



First 13 TeV Collisions for the Jet Trigger Signature
Jet Trigger Meeting

Ricardo Goncalo, David W. Miller

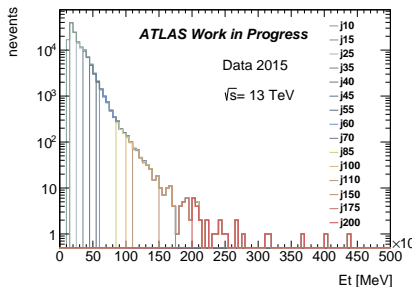
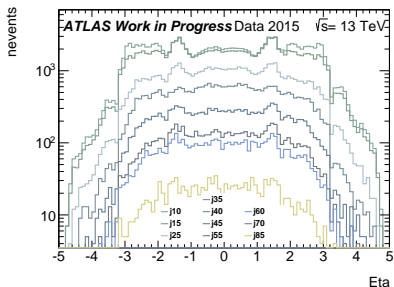
May 26, 2015



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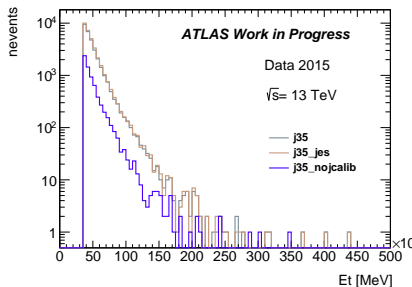
- 1 *Run 2: 13 TeV Data*
 - Turn-Ons and L1 comparison
 - Turn-Ons and L1 comparison
 - First collisions and MC15a

HLT jet triggers in Run 265573 (I)

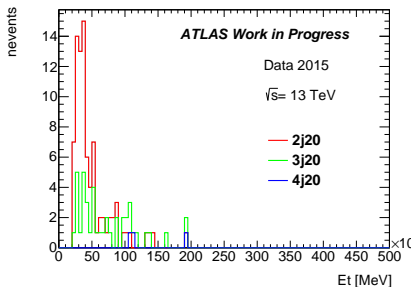
Jet triggers (E_T)Jet triggers (η)

- Data: Run 265573
- P1HLT 20.2.1.2, AMI r6715

HLT jet triggers in Run 265573 (II)



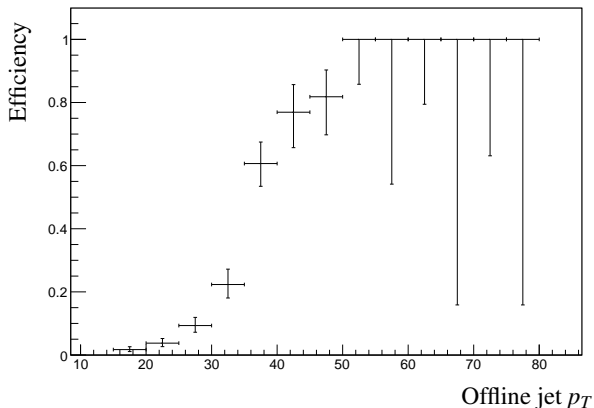
Jet triggers (E_T)



Jet triggers (η)

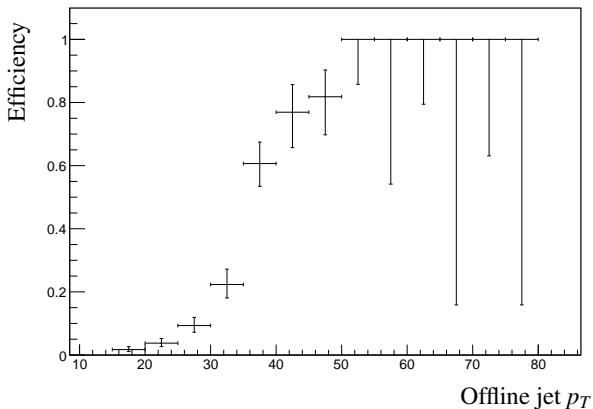
- Data: Run 265573
- P1HLT 20.2.1.2, AMI r6715

Pre-Preliminary Turn-on Curve for L1_J12



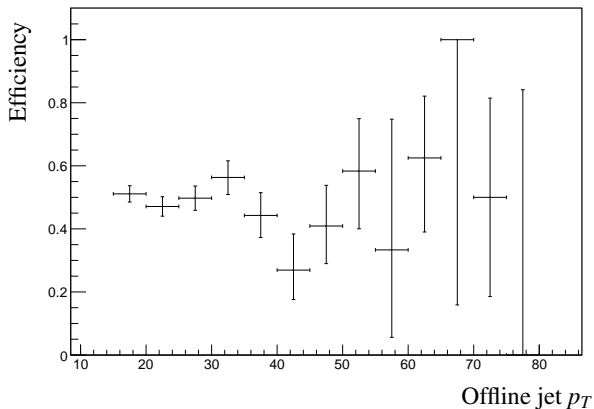
- Data: Run 265573
- L1_J12
- physics_L1Calo (x331_m1423)

Pre-Preliminary Turn-on Curve for L1_J12



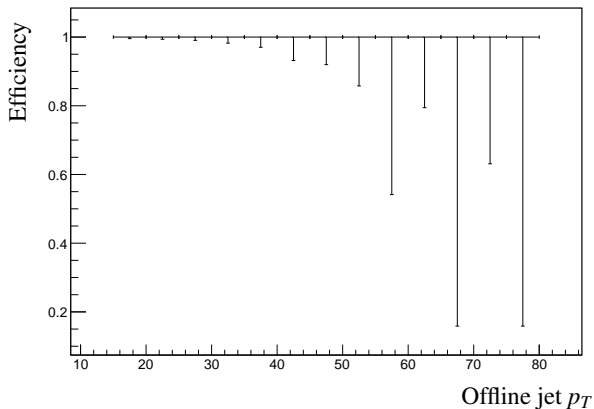
- Data: Run 265573
- L1_J12
- physics_L1Calo (x331_m1423)

Pre-Preliminary Turn-on Curve for L1_MBTS



- Data: Run 265573
- L1_MBTS
- physics_L1Calo (x331_m1423)

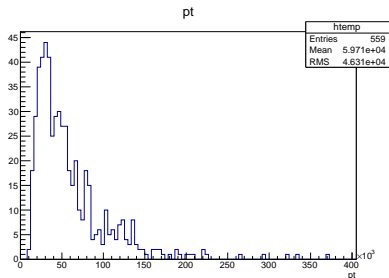
Pre-Preliminary Turn-on Curve for HLT_noalg_L1Calo



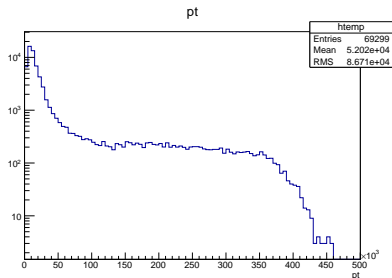
- Data: Run 265573
- HLT_noalg_L1Calo
- physics_L1Calo (x331_m1423)

First collisions and MC15a (no selection!)

a4tcemsubjesFS



Data: Run 265573



MC15a: JZ3W

● Compare: a4tcemsubjesFS

● Data:

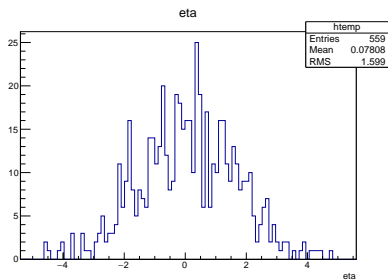
- data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._1b0086-1b0089._0001.1
- Low pT tracking (x330), all detectors in

● MC15a:

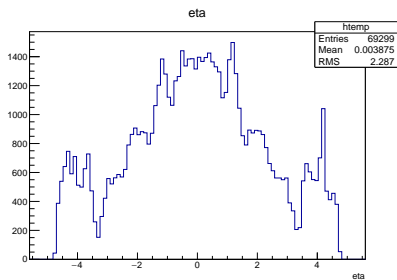
- mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264

First collisions and MC15a (no selection!)

a4tcemsubjesFS



Data: Run 265573



MC15a: JZ3W

● Compare: *a4tcemsubjesFS*

● Data:

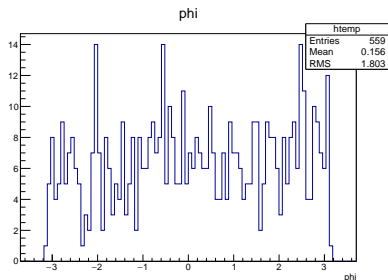
- `data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._1b0086-1b0089._0001.1`
- Low pT tracking (x330), all detectors in

● MC15a:

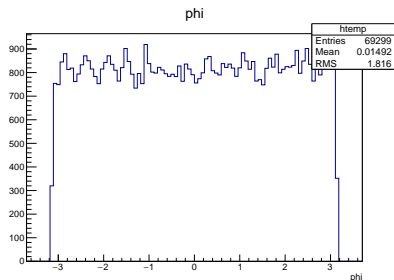
- `mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264`

First collisions and MC15a (no selection!)

a4tcemsubjesFS



Data: Run 265573



MC15a: JZ3W

● Compare: a4tcemsubjesFS

● Data:

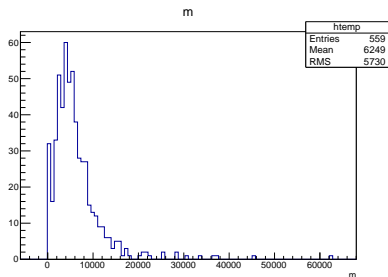
- `data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._1b0086-1b0089._0001.1`
- Low pT tracking (x330), all detectors in

● MC15a:

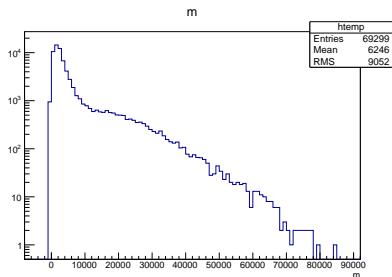
- `mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264`

First collisions and MC15a (no selection!)

a4tcemsubjesFS



Data: Run 265573



MC15a: JZ3W

● Compare: *a4tcemsubjesFS*

● Data:

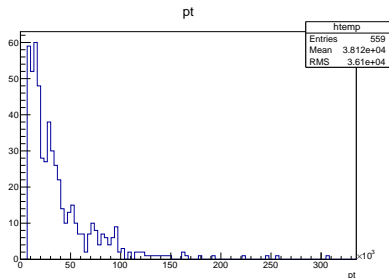
- `data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._1b0086-1b0089._0001.1`
- Low pT tracking (x330), all detectors in

● MC15a:

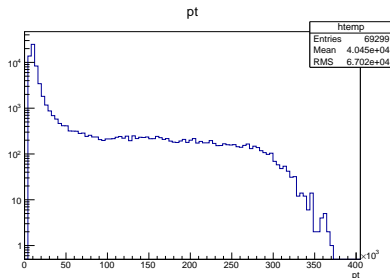
- `mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264`

First collisions and MC15a (no selection!)

`a4tcemnojcalibFS`



Data: Run 265573



MC15a: JZ3W

● Compare: `a4tcemnojcalibFS`

● Data:

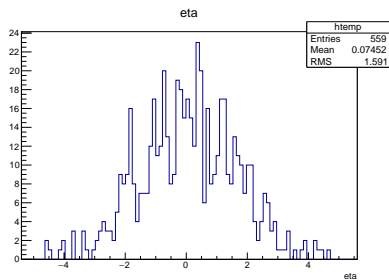
- `data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._1b0086-1b0089._0001.1`
- Low pT tracking (x330), all detectors in

● MC15a:

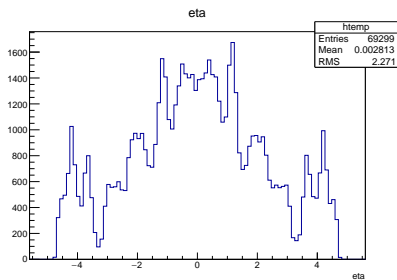
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First collisions and MC15a (no selection!)

a4tcemnojcalibFS



Data: Run 265573



MC15a: JZ3W

● Compare: a4tcemnojcalibFS

● Data:

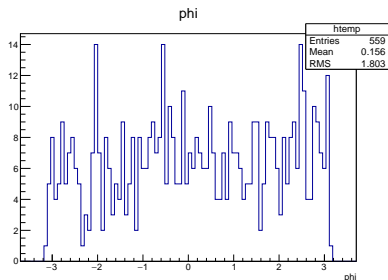
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- Low pT tracking (x330), all detectors in

● MC15a:

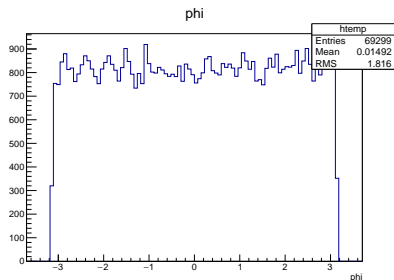
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First collisions and MC15a (no selection!)

a4tcemnojcalibFS



Data: Run 265573



MC15a: JZ3W

● Compare: a4tcemnojcalibFS

● Data:

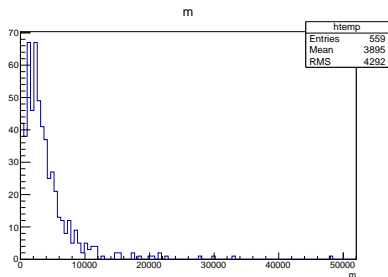
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- Low pT tracking (x330), all detectors in

● MC15a:

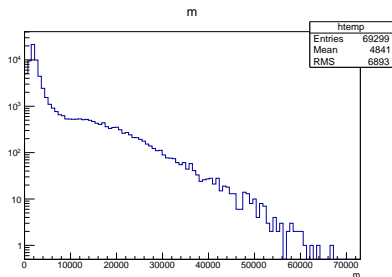
- mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264

First collisions and MC15a (no selection!)

a4tcemnojcalibFS



Data: Run 265573



MC15a: JZ3W

● Compare: a4tcemnojcalibFS

● Data:

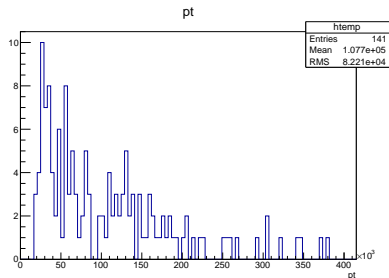
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- Low pT tracking (x330), all detectors in

● MC15a:

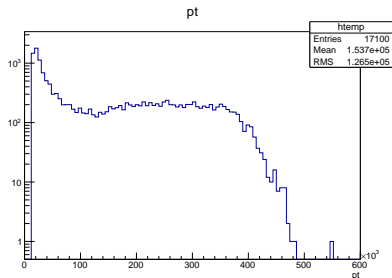
- mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264

First collisions and MC15a (no selection!)

a10r_tcemsubjesFS



Data: Run 265573



MC15a: JZ3W

● Compare: a10r_tcemsubjesFS

● Data:

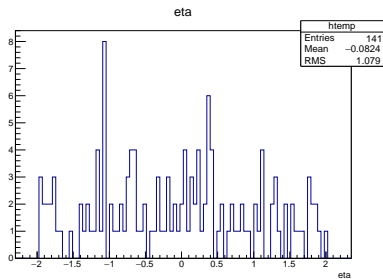
- data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._lb0086-lb0089._0001.1
- Low pT tracking (x330), all detectors in

● MC15a:

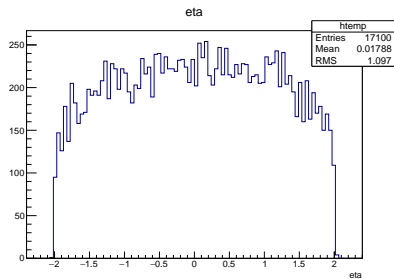
- mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264

First collisions and MC15a (no selection!)

a10r_tcemsubjesFS



Data: Run 265573



MC15a: JZ3W

● Compare: a10r_tcemsubjesFS

● Data:

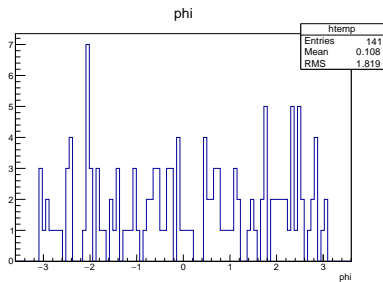
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- Low pT tracking (x330), all detectors in

● MC15a:

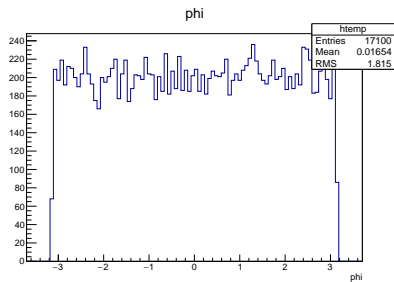
- mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264

First collisions and MC15a (no selection!)

a10r_tcemsubjesFS



Data: Run 265573



MC15a: JZ3W

● Compare: a10r_tcemsubjesFS

● Data:

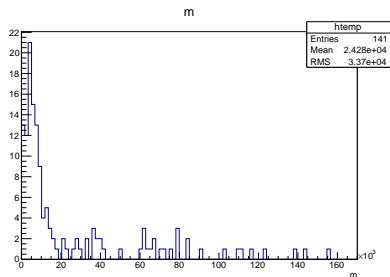
- data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._1b0086-1b0089._0001.1
- Low pT tracking (x330), all detectors in

● MC15a:

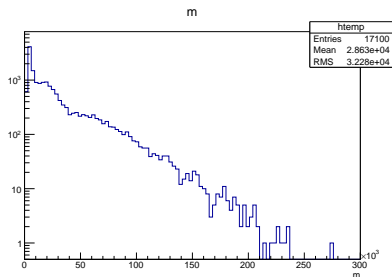
- mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264

First collisions and MC15a (no selection!)

a10r_tcemsubjesFS



Data: Run 265573



MC15a: JZ3W

● Compare: a10r_tcemsubjesFS

● Data:

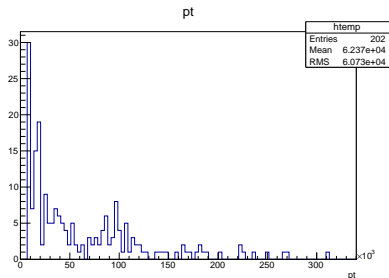
- data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._1b0086-1b0089._0001.1
- Low pT tracking (x330), all detectors in

● MC15a:

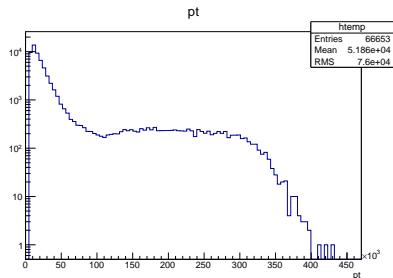
- mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264

First collisions and MC15a (no selection!)

a10tcejnojcalibFS



Data: Run 265573



MC15a: JZ3W

● Compare: *a10tcejnojcalibFS*

● Data:

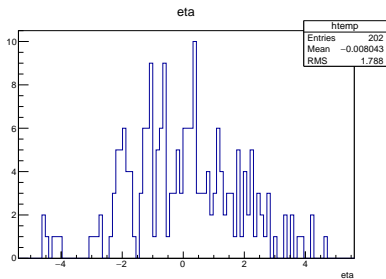
- `data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._1b0086-1b0089._0001.1`
- Low pT tracking (x330), all detectors in

● MC15a:

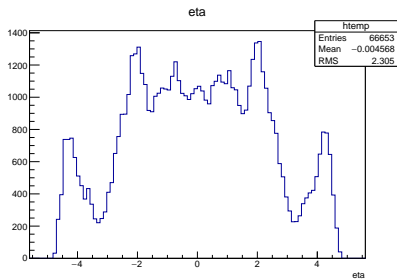
- `mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264`

First collisions and MC15a (no selection!)

a10tcejnojcalibFS



Data: Run 265573



MC15a: JZ3W

● Compare: *a10tcejnojcalibFS*

● Data:

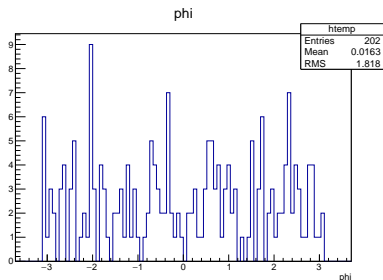
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- Low pT tracking (x330), all detectors in

● MC15a:

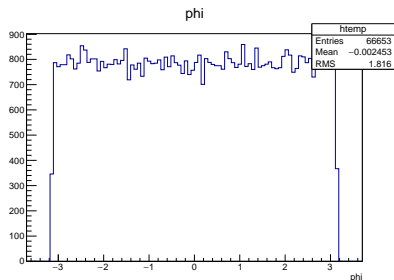
- `mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264`

First collisions and MC15a (no selection!)

a10tcejnojcalibFS



Data: Run 265573



MC15a: JZ3W

● Compare: *a10tcejnojcalibFS*

● Data:

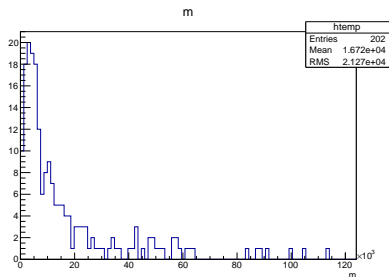
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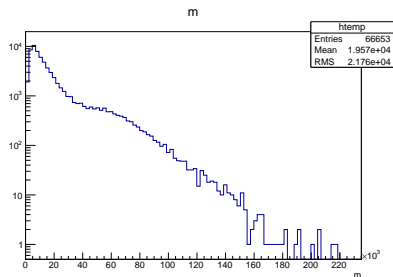
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First collisions and MC15a (no selection!)

a10tcecnjcalibFS



Data: Run 265573



MC15a: JZ3W

● Compare: a10tcecnjcalibFS

● Data:

- data15_comm.00265573.physics_L1Calo.merge.AOD.x330_m1423._1b0086-1b0089._0001.1
- Low pT tracking (x330), all detectors in

● MC15a:

- mc15_13TeV.361023.Pythia8EvtGen_A14NNPDF23LO_jetjet_JZ3W.merge.AOD.e3668_s2576_s2132_r6630_r6264