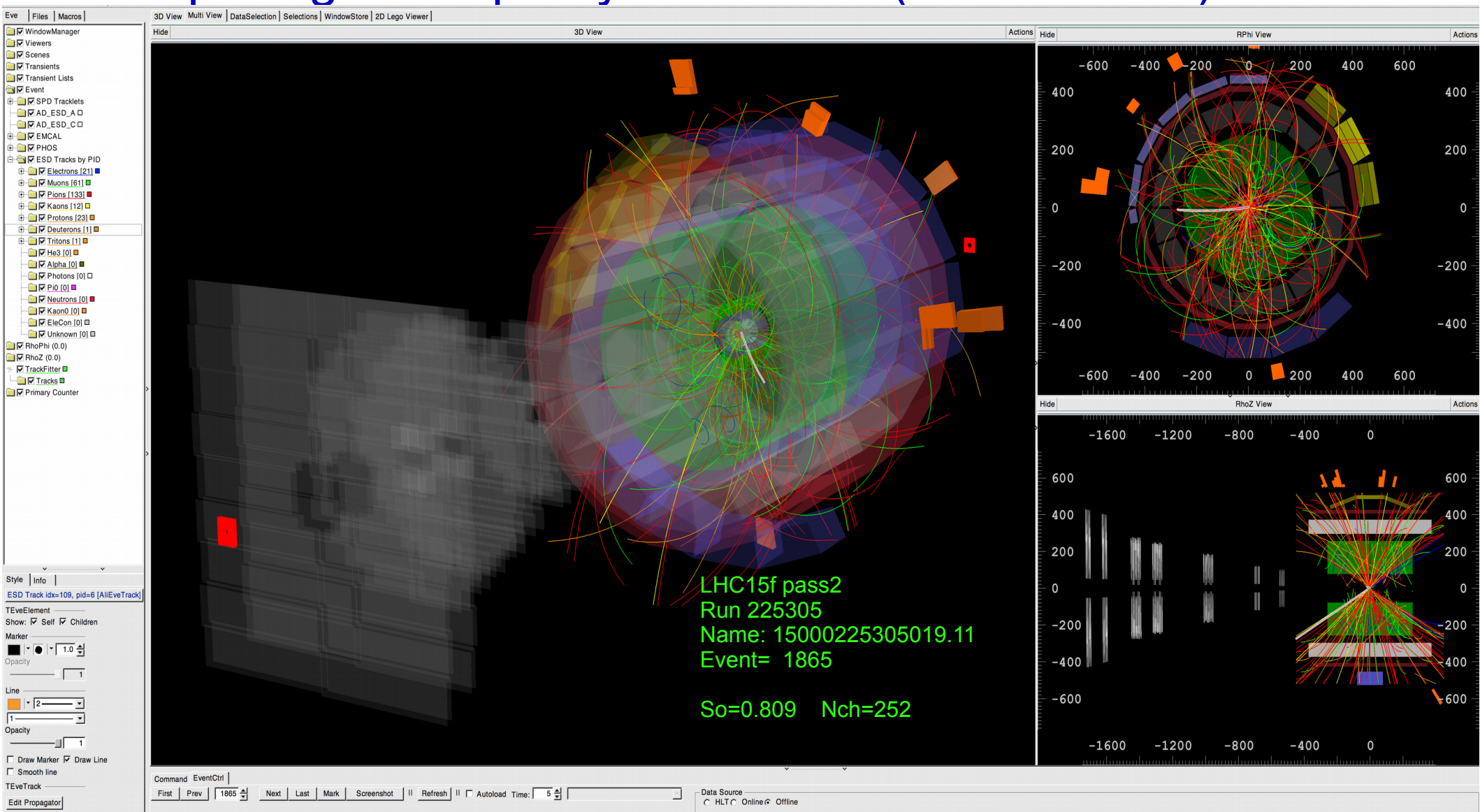
- So Analysis, Hybrid-track cuts for primary charged particles with $|\eta| < 0.8$ and $0.15 < p_T < 10$ GeV/c.
- $\langle p_T \rangle$ Analysis, Golden-track cuts with $|\eta| < 0.8$ and $0.15 < p_T < 10$ GeV/c.
- Multiplicity:
 - Reference multiplicity selection with $|\eta| < 0.8$

V0M percentil selection

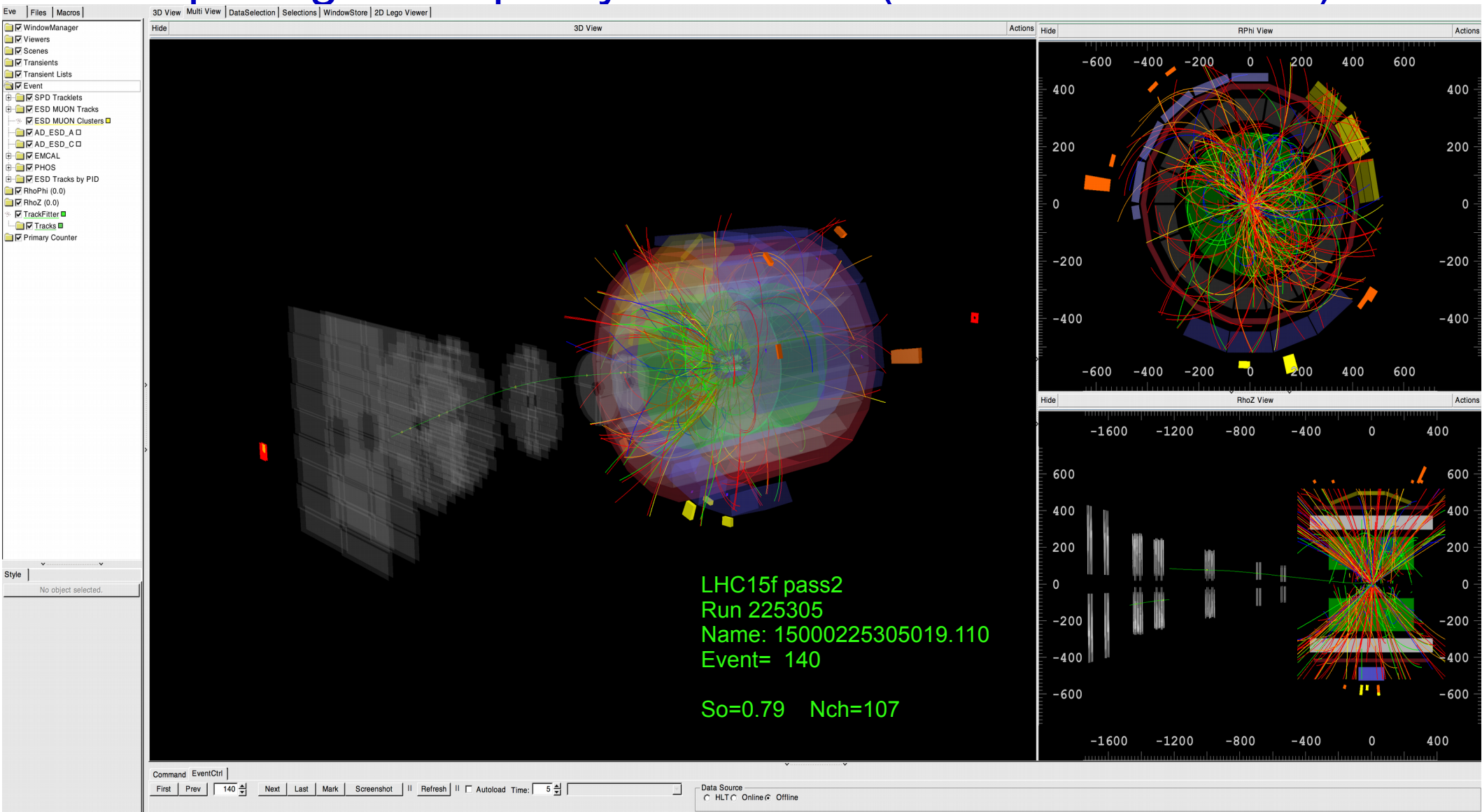
Visualization for events selected (locally) with Sphericity: Isotropic high Multiplicity $So \sim 0.8$



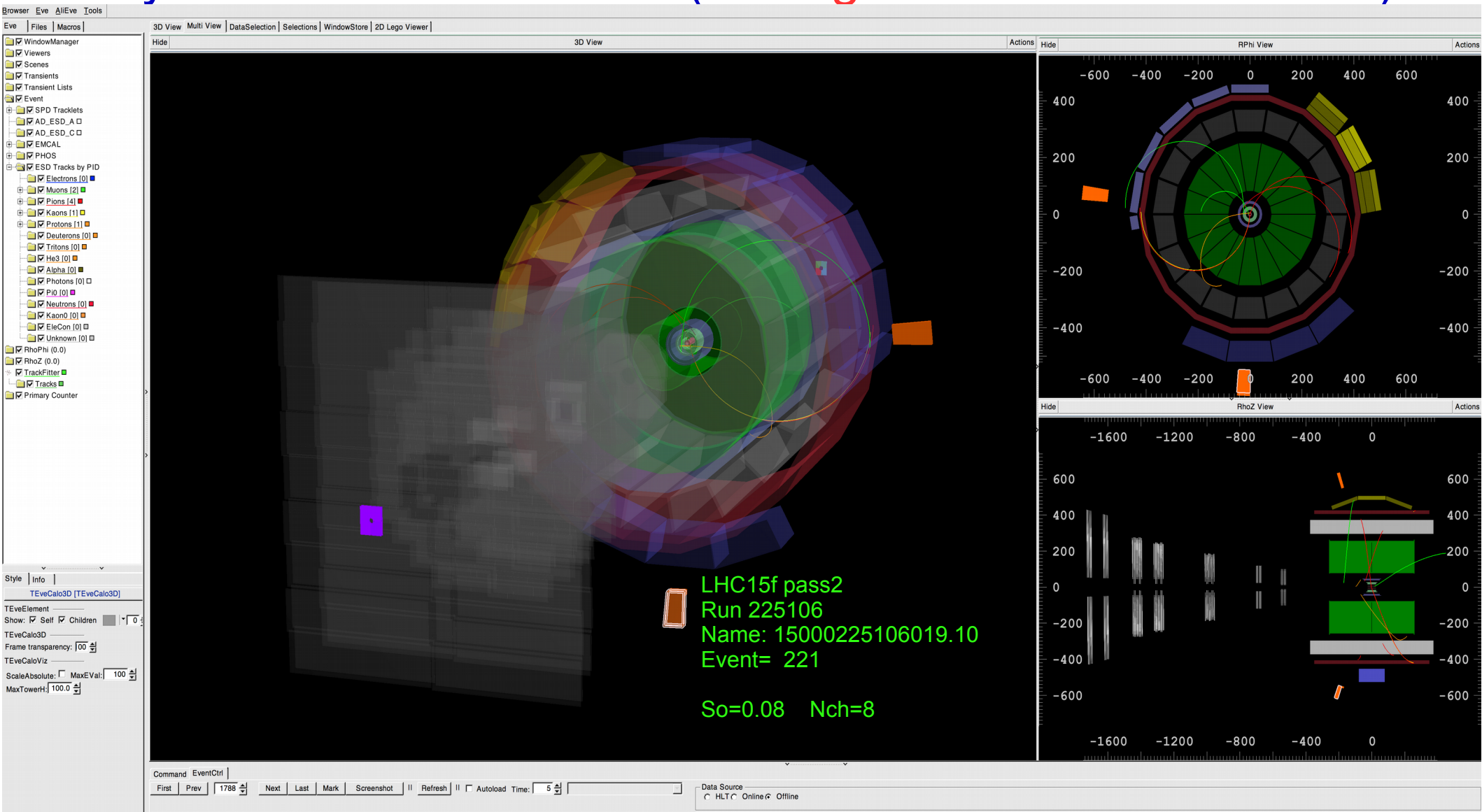
Visualization for events selected (locally) with Spherocity: Isotropic high Multiplicity $So \sim 0.8$ (1 tritio found)



Visualization for events selected (locally) with Spherocity: Isotropic high Multiplicity $So \sim 0.8$ (1 mu in muon arm)



Visualization for events selected (locally) with Spherocity: Jetty $So < 0.02$ but low mult (not high mult has been found)



To Do:

This visualizations still no high for $So > 0.9$ as wanted and not high mutliplicity for $So < 0.02$.

Strategy:

-- To look this no in local analysis, better to look this running at grid and adding some plost with the info of the event, chunks, run number etc.

```
low cut diag
MGR: Processing event #2725
name of file=
Event number=0
Run number for plot=225305
Numero de evento en corrida====0
////////////////////***** fEventIddddEvent ID= *****7474249728
low cut diag
MGR: Processing event #2726
name of file=
Event number=0
Run number for plot=225305
Numero de evento en corrida====0
////////////////////***** fEventIddddEvent ID= *****7474249728
low cut diag
```

– Modify the Task