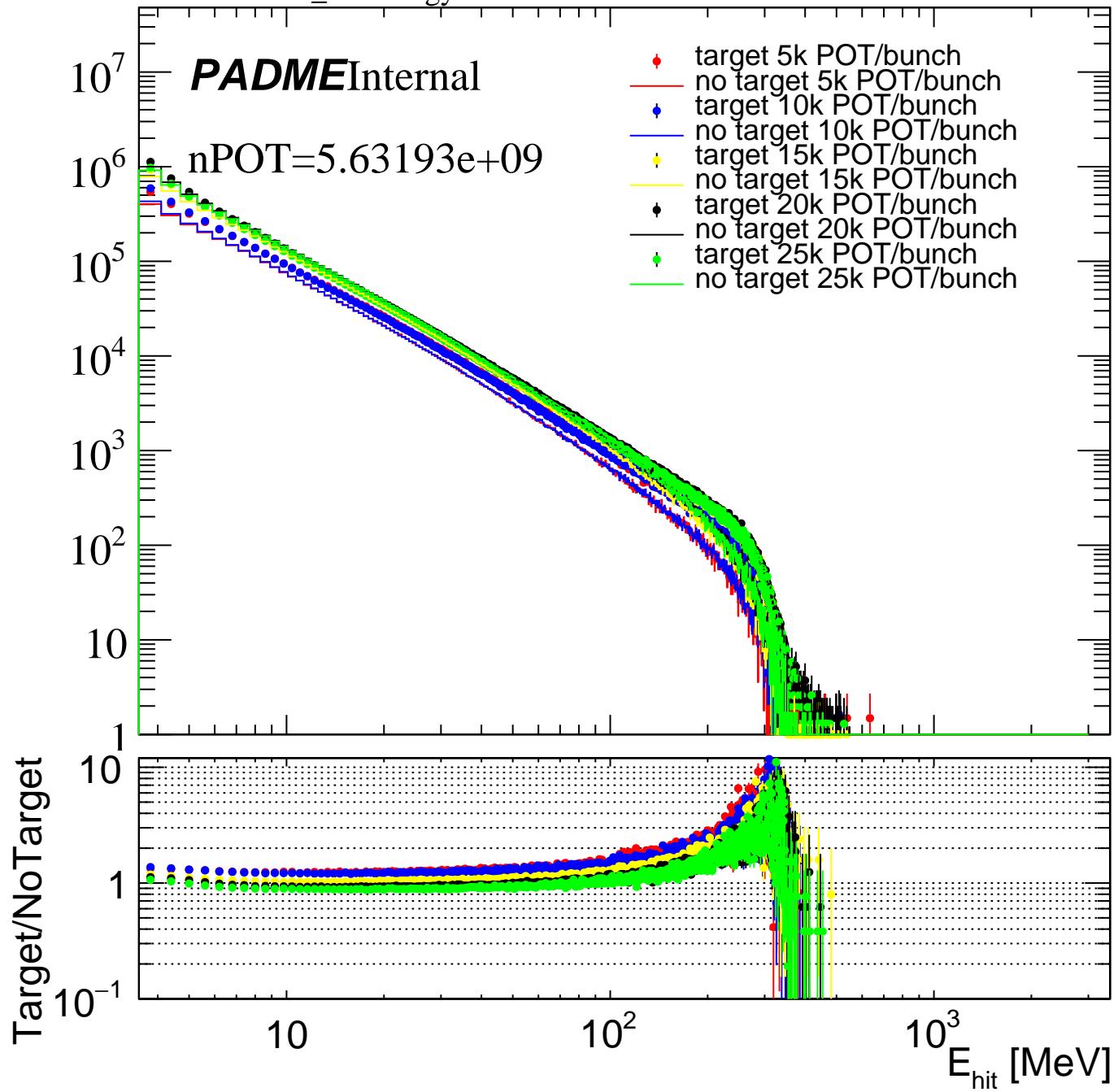
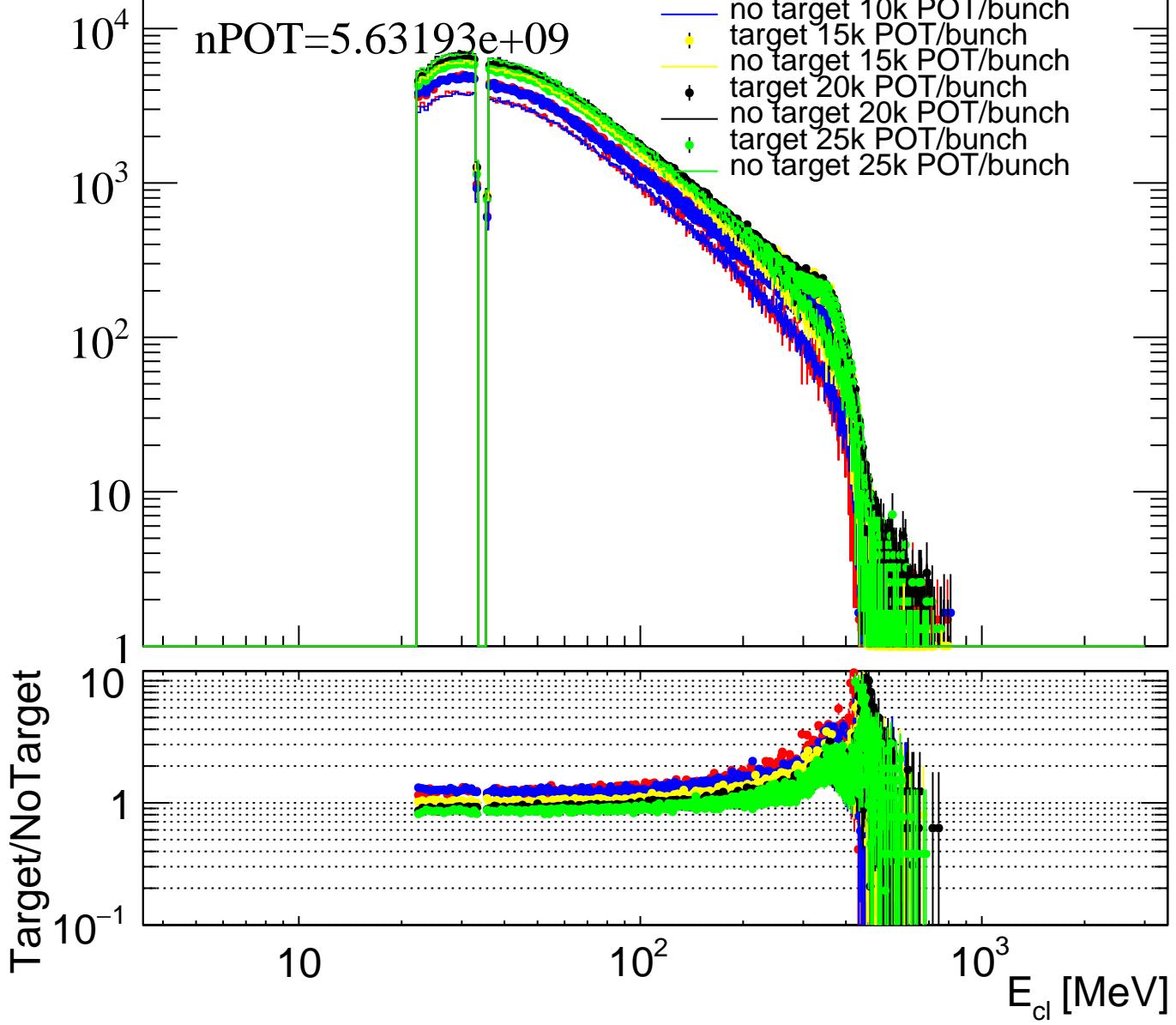


ECal_HitEnergy

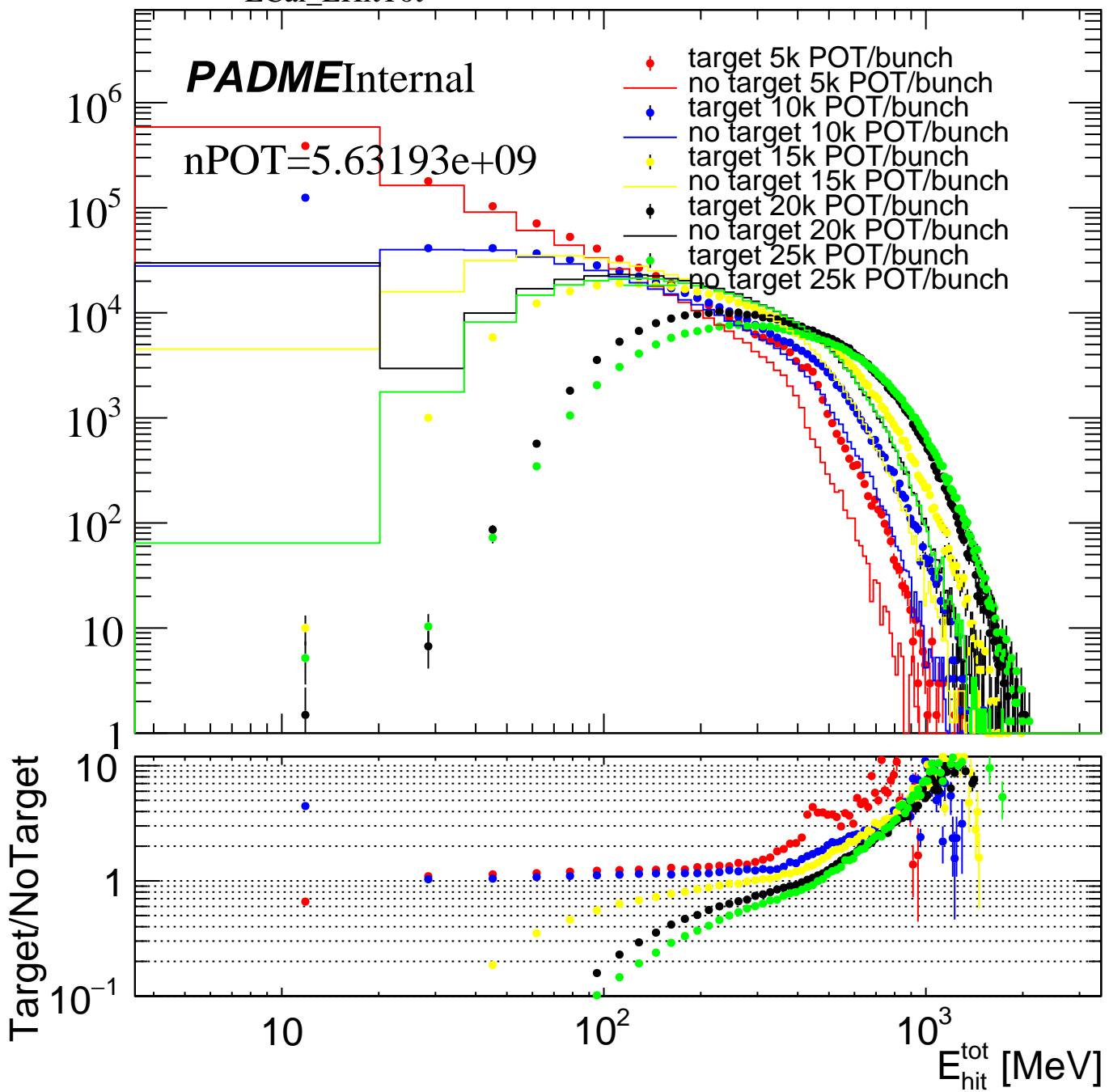


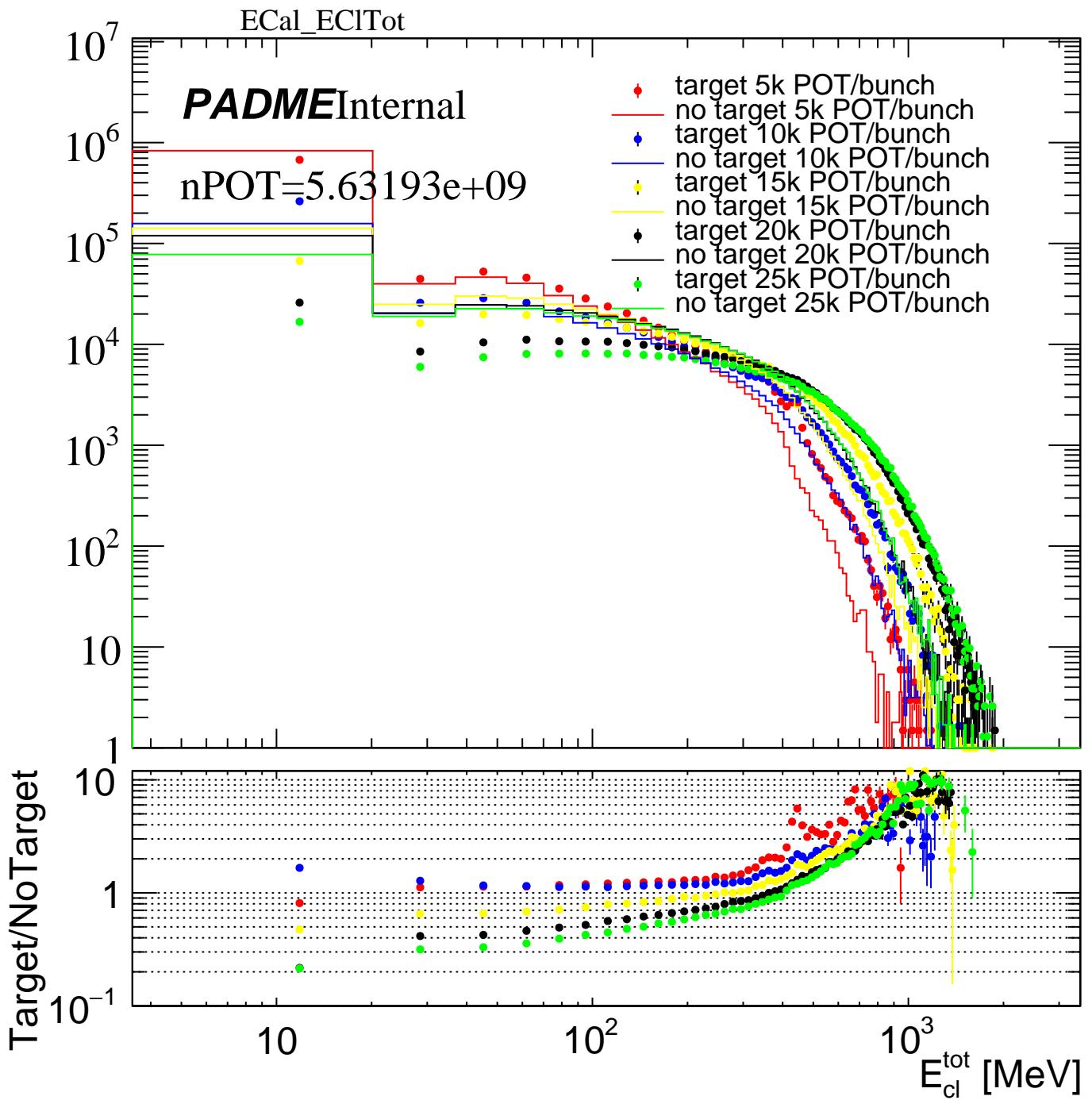
ECal_ClusterEnergy

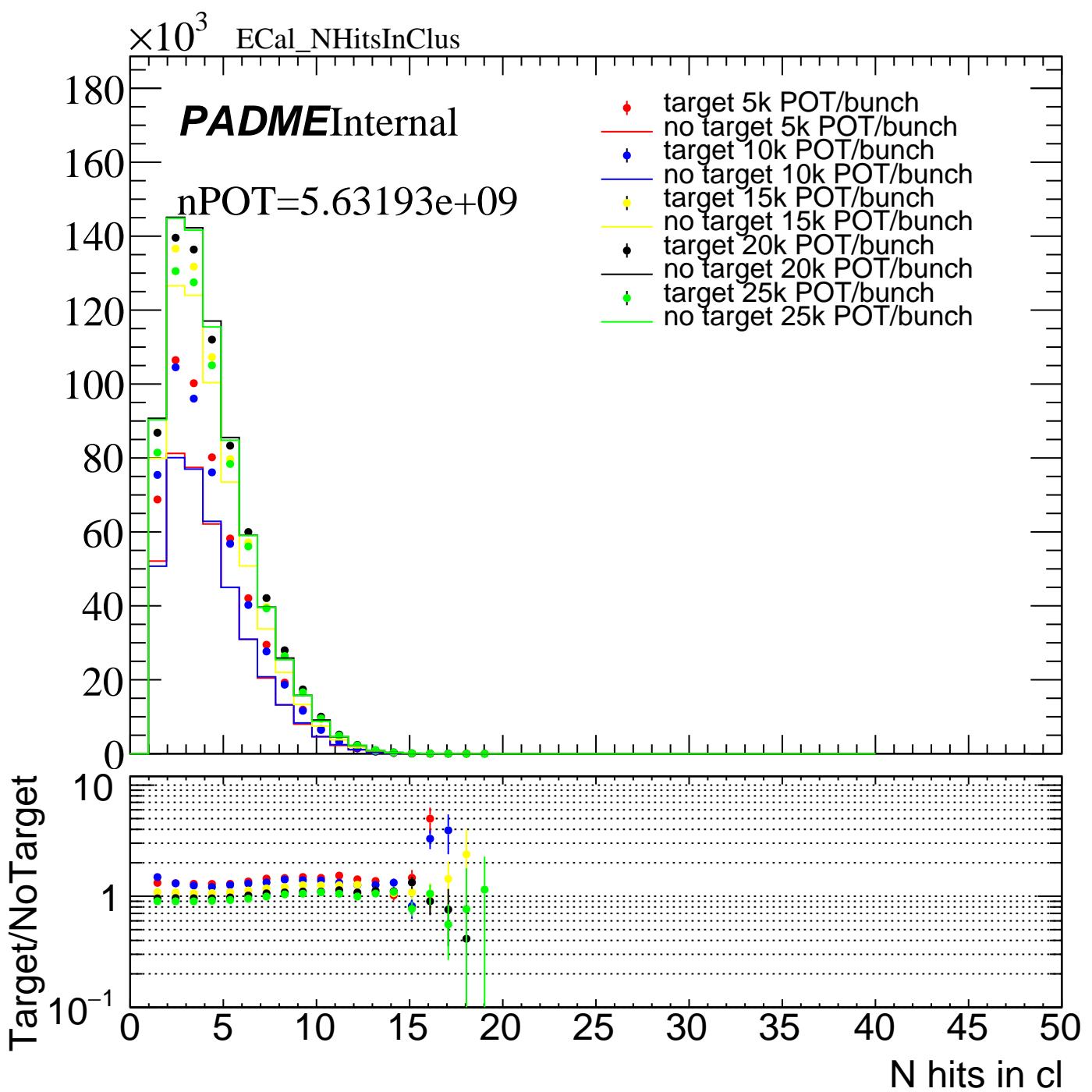
PADMEInternal

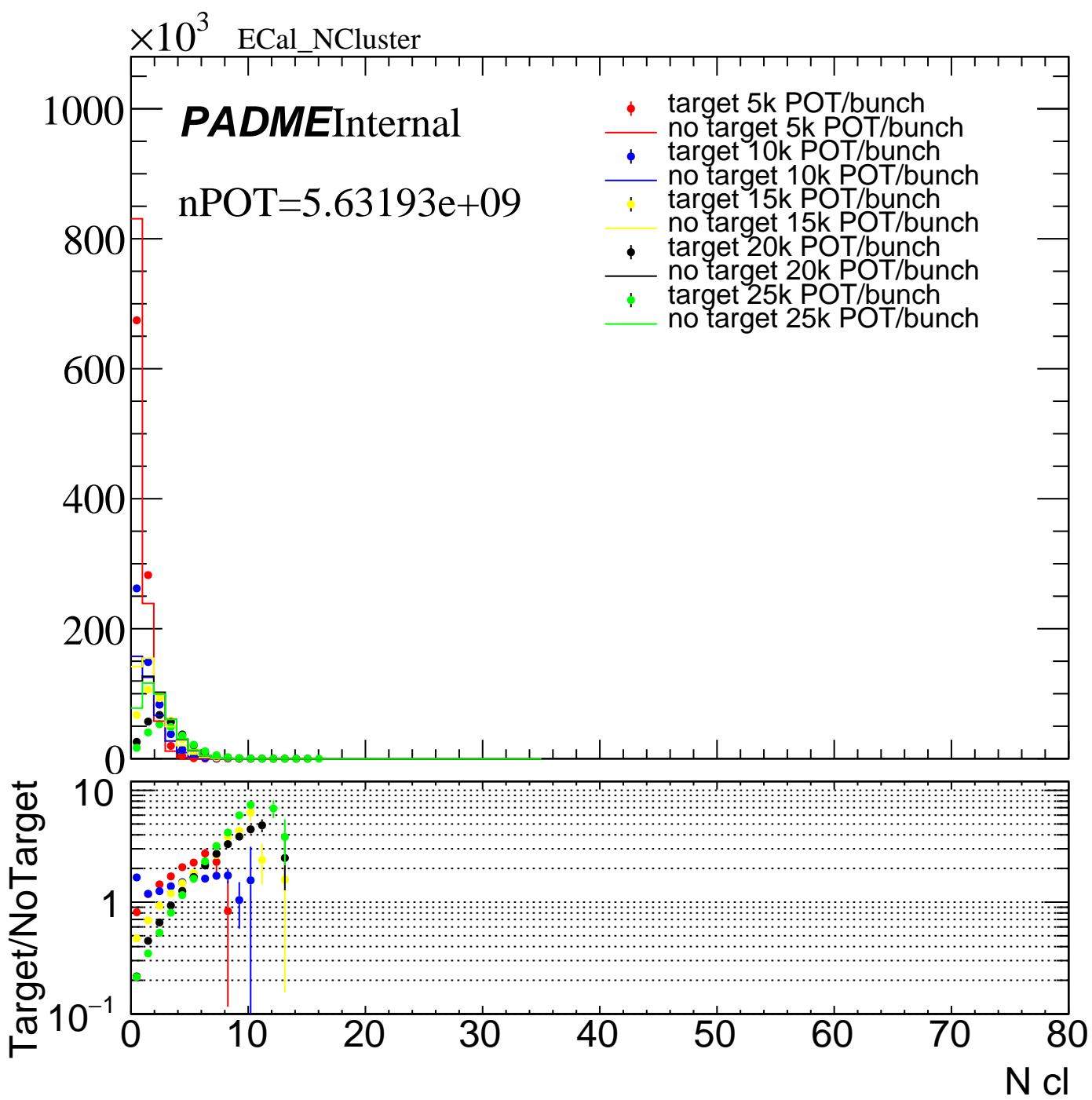


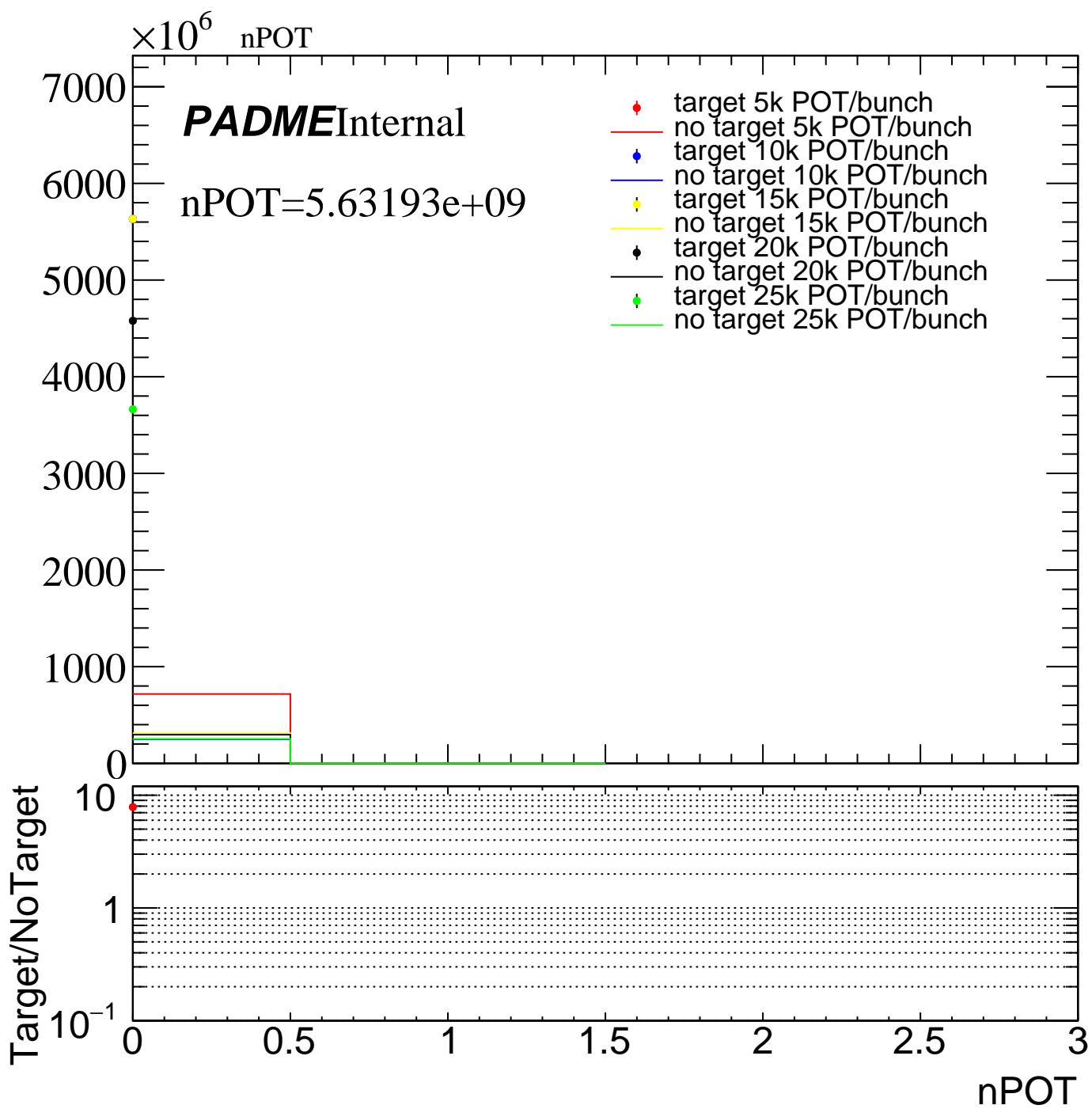
ECal_EHitTot

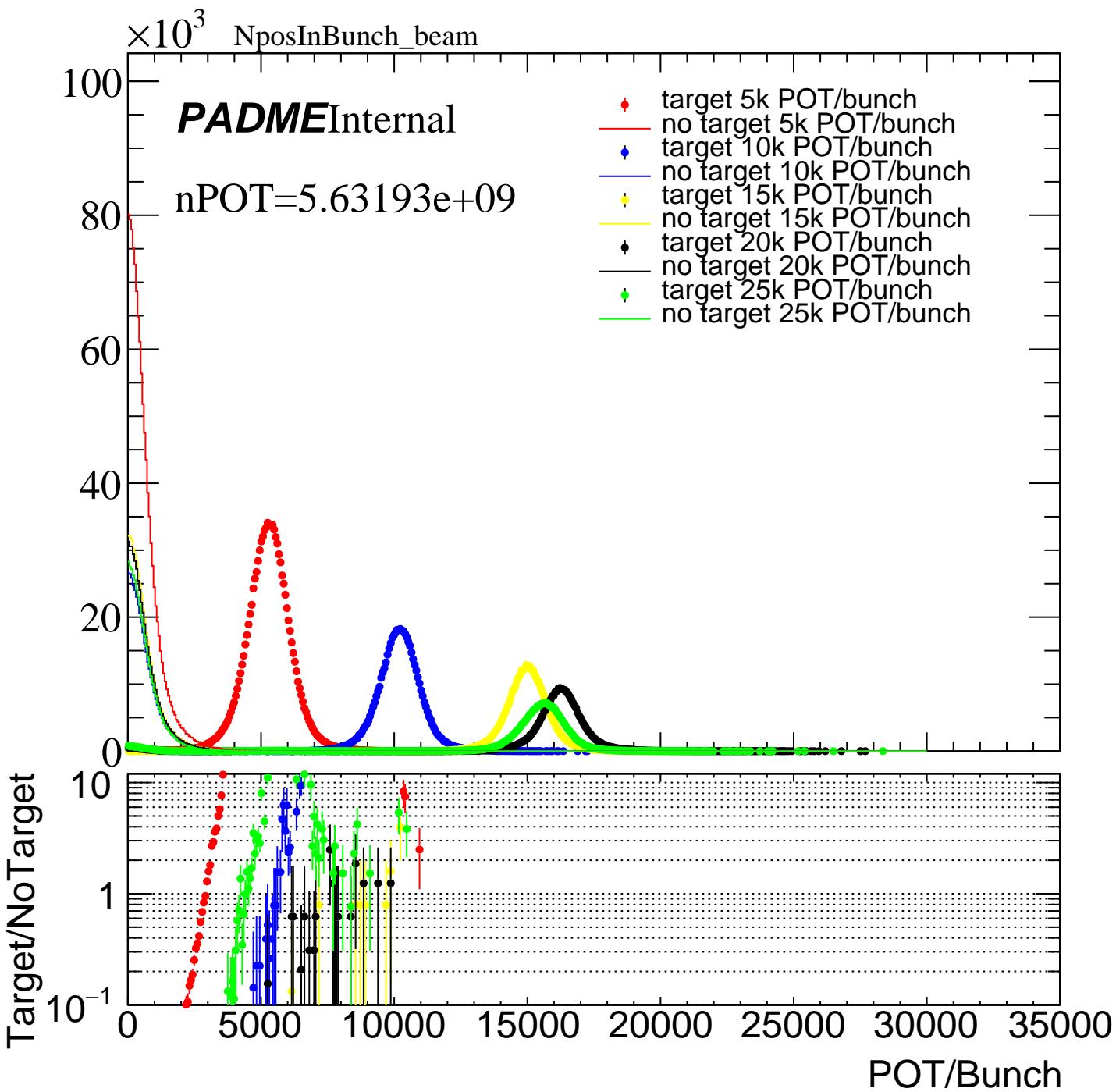




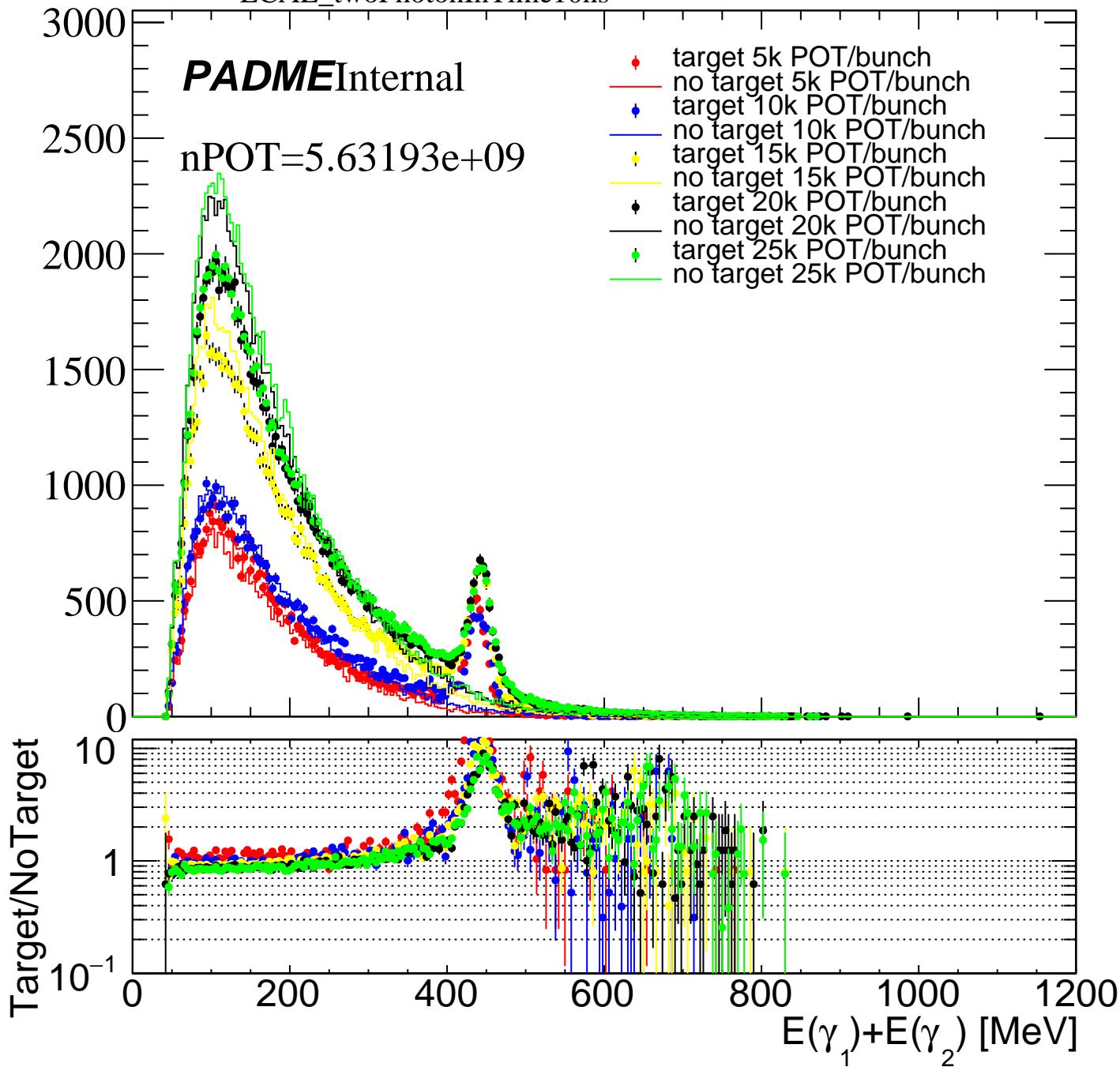




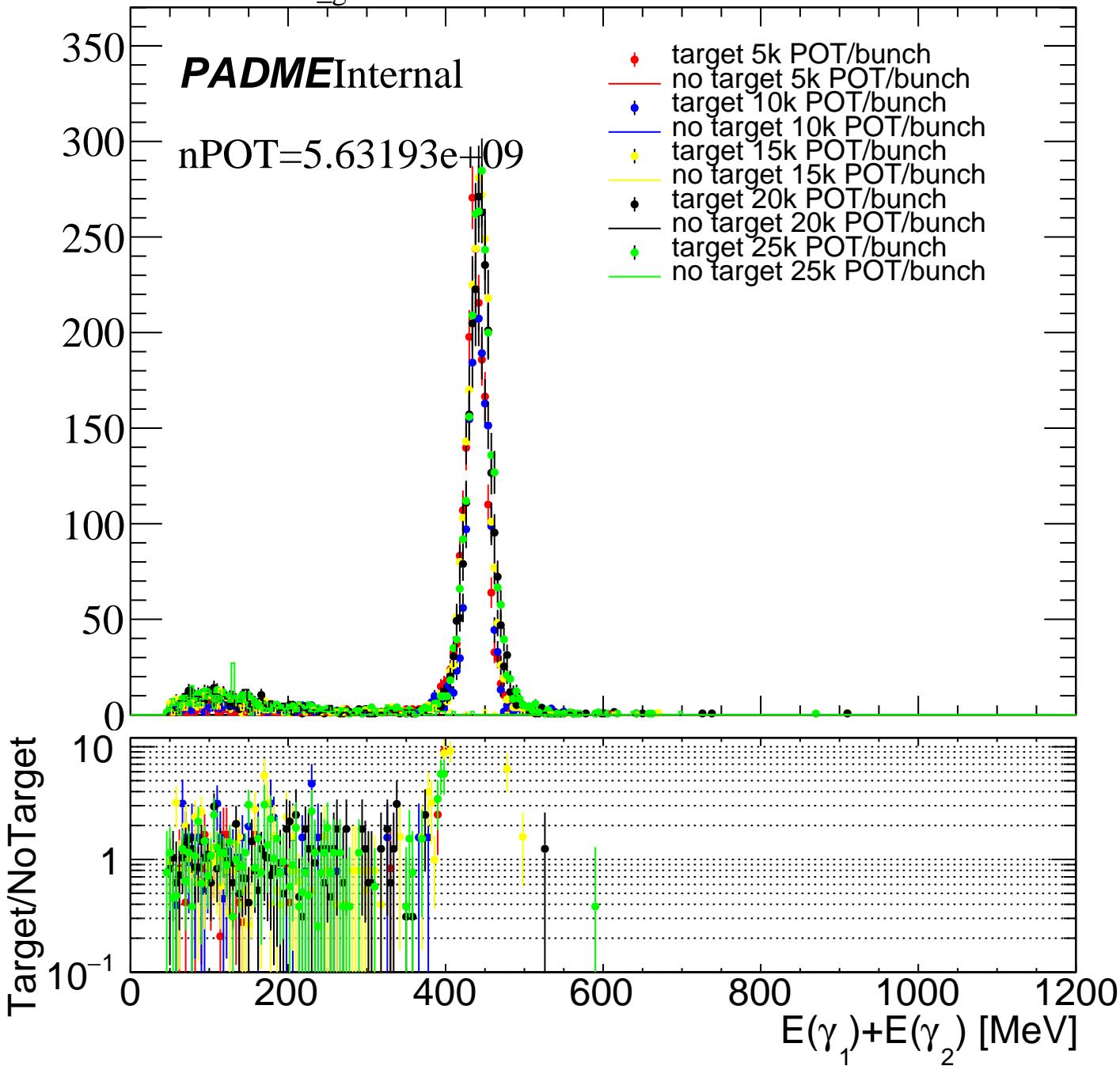




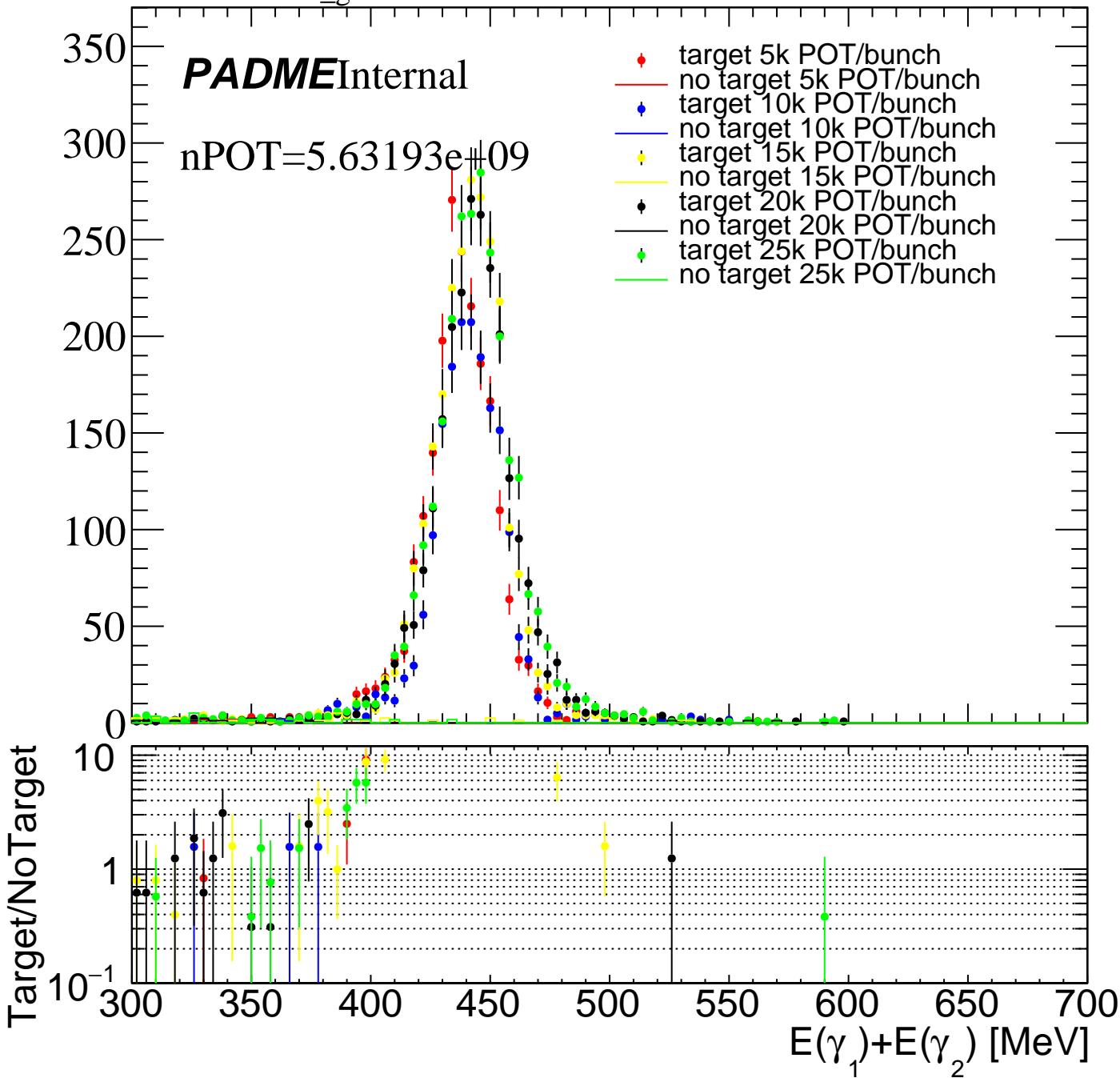
ECAL_twoPhotonInTime10ns



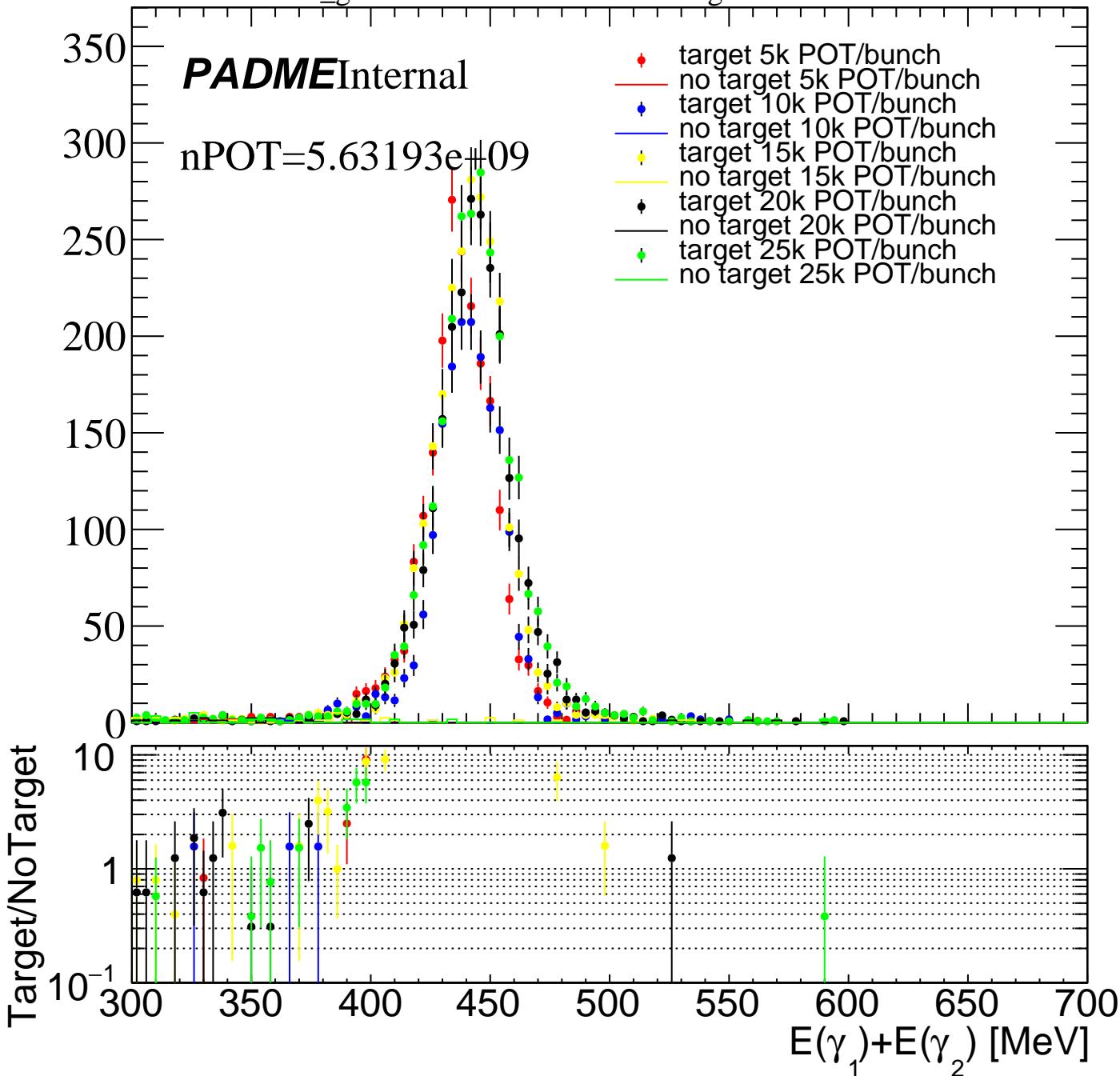
ECAL_gravTwoPhoton10ns1cm



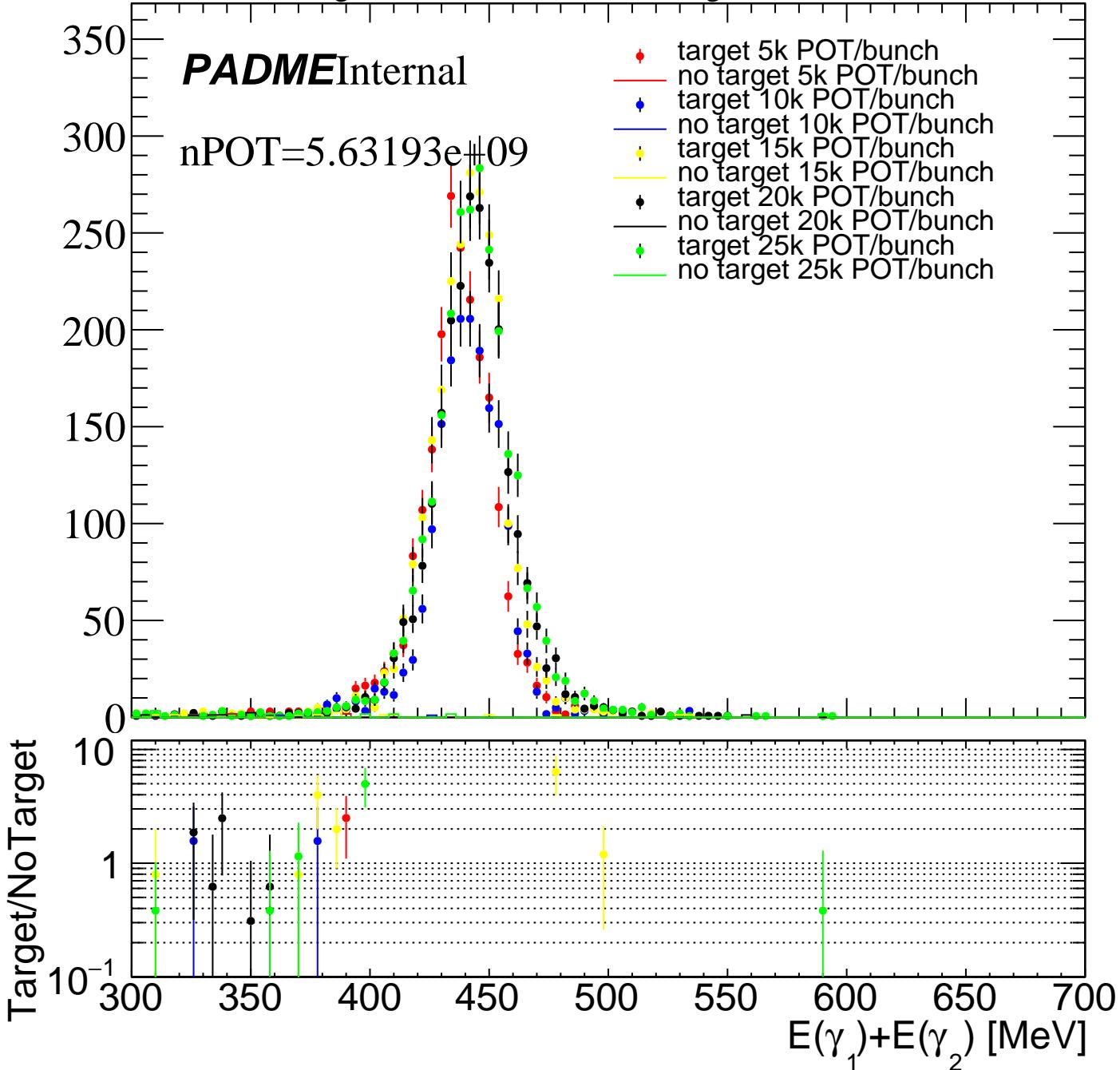
ECAL_gravTwoPhoton10ns1cmUnderPeak



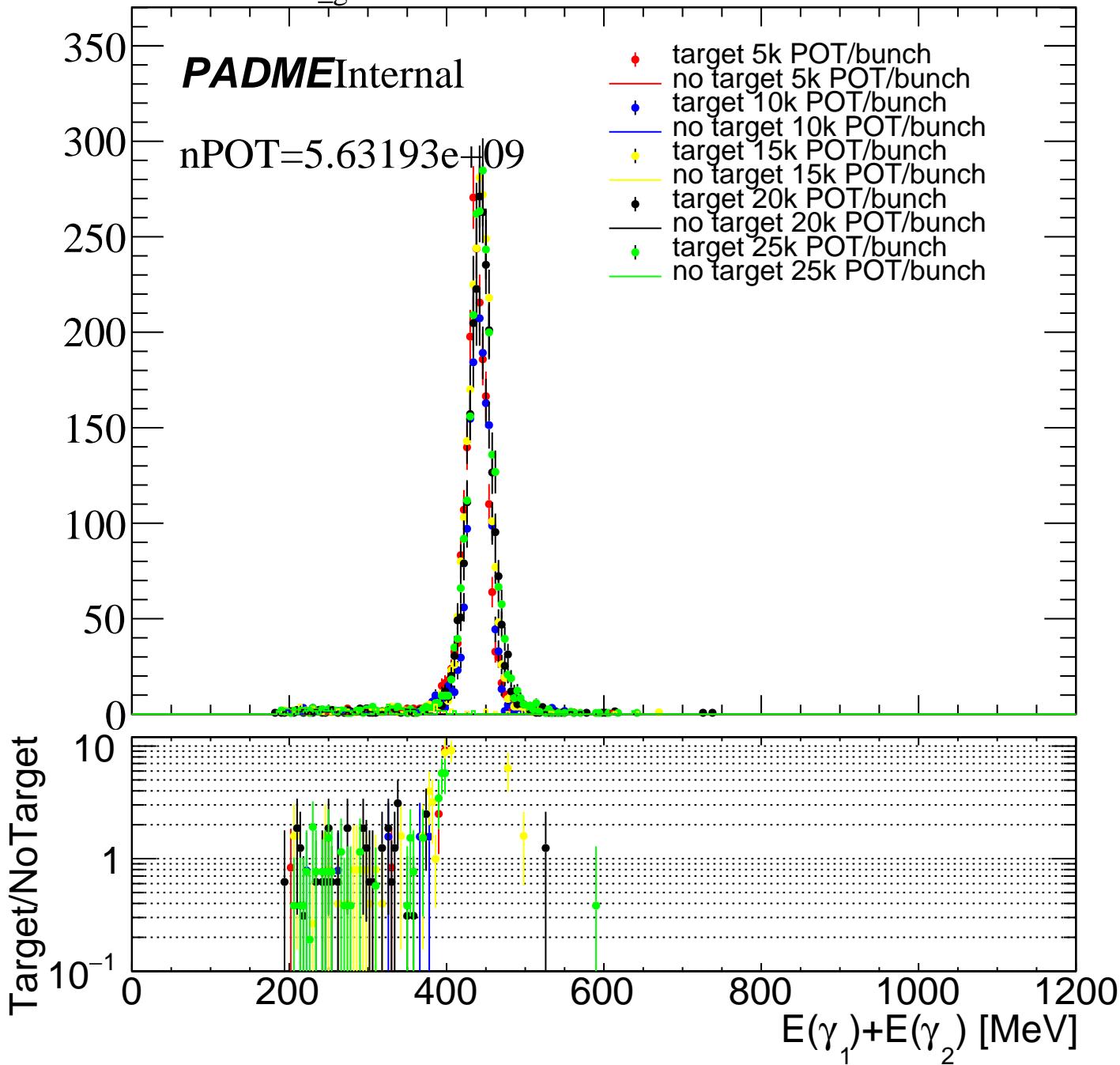
ECAL_gravTwoPhoton10ns1cm20DegreeUnderPeak



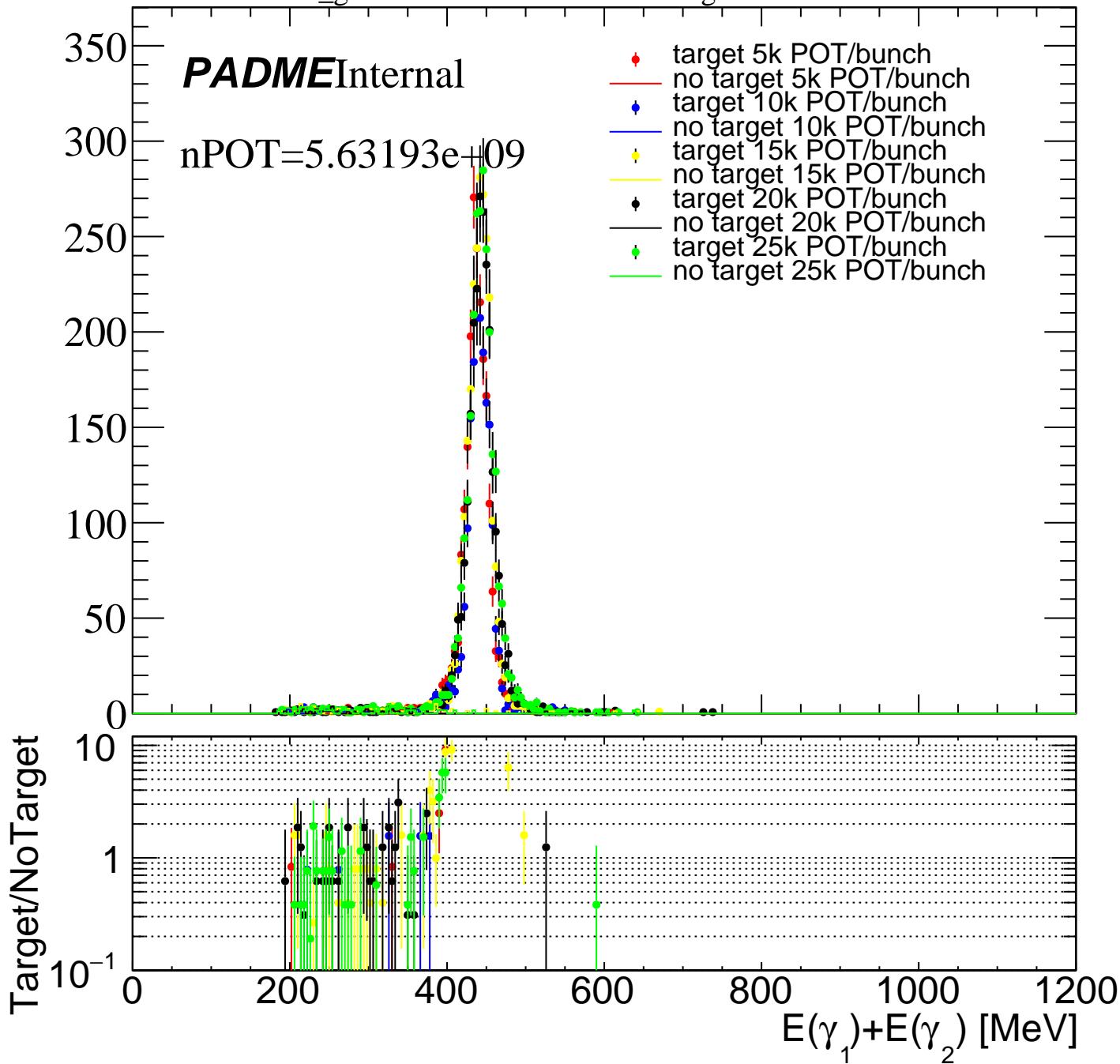
ECAL_gravTwoPhoton10ns1cm20DegreeDeltaThetaUnderPeak



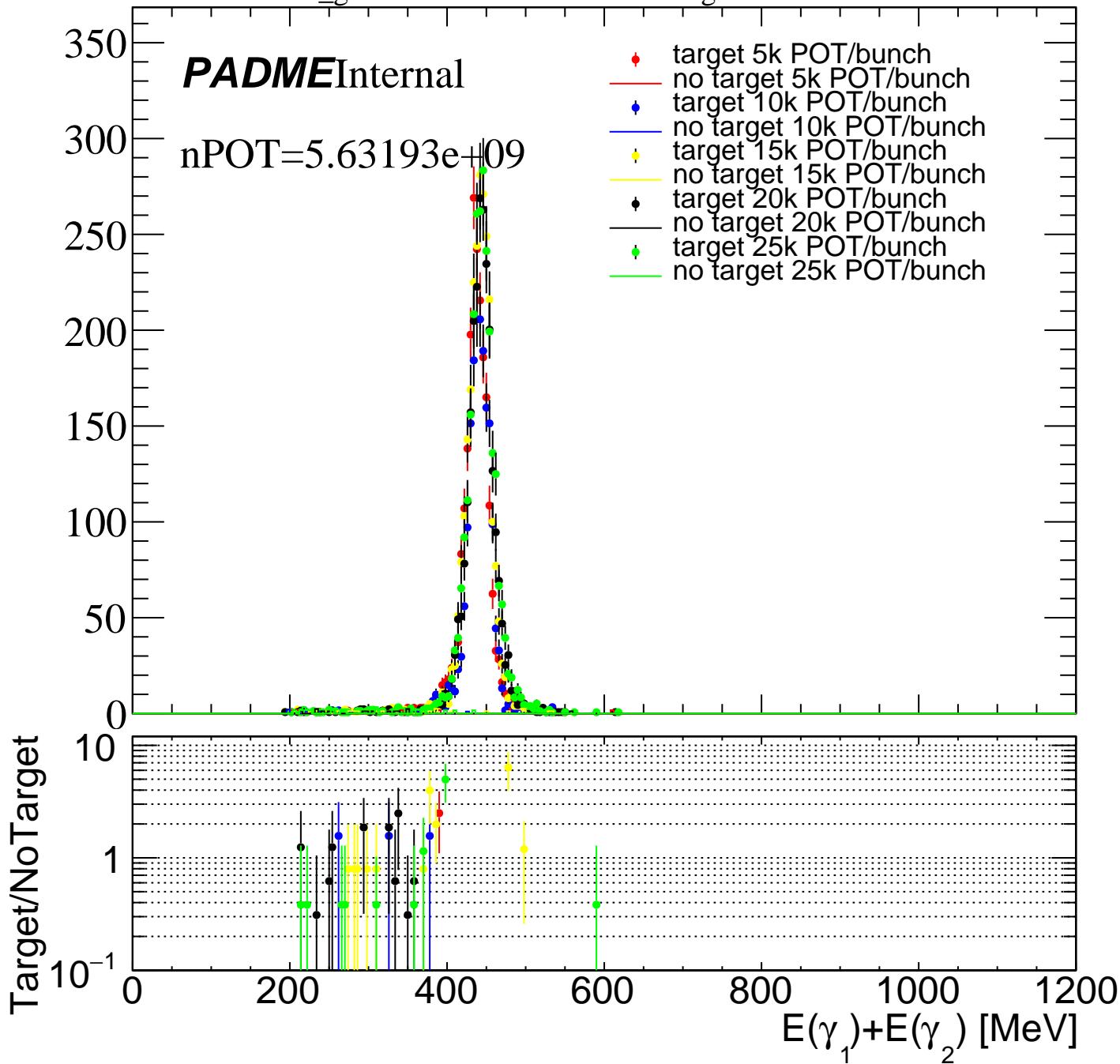
ECAL_gravTwoPhoton10ns1cmEThr90



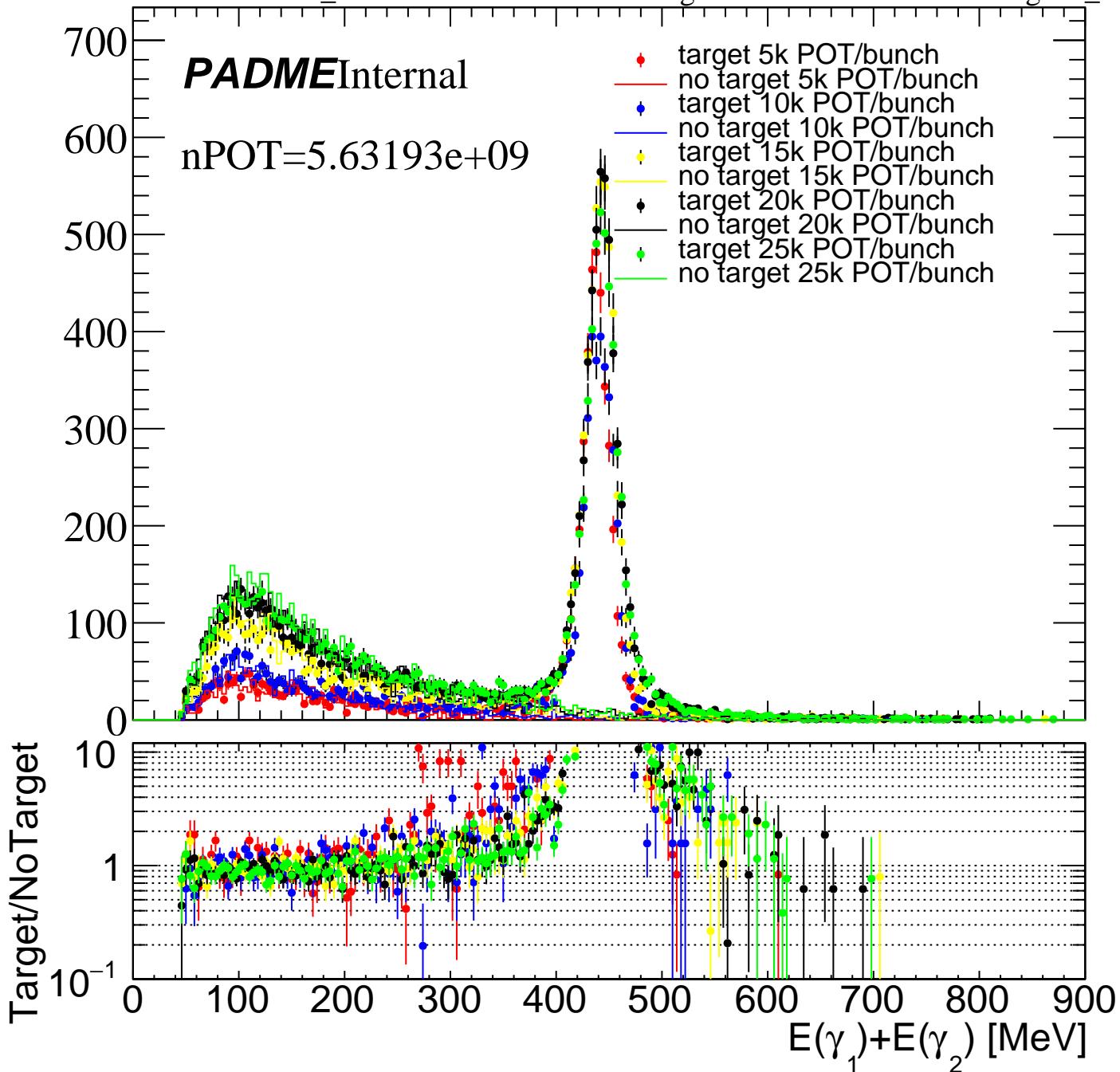
ECAL_gravTwoPhoton10ns1cm20DegreeEThr90



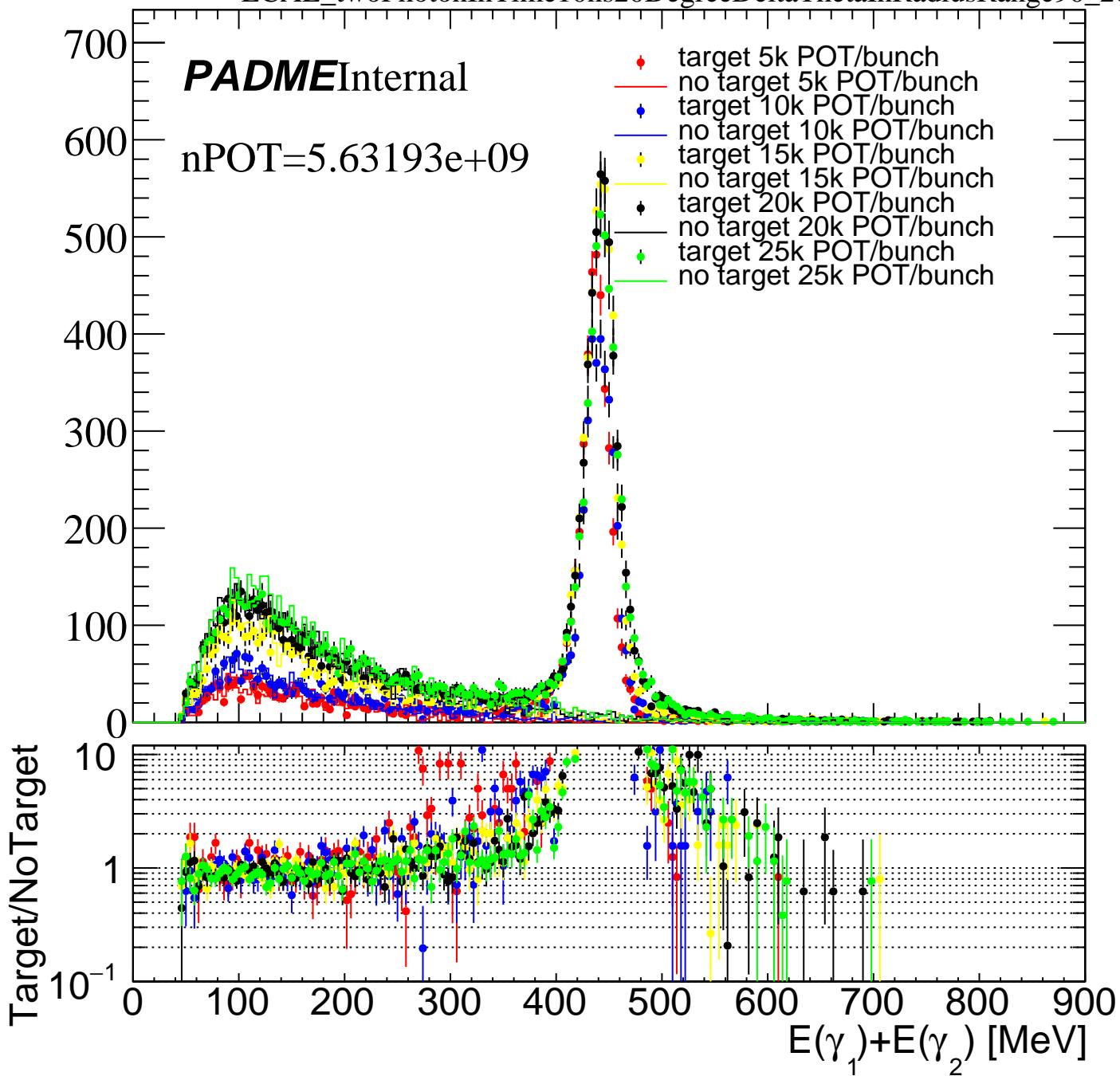
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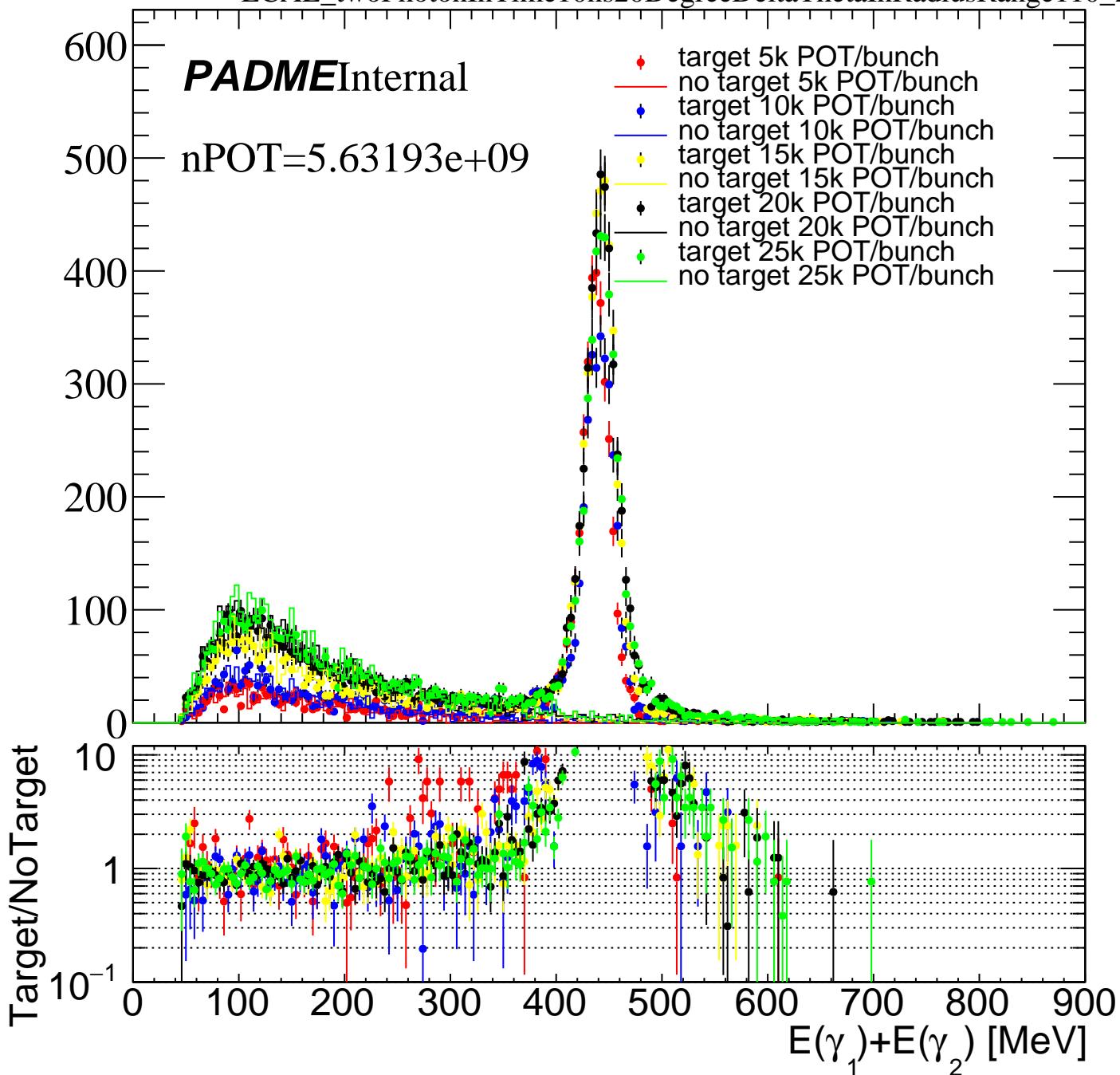
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange70_280

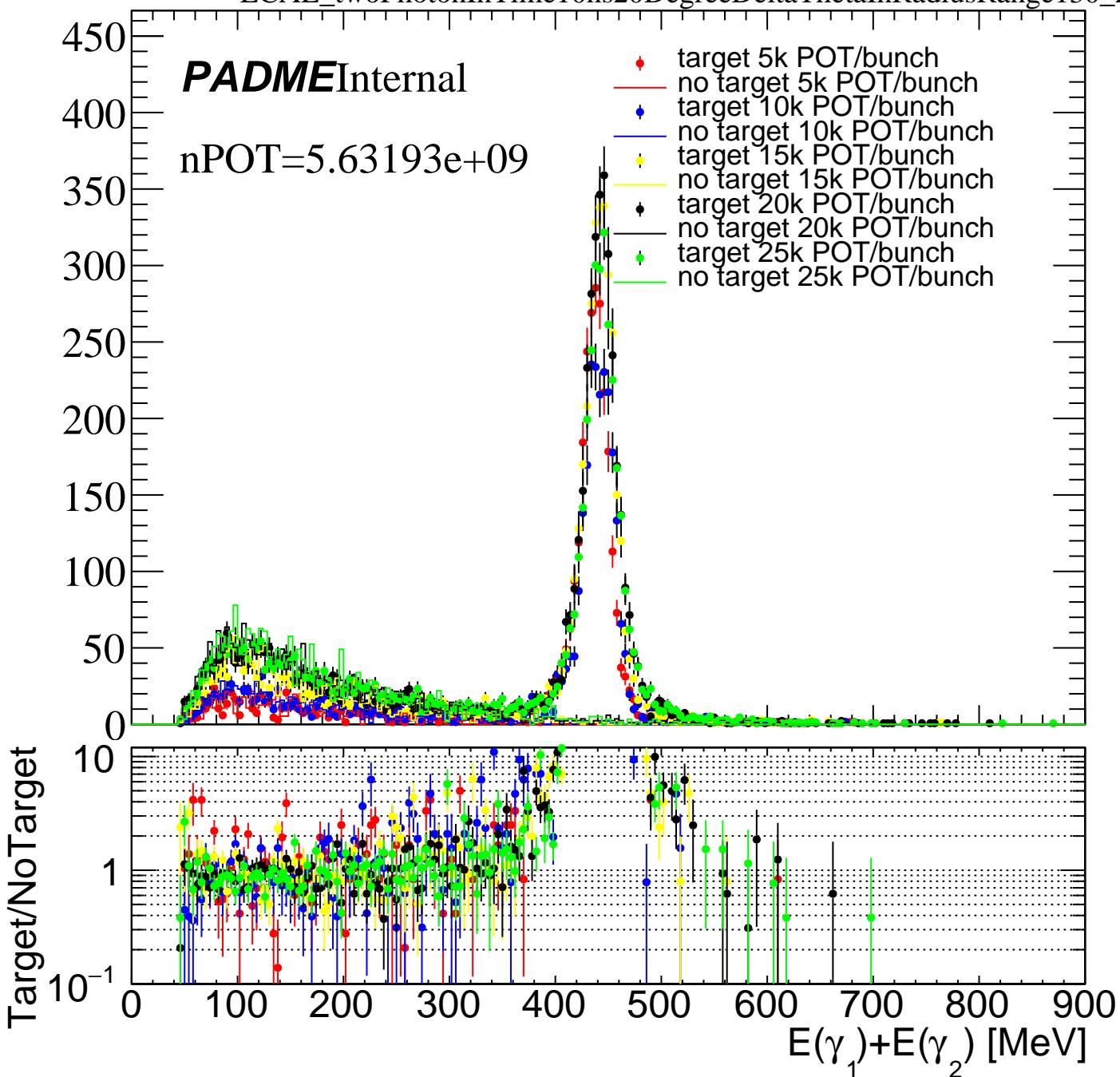


ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange90_260

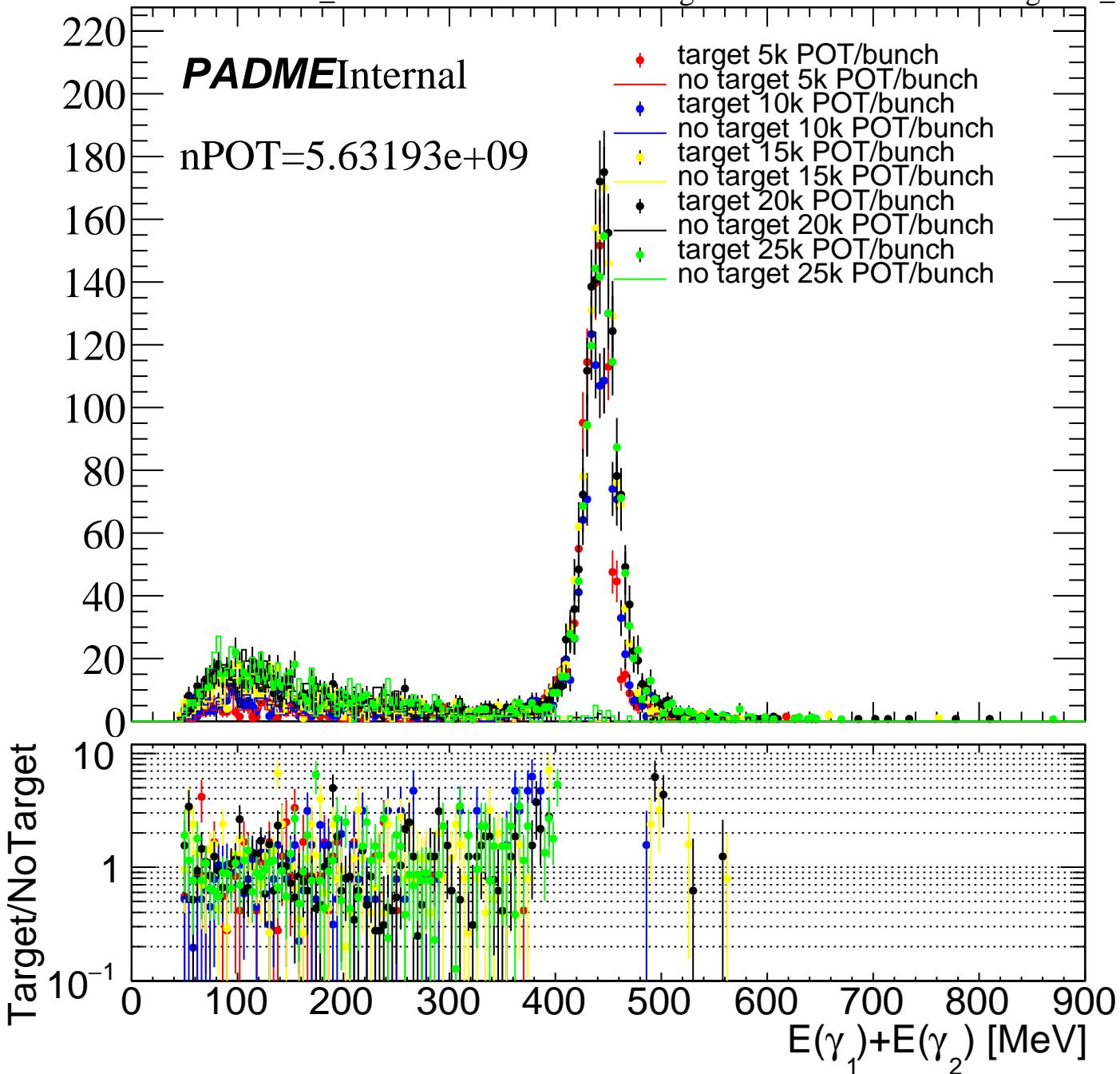


ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange110_24

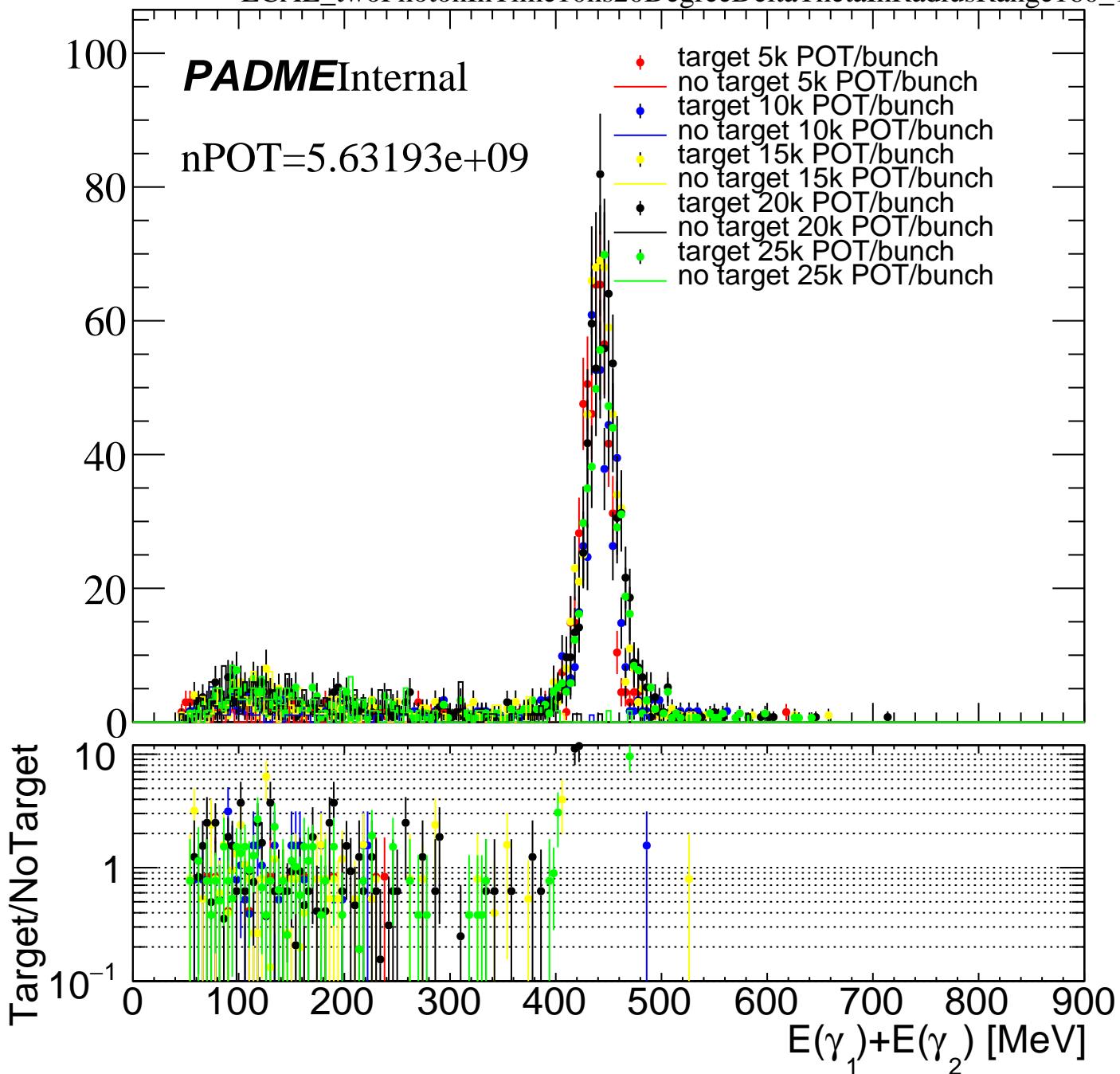




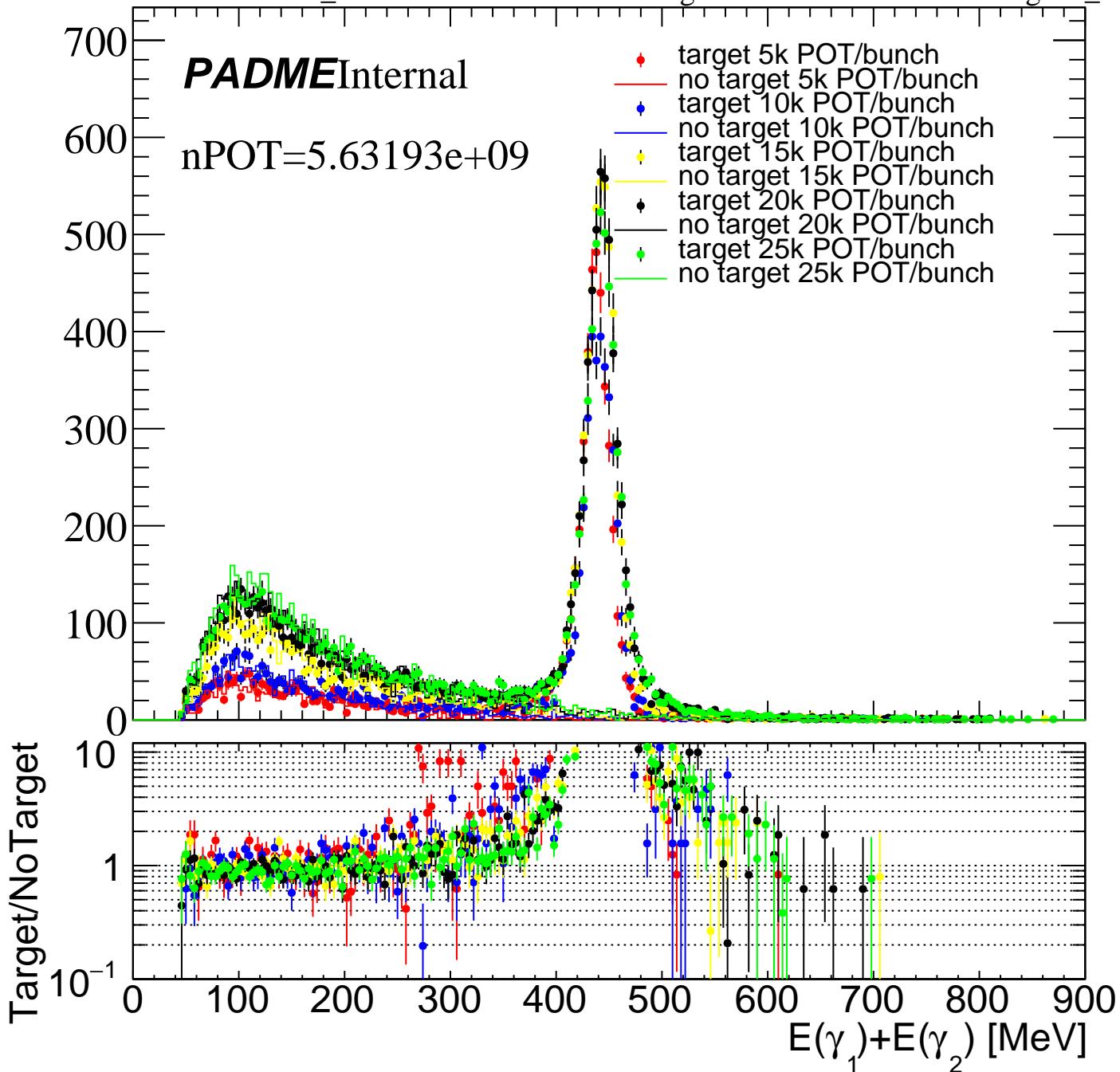
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange150_20



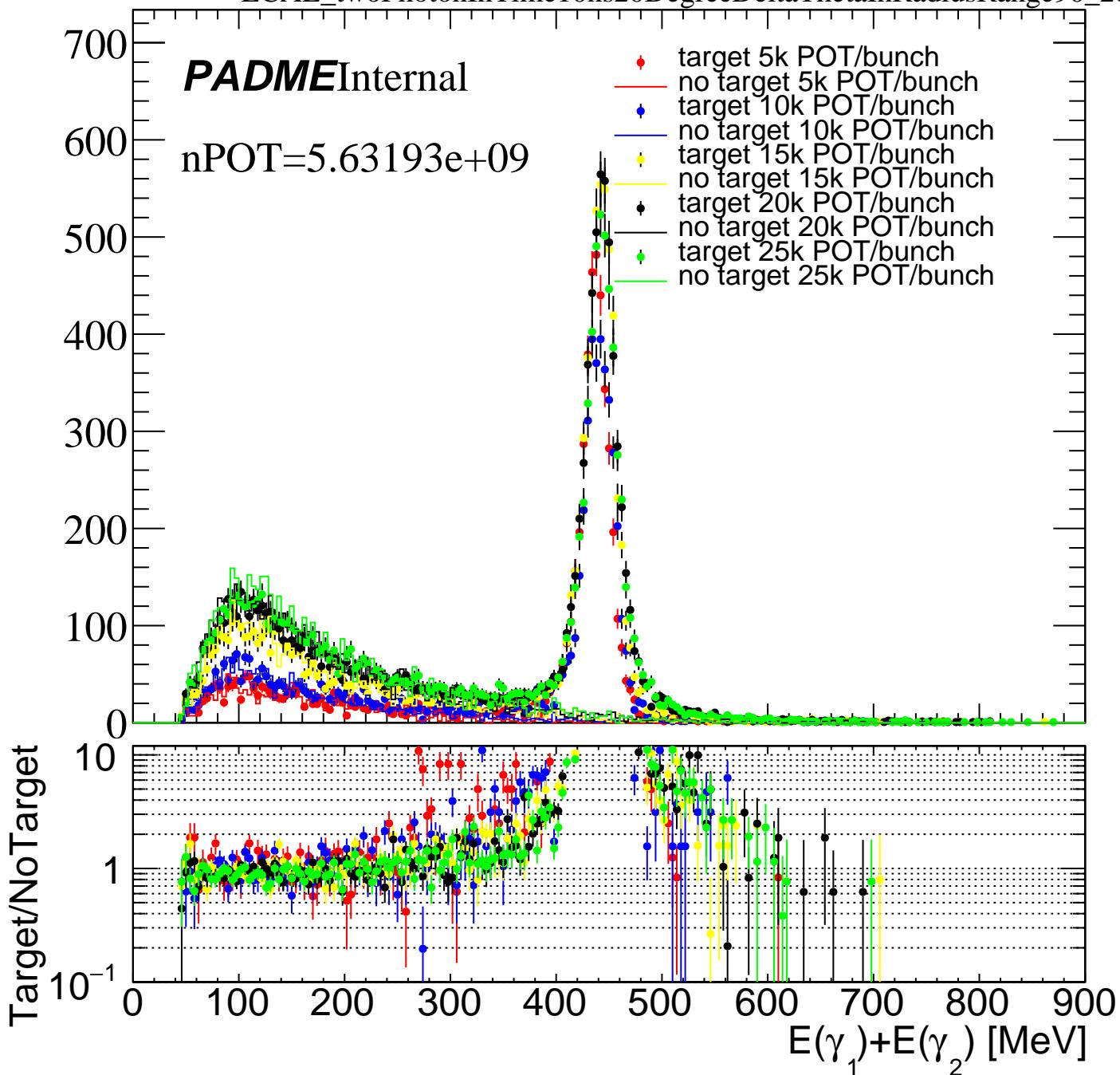
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange160_19

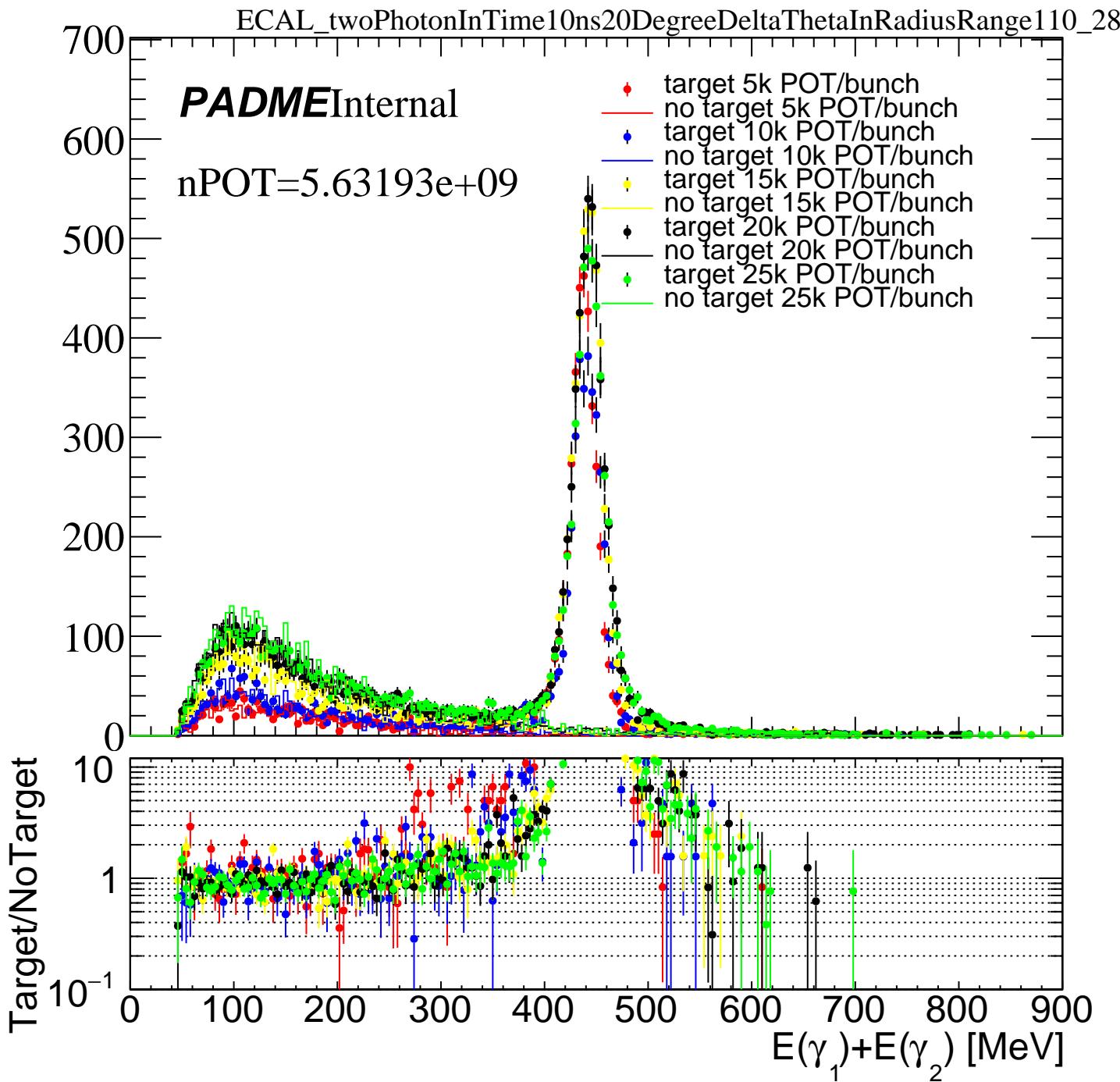


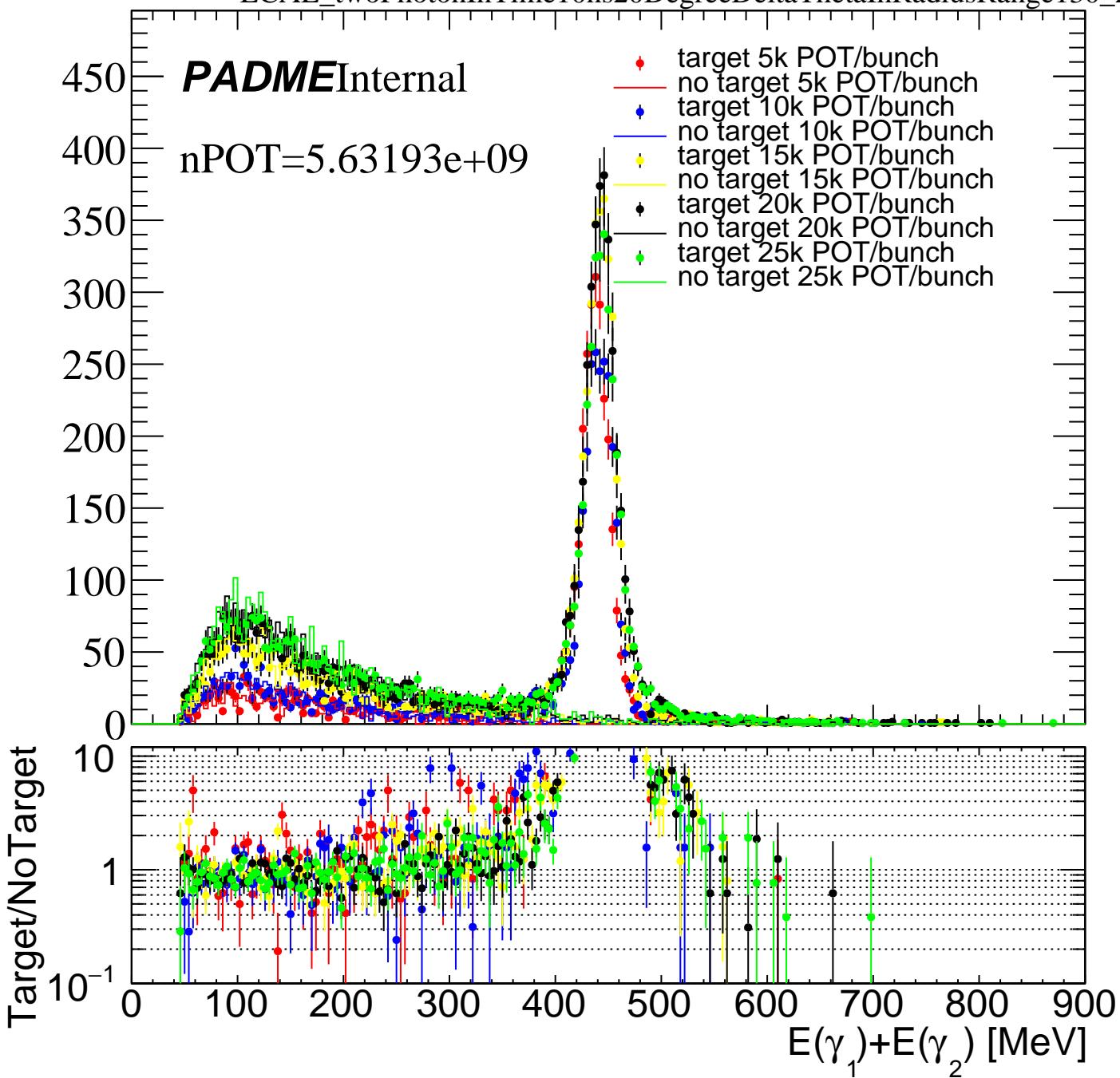
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange70_280

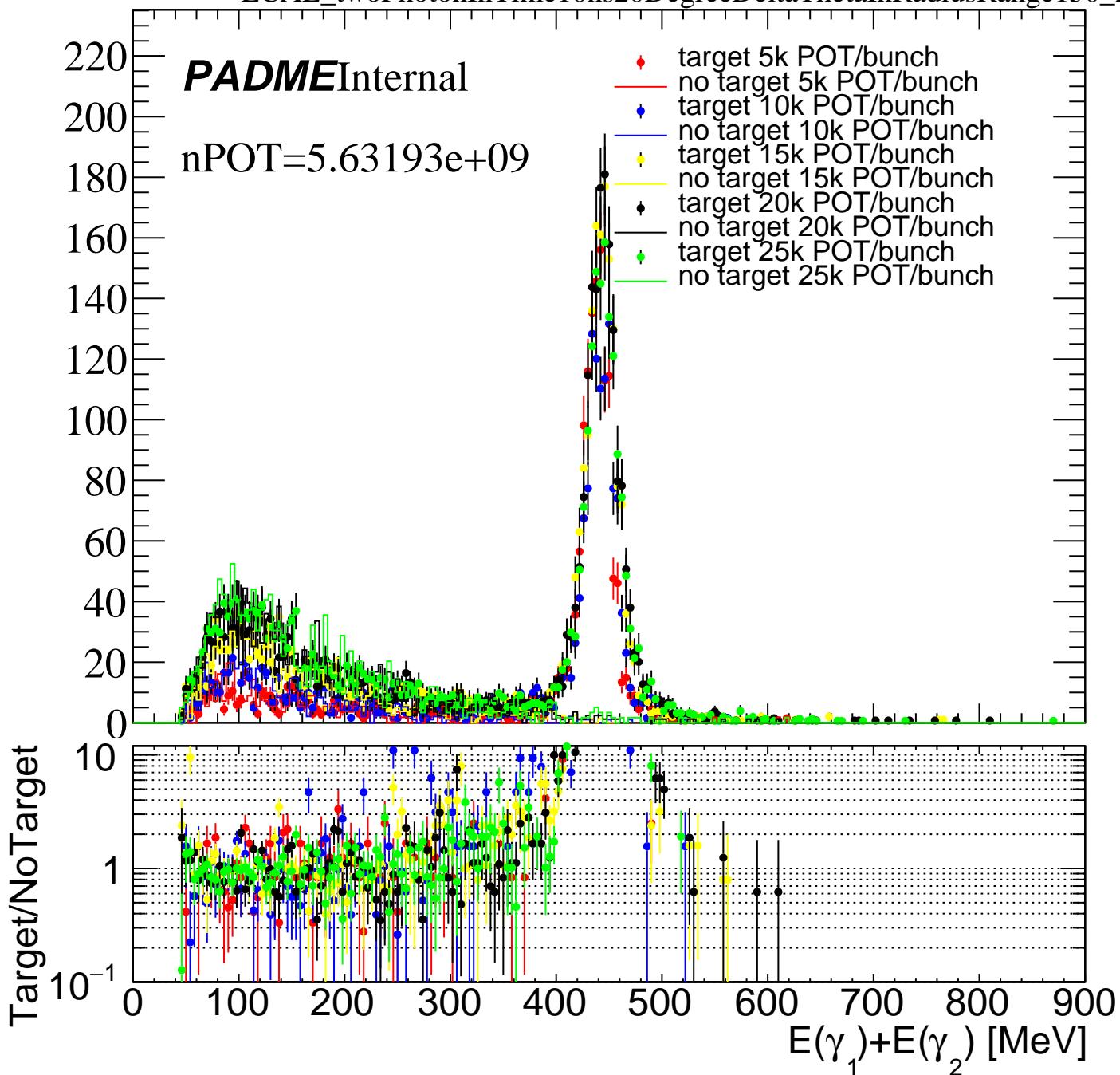


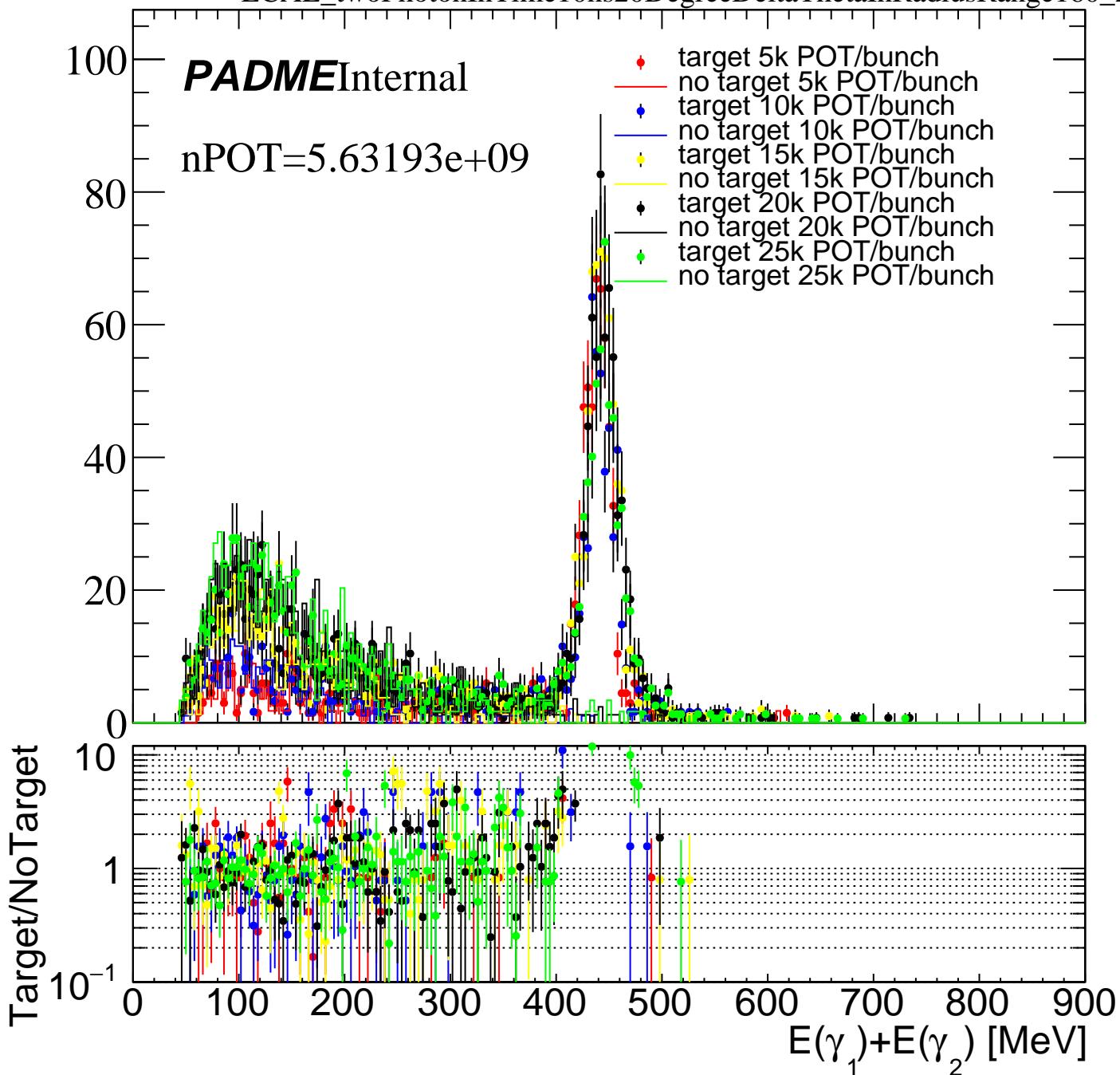
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange90_280



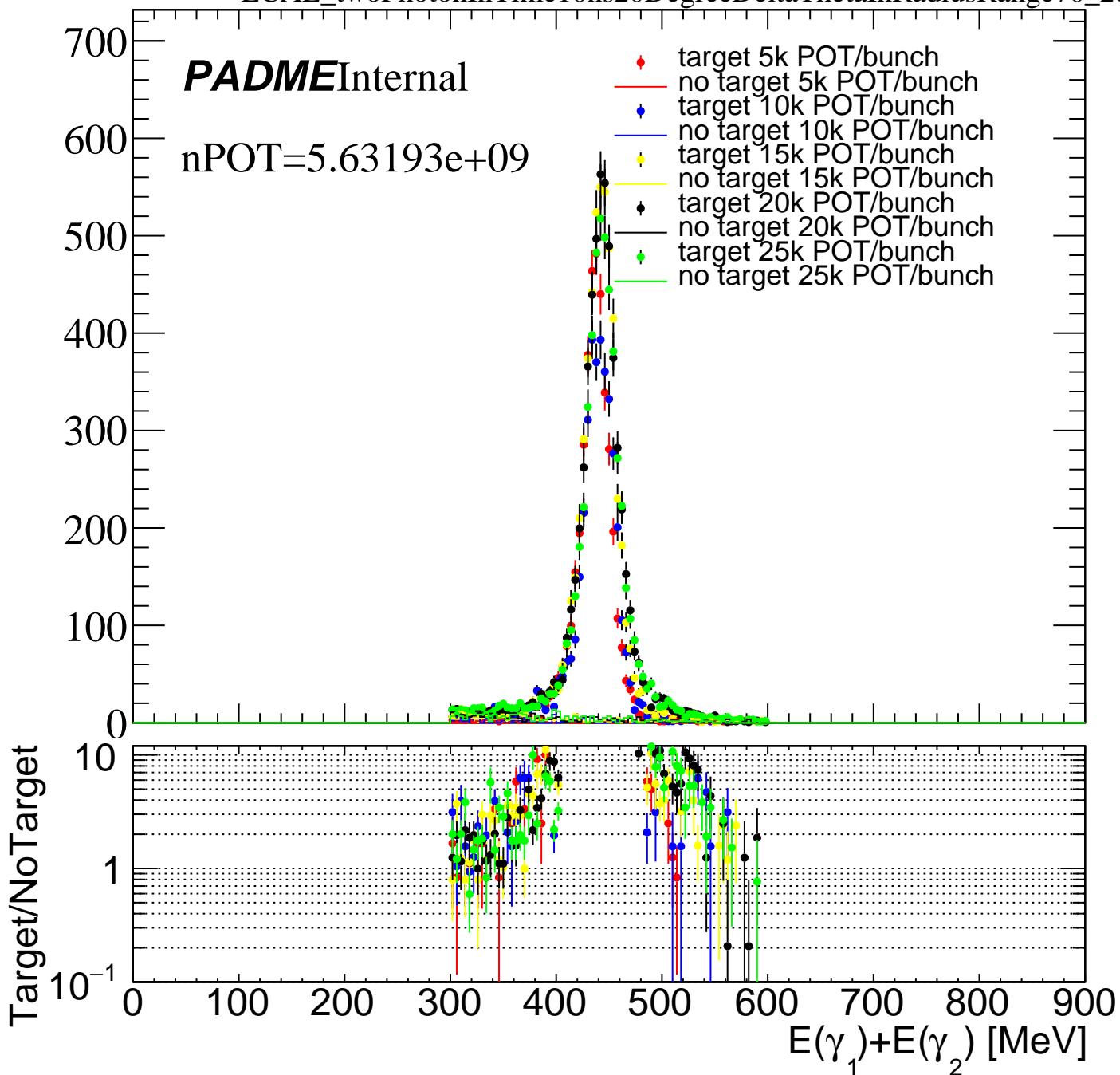




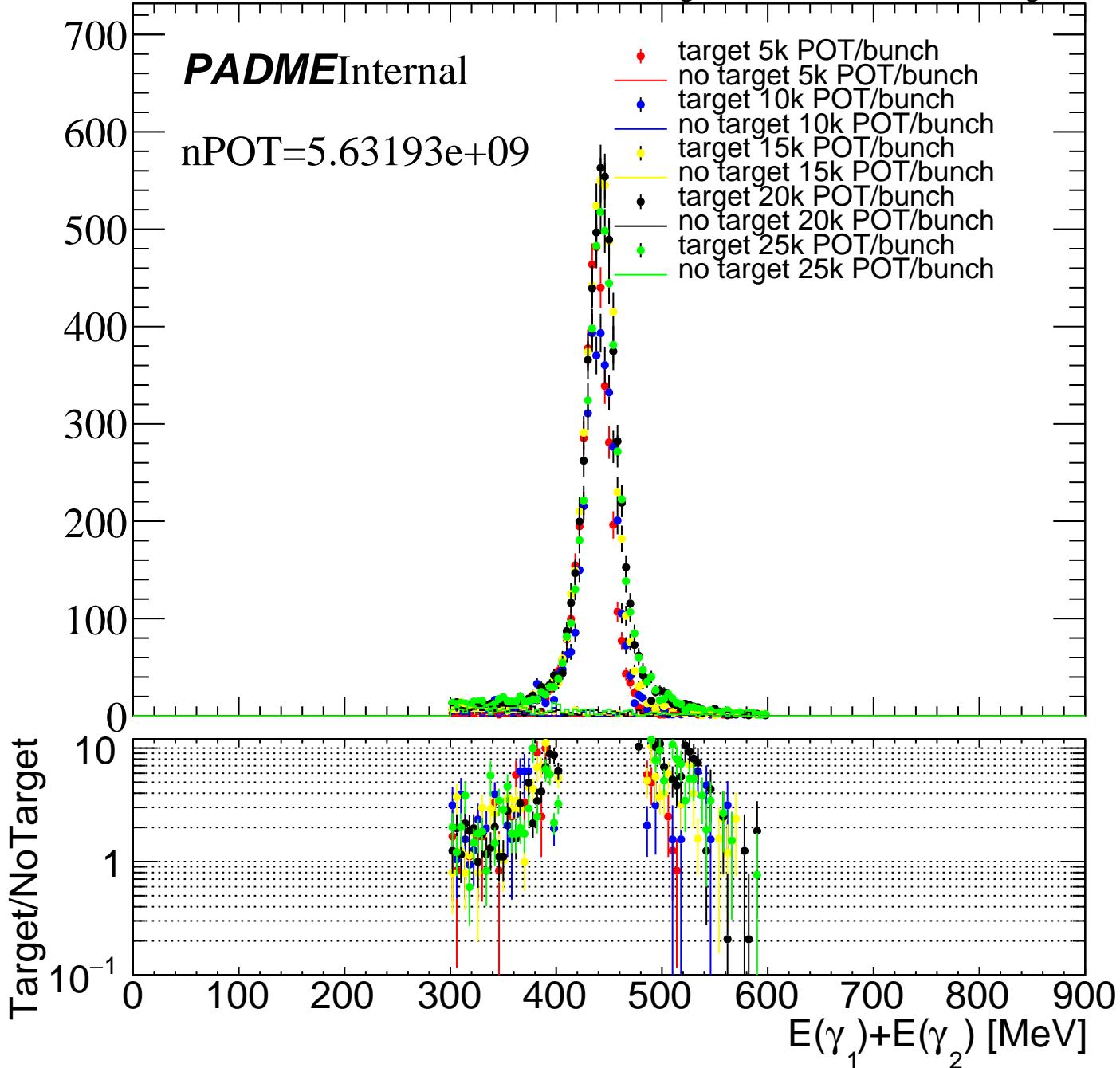




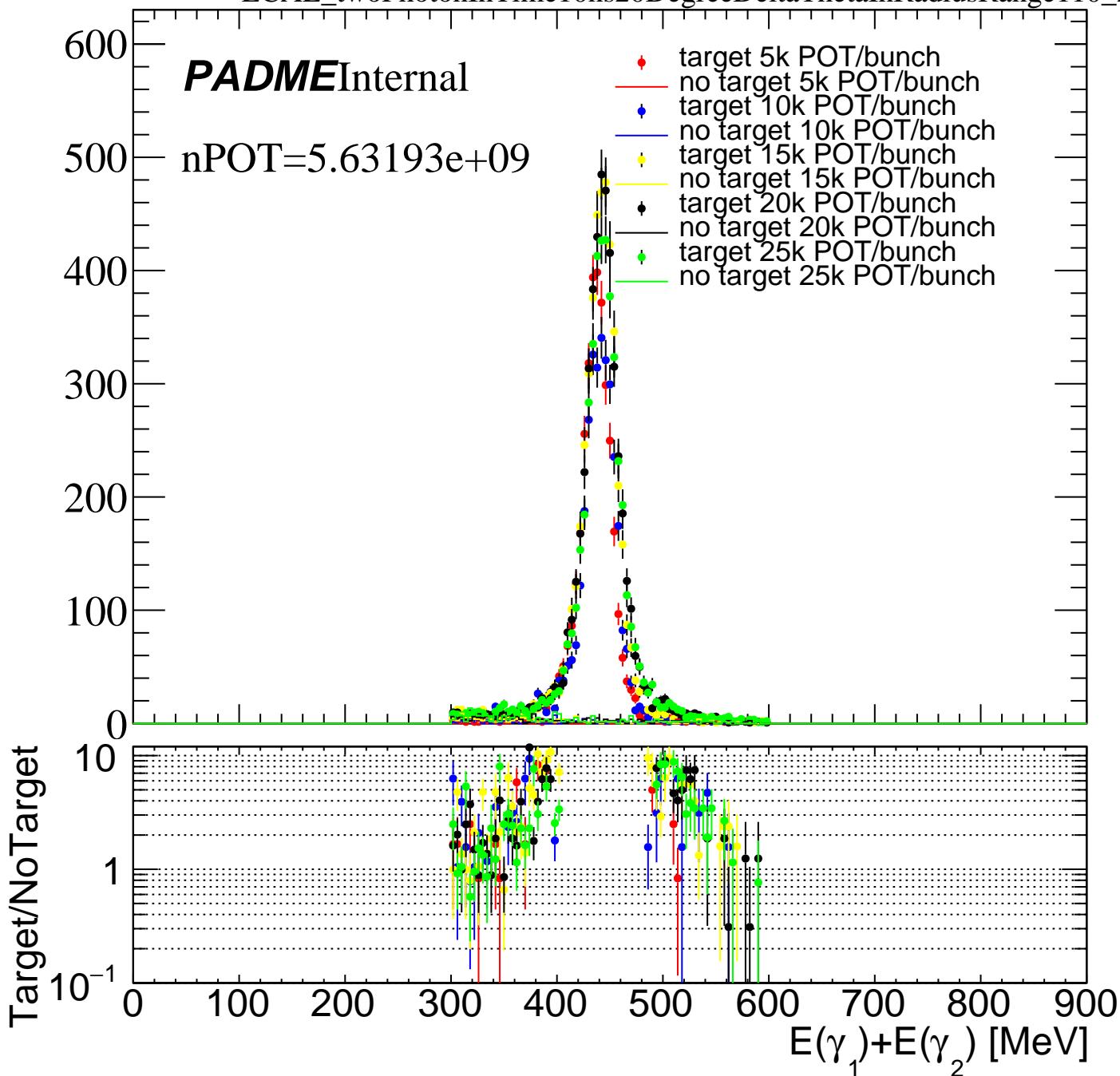
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange70_280



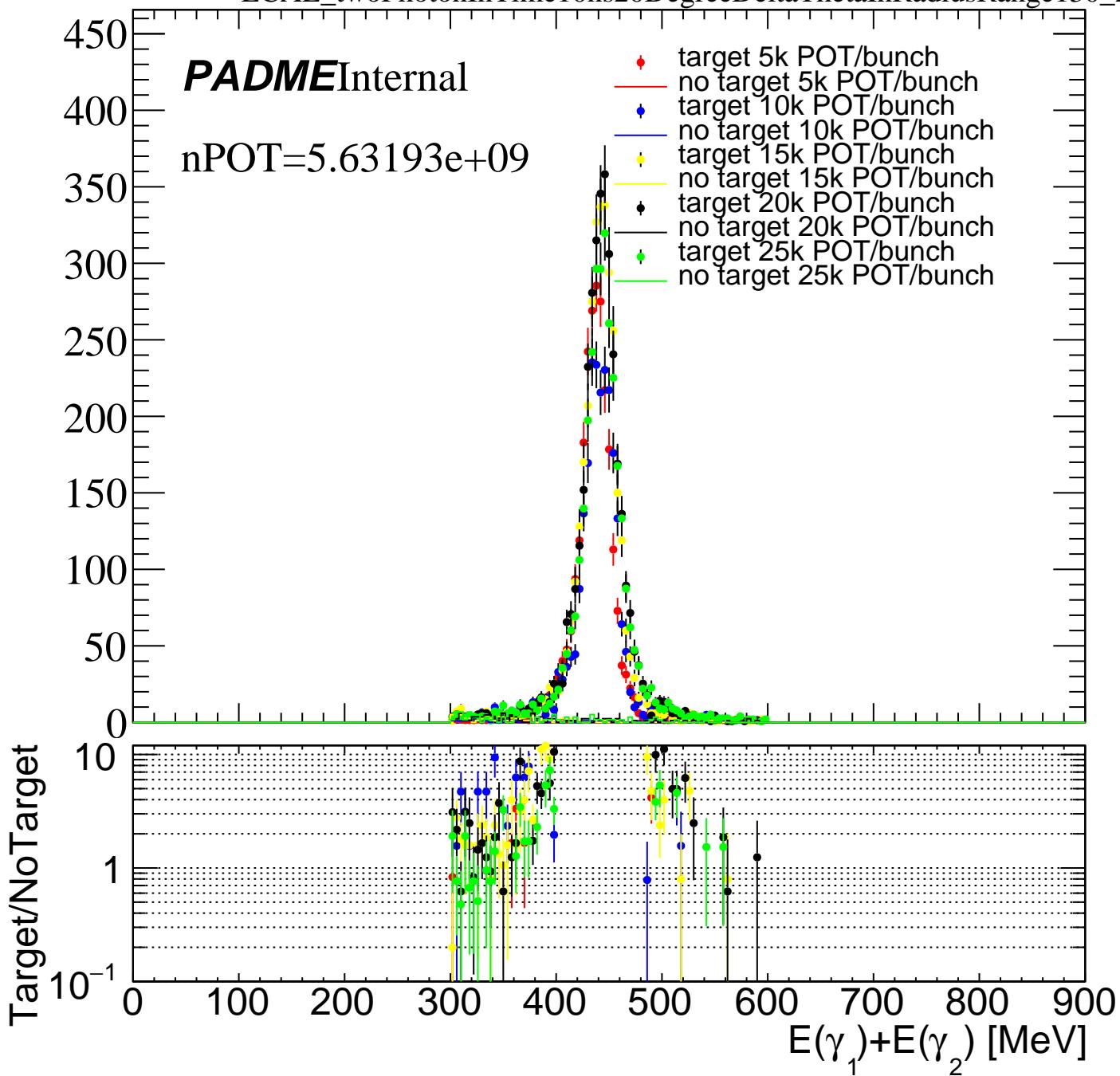
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange90_260



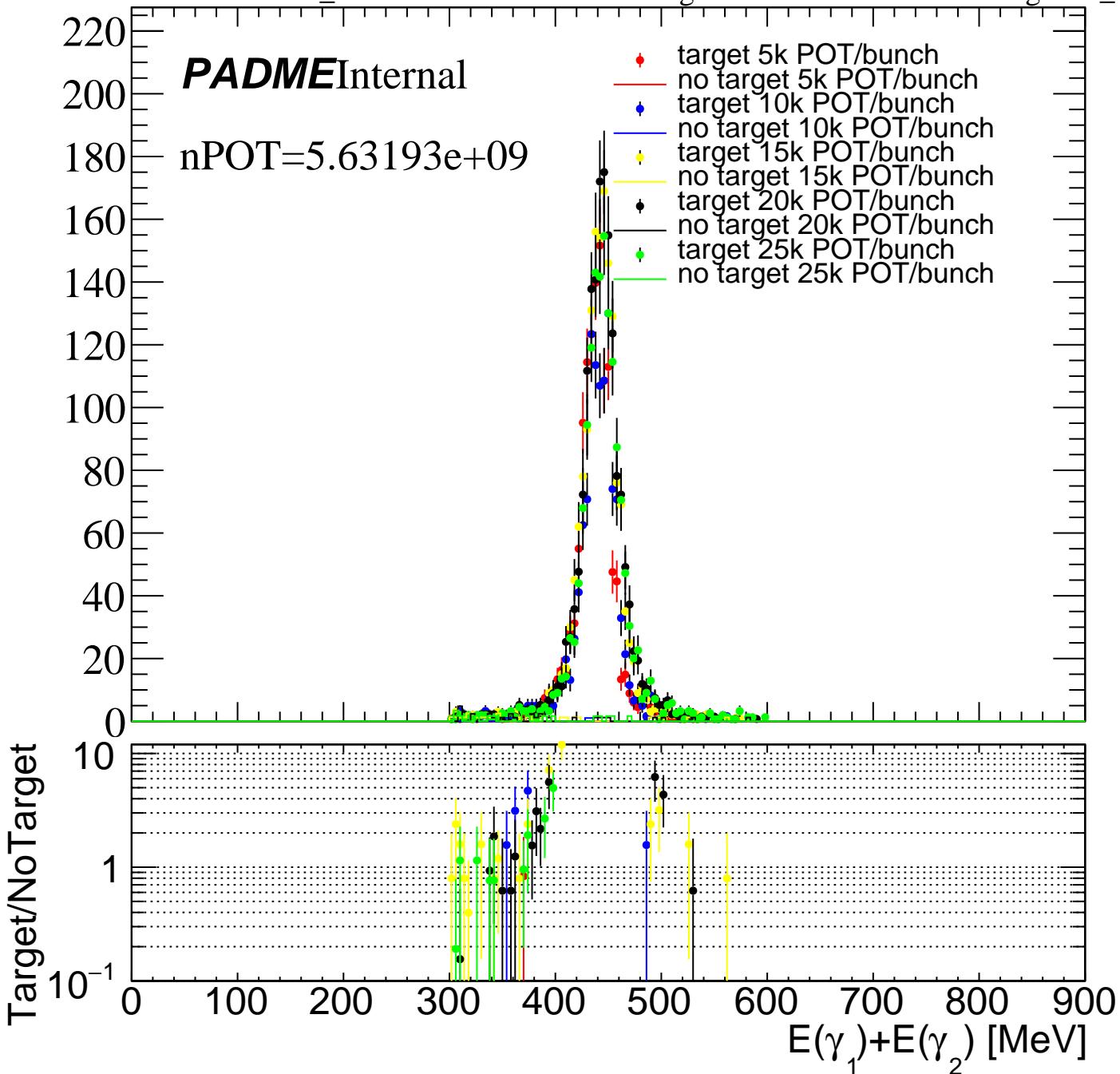
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange110_24



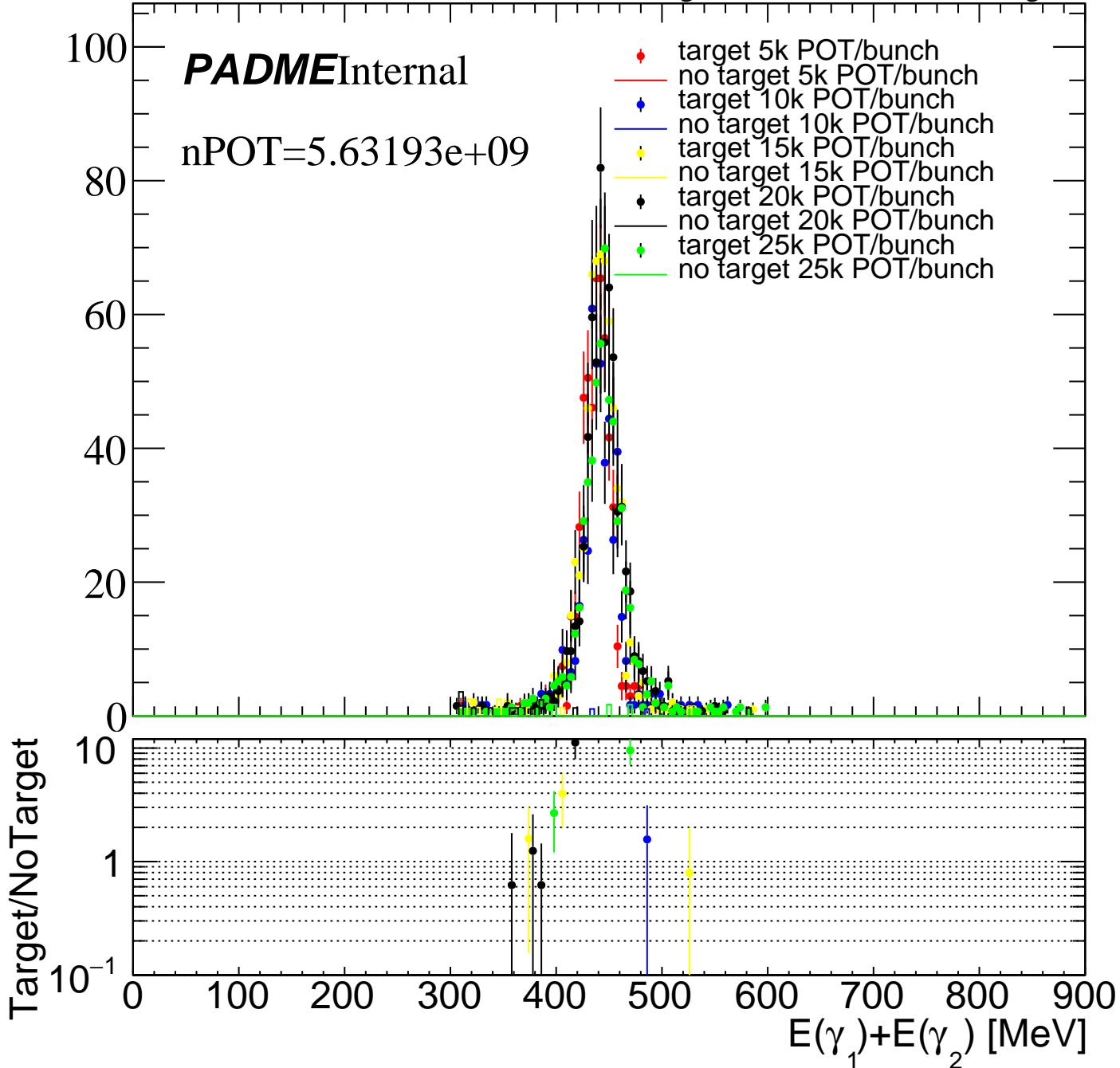
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange130_22



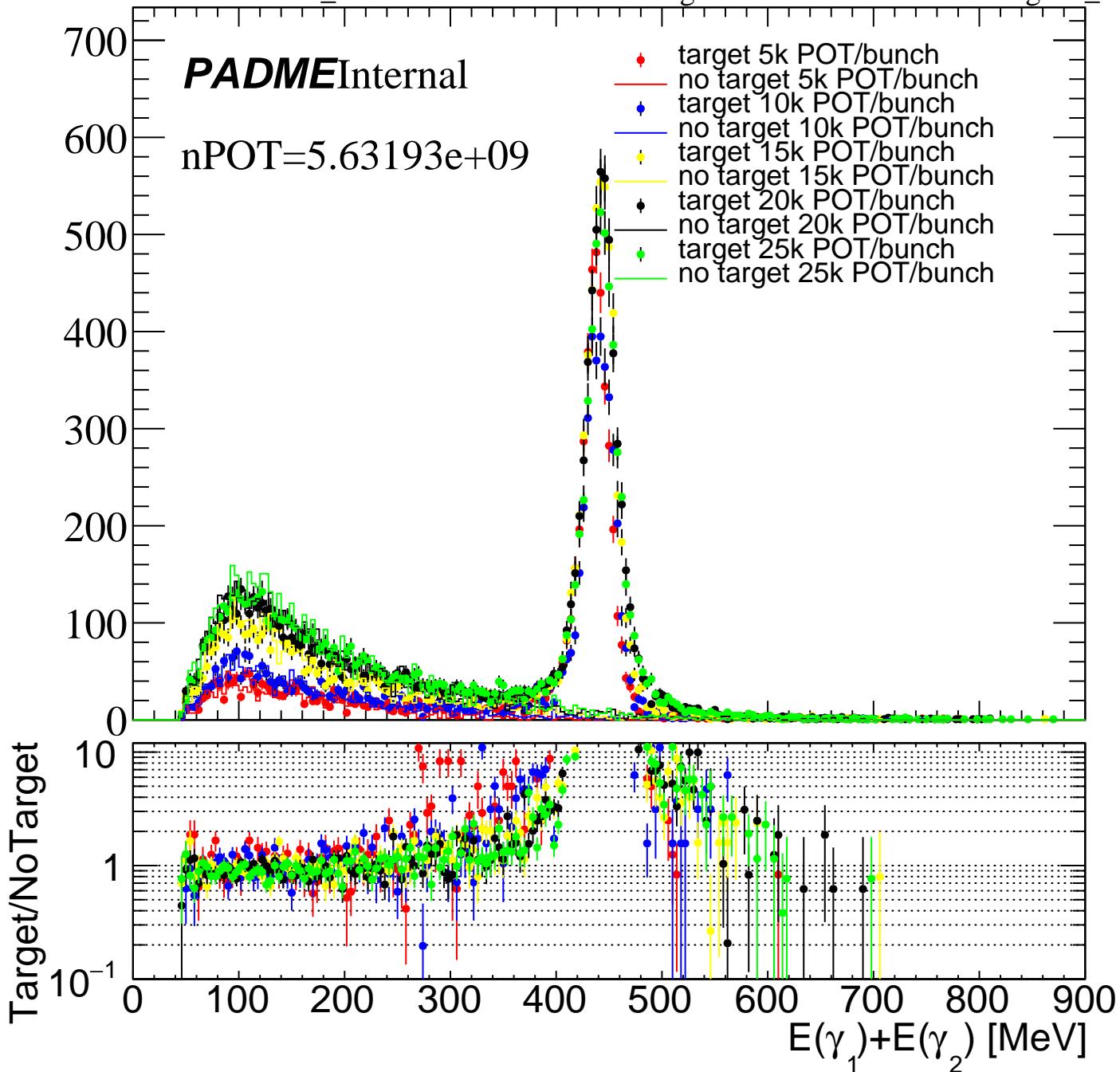
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange150_20

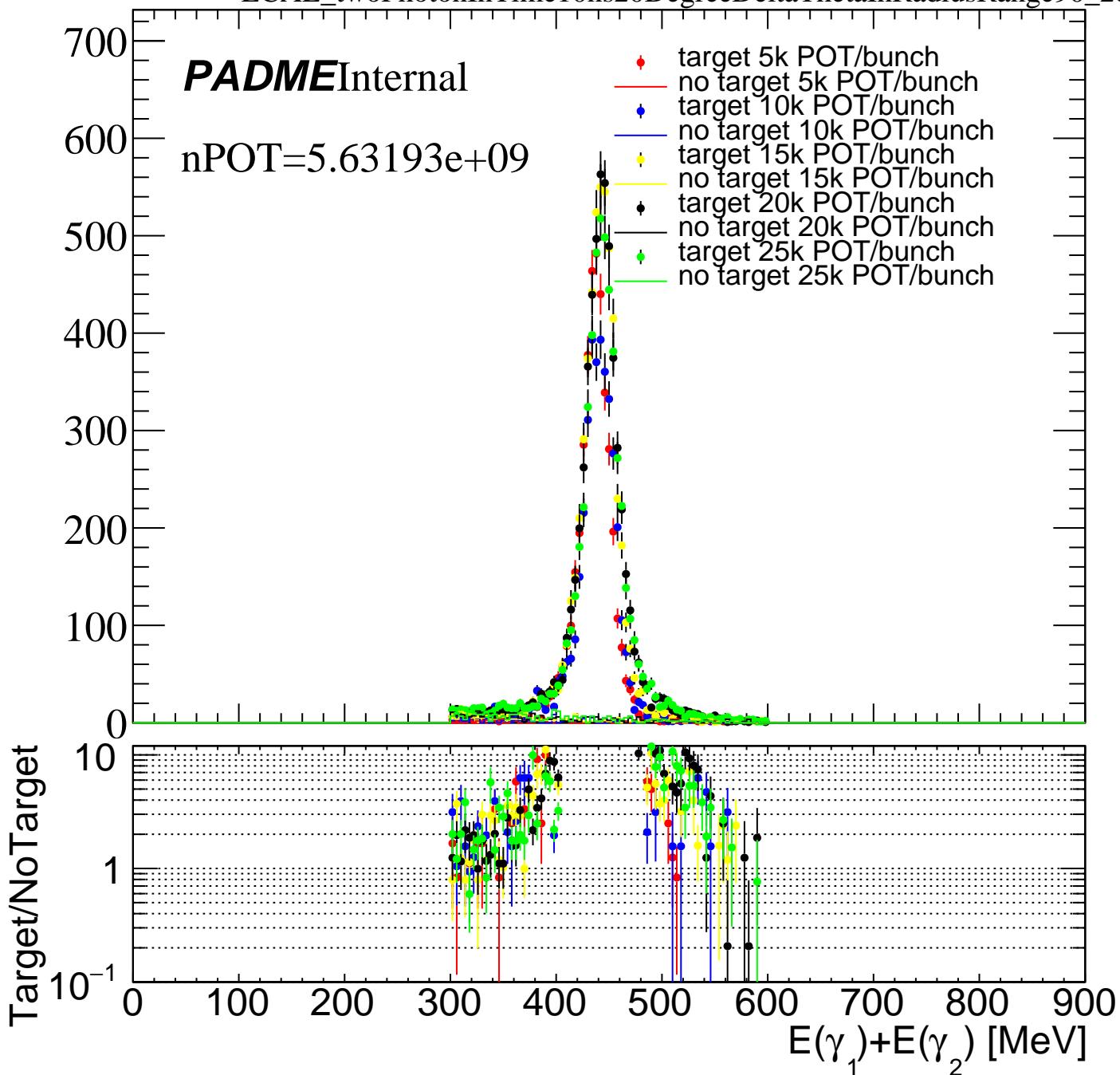


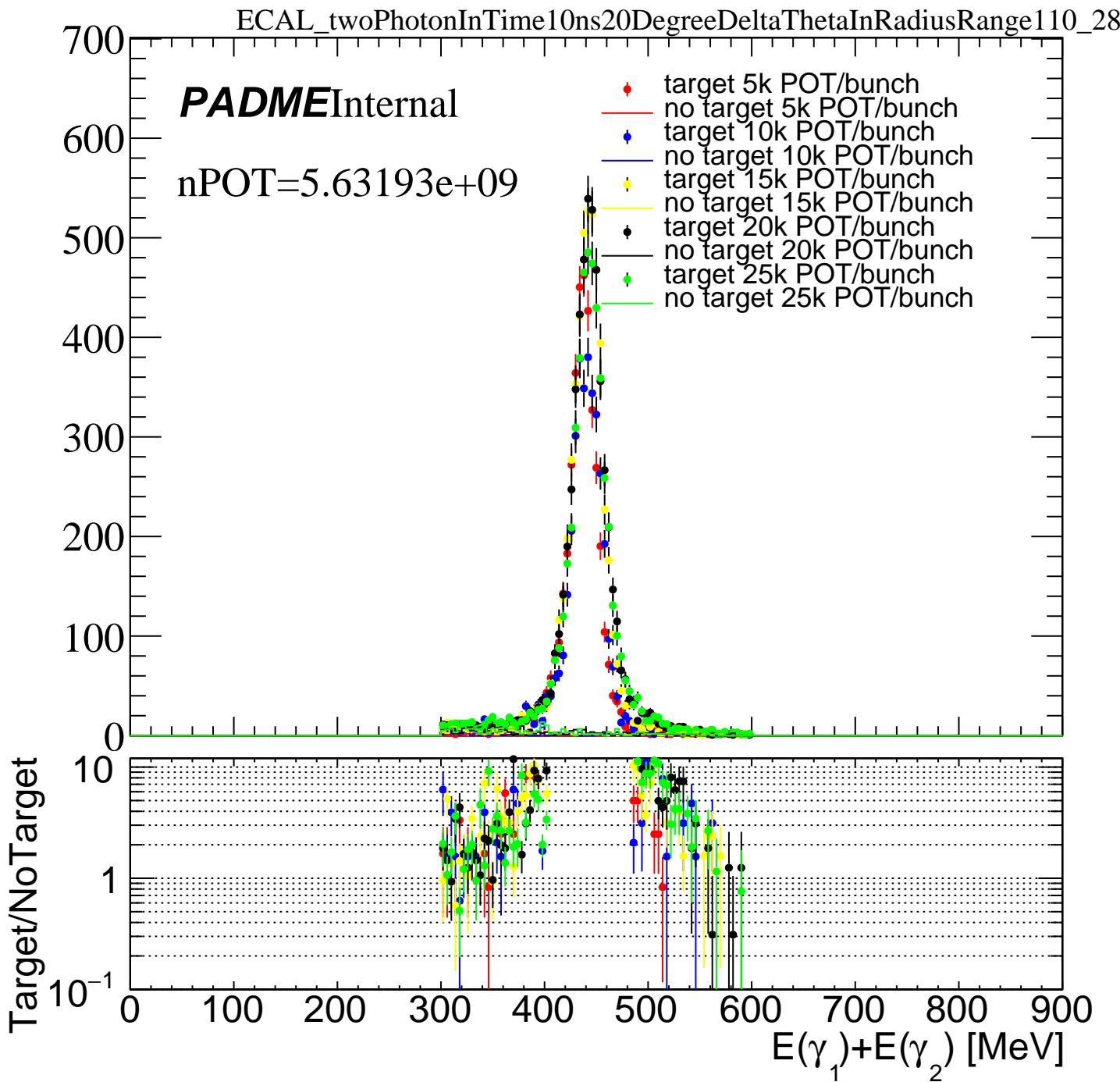
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange160_19

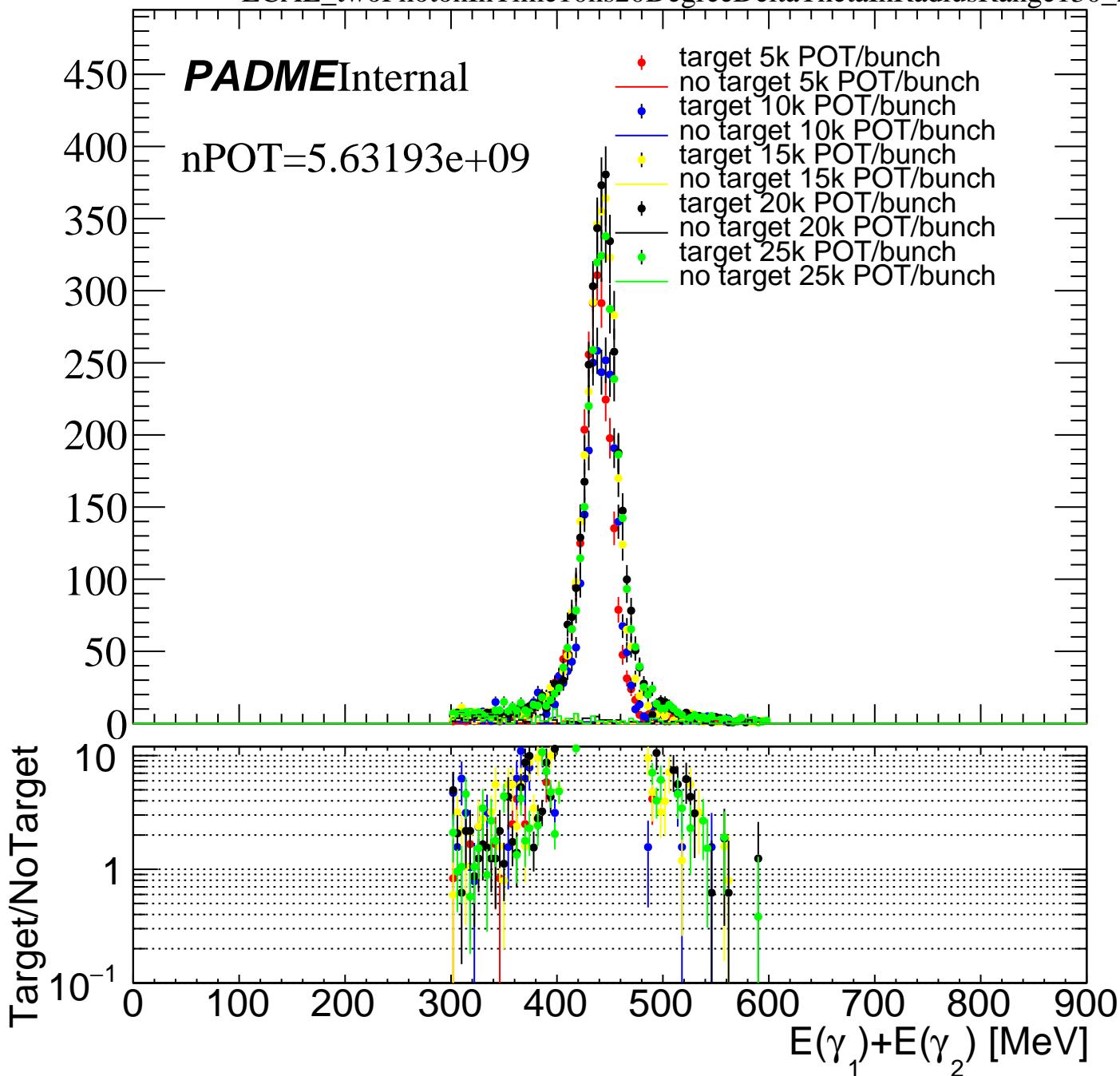


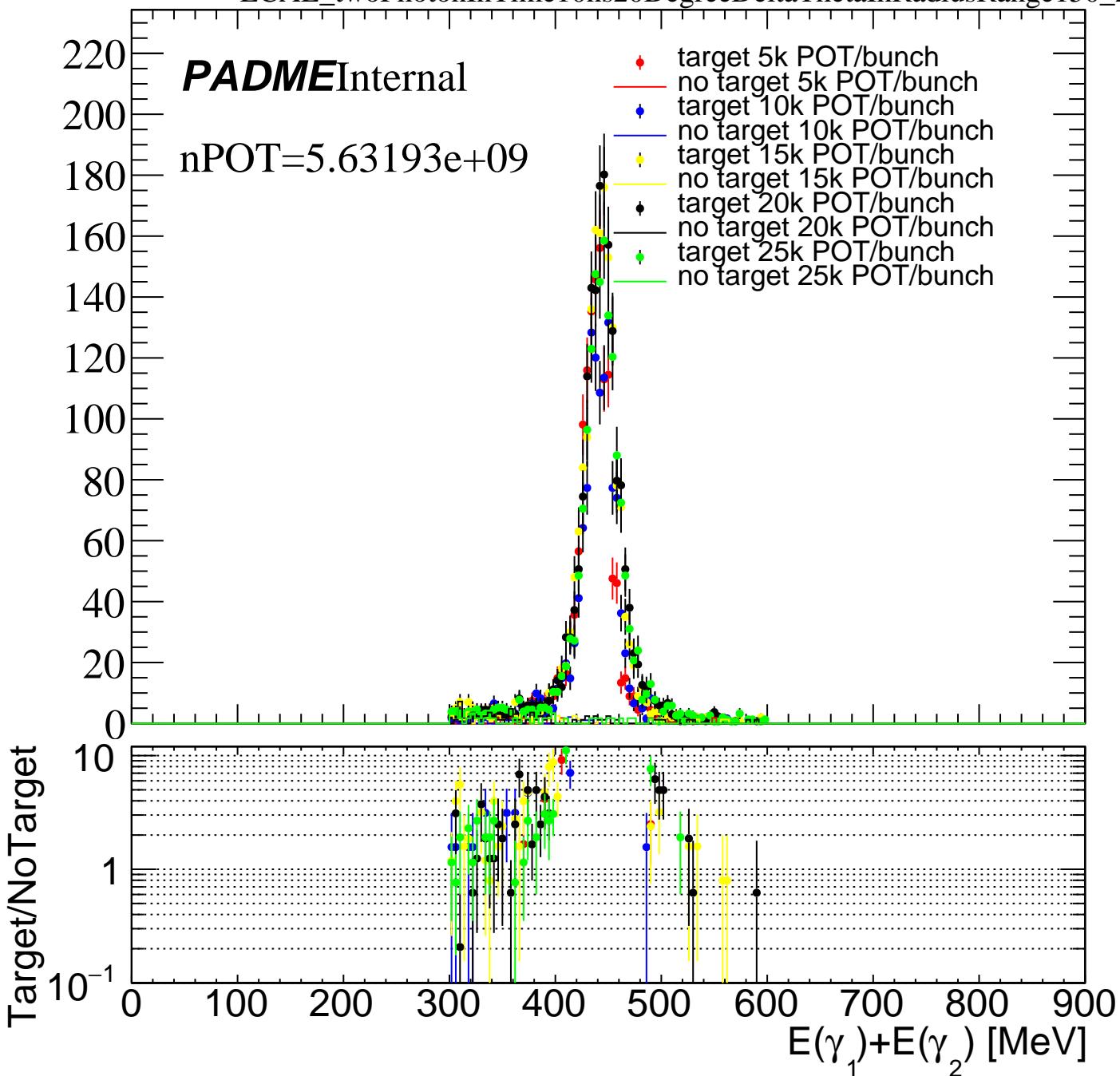
ECAL_twoPhotonInTime10ns20DegreeDeltaThetaInRadiusRange70_280

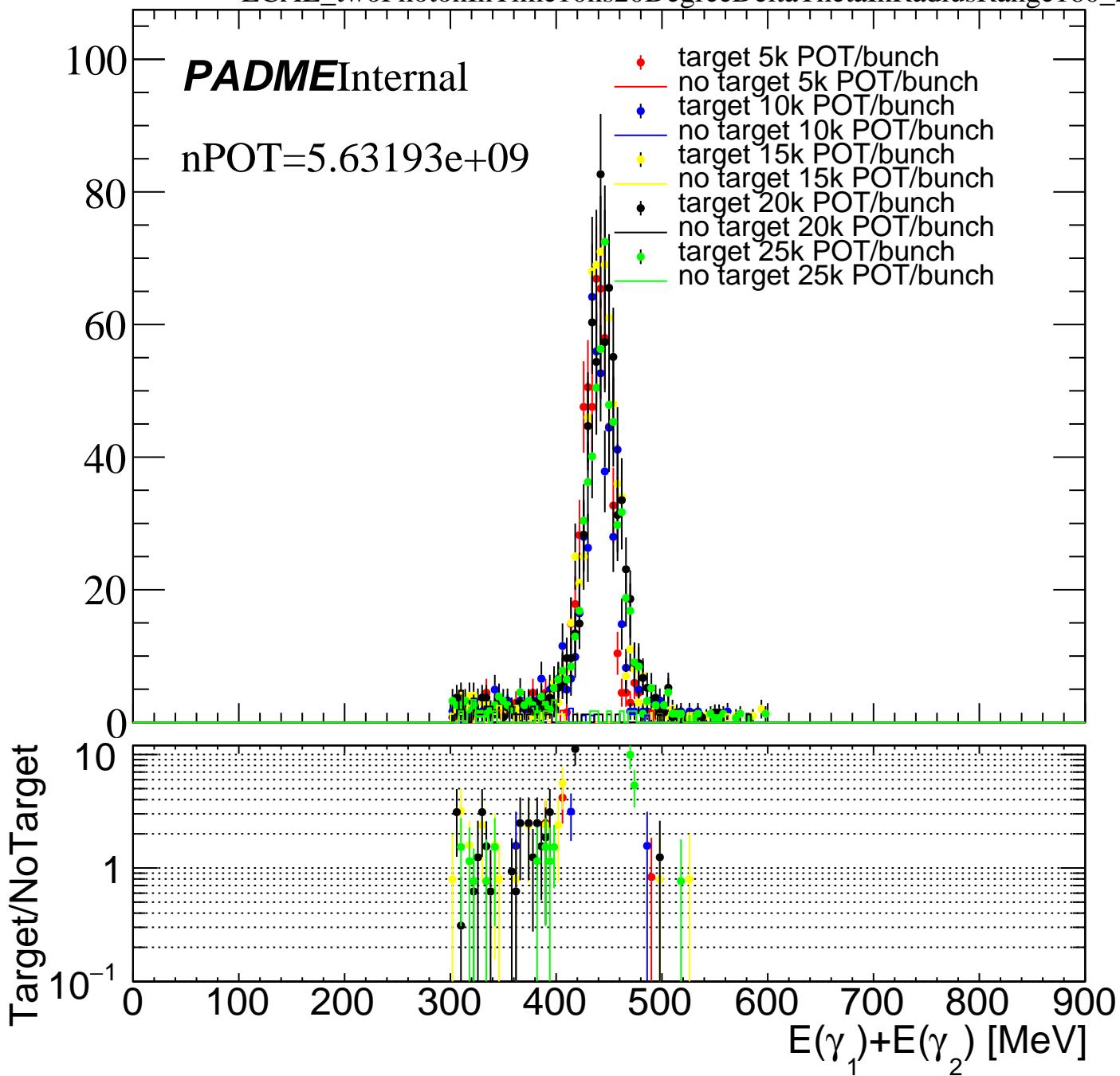




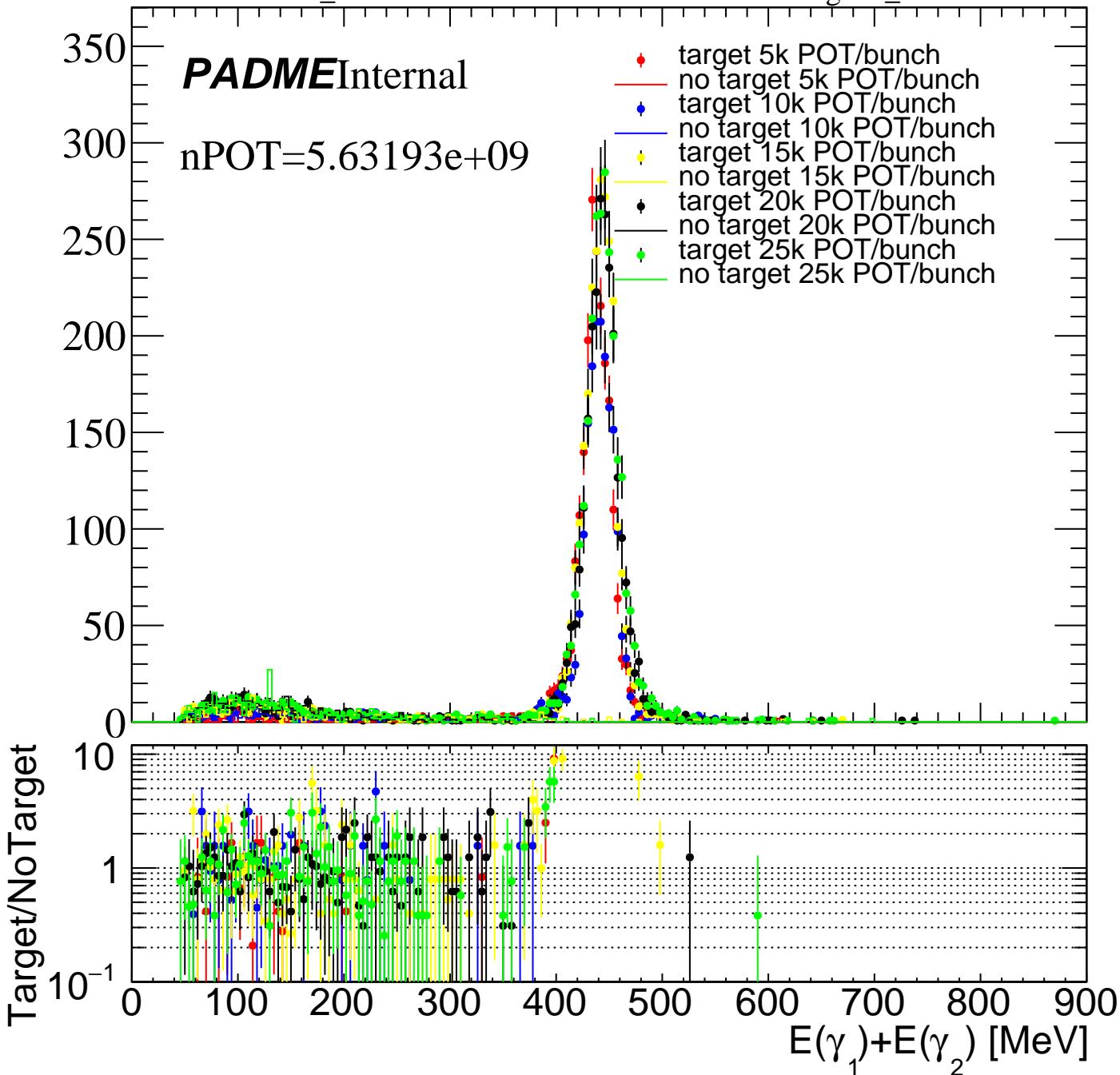




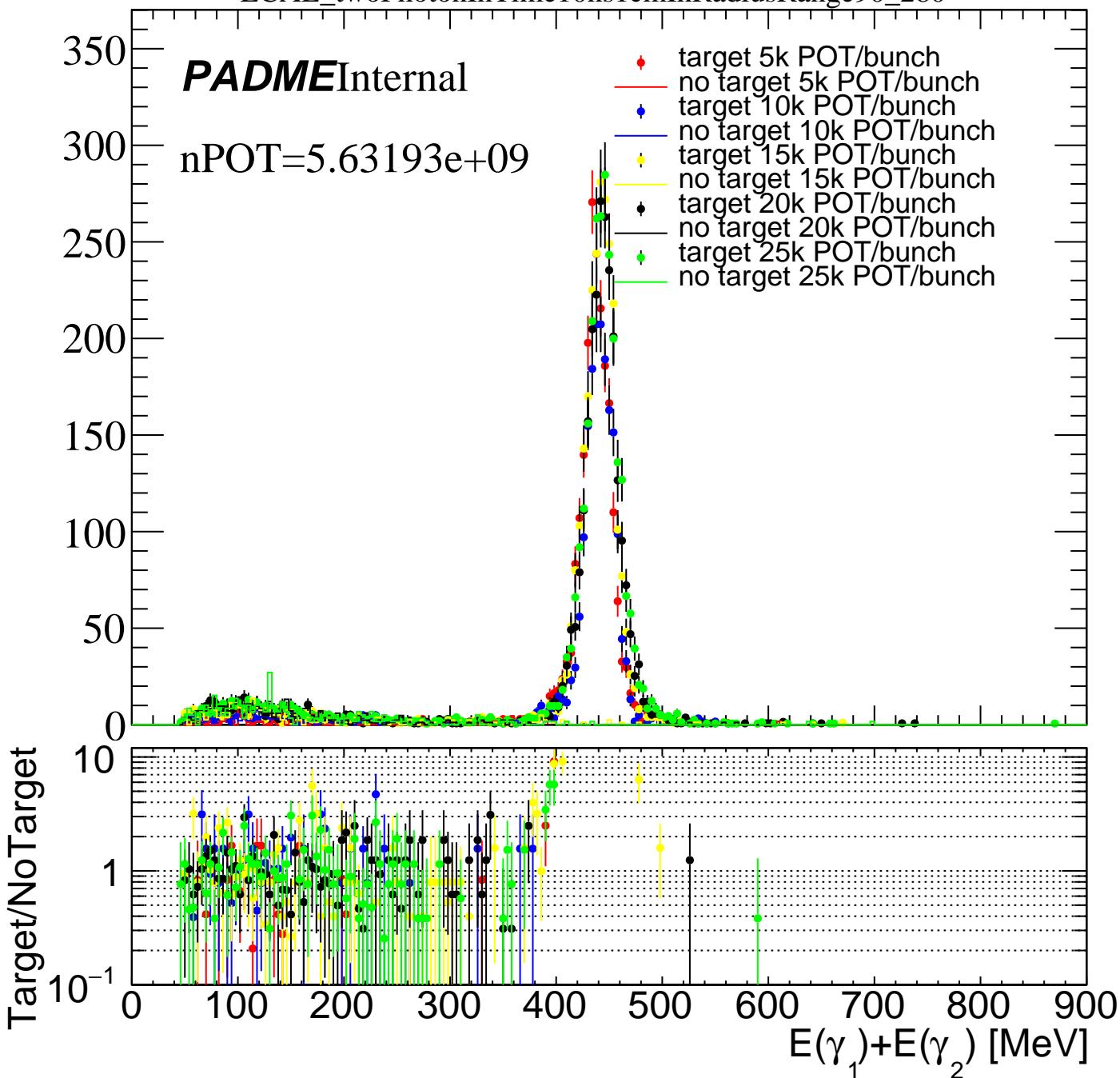




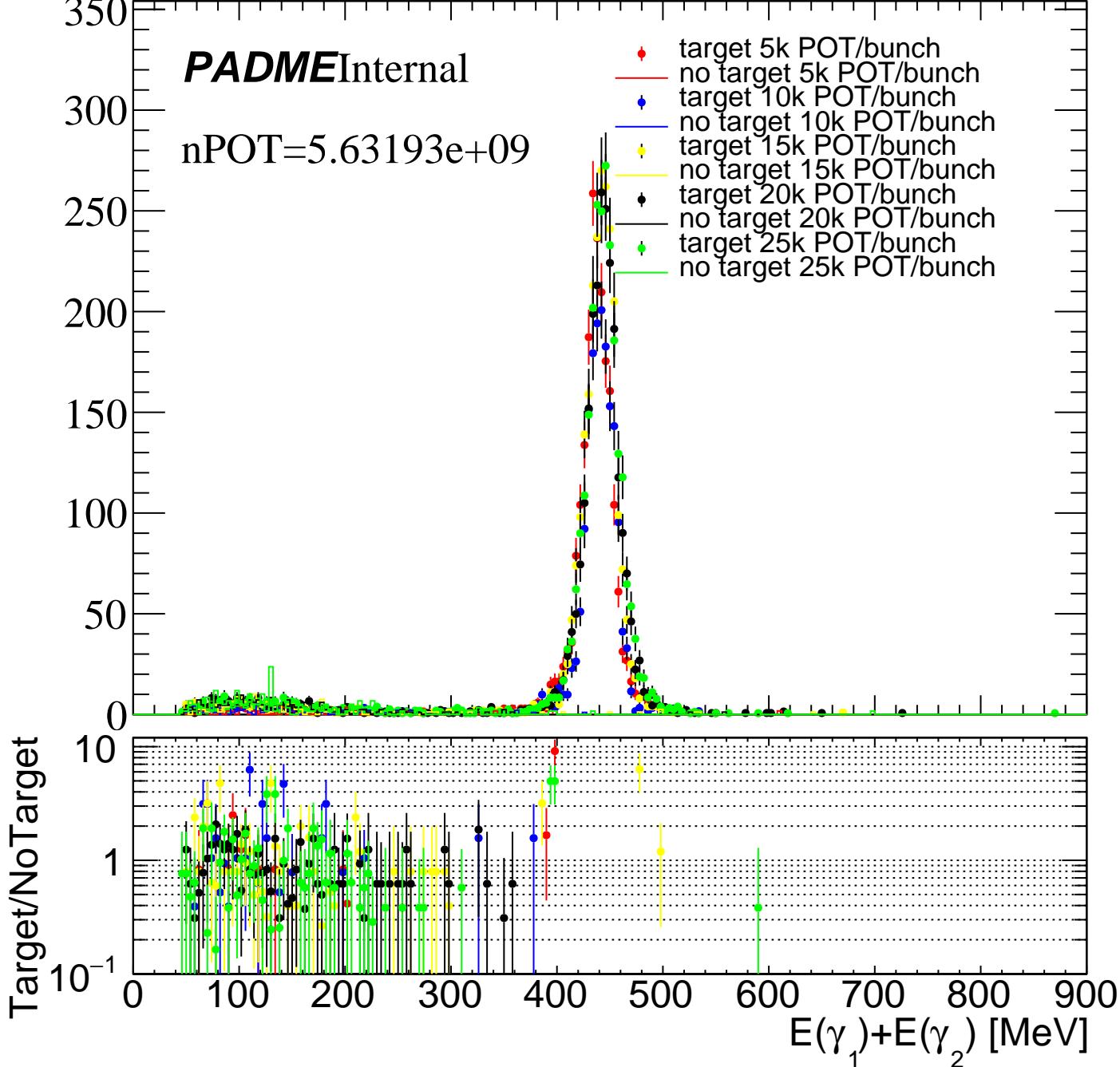
ECAL_twoPhotonInTime10ns1cmInRadiusRange70_280



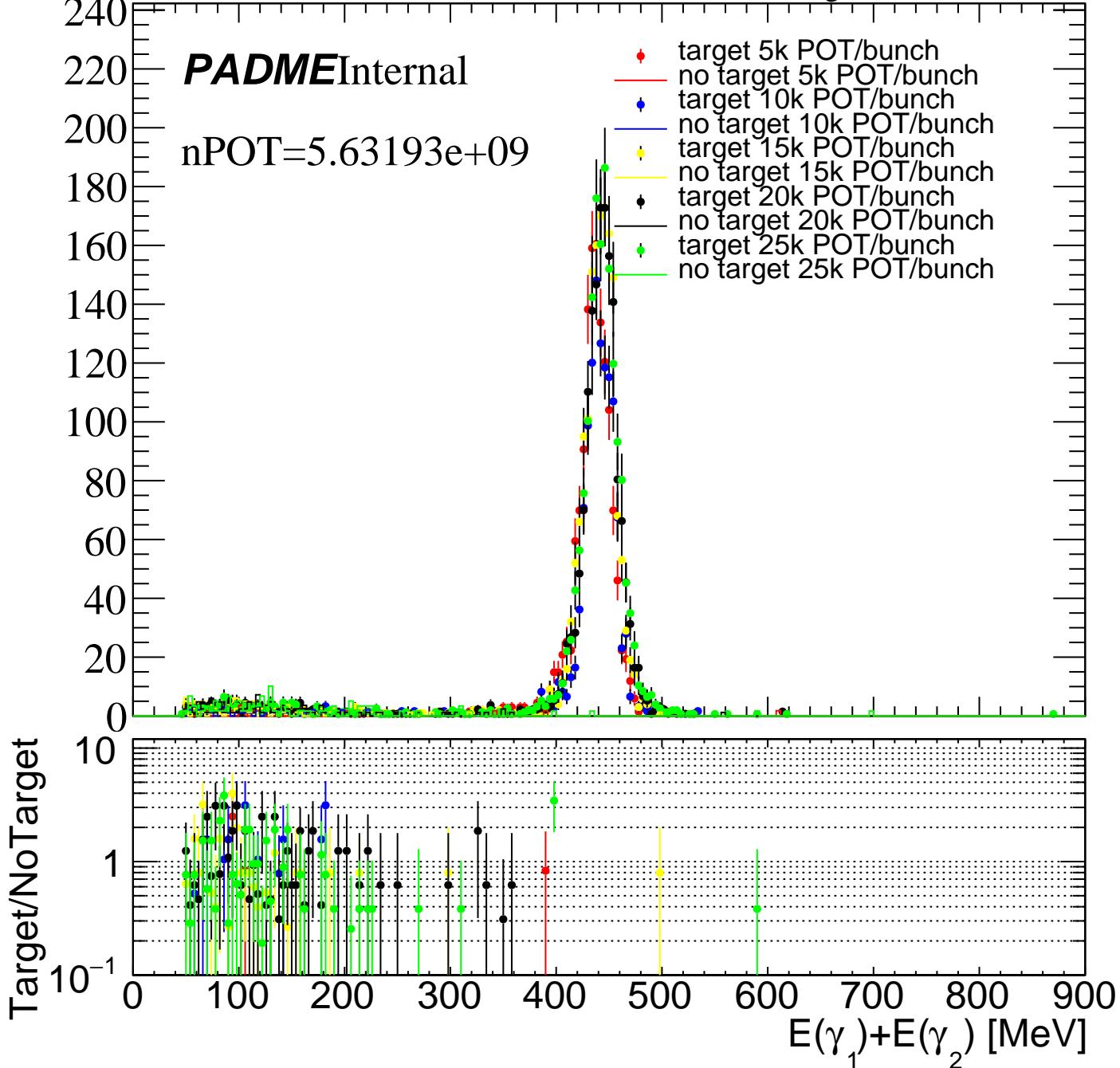
ECAL_twoPhotonInTime10ns1cmInRadiusRange90_280



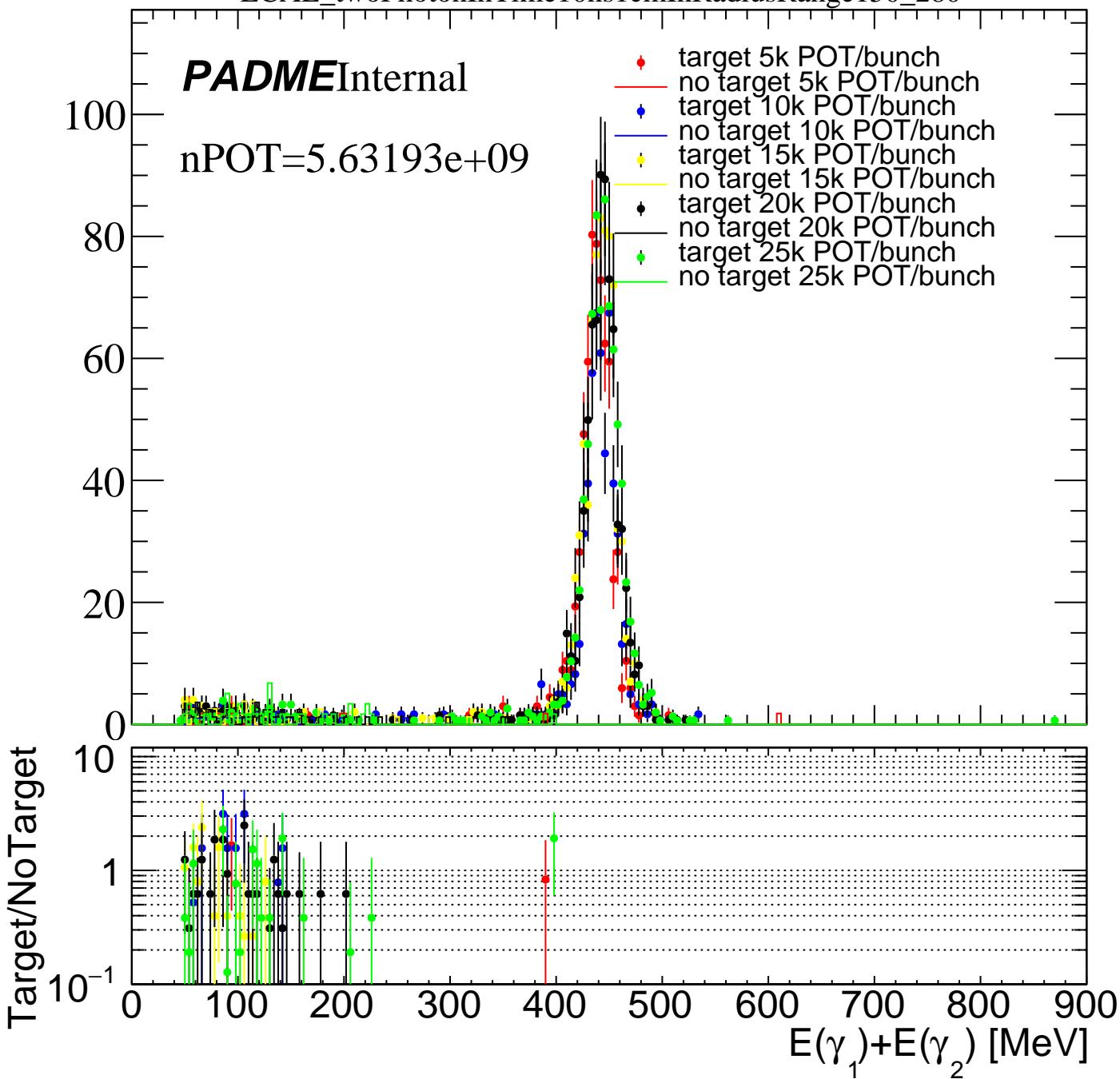
ECAL_twoPhotonInTime10ns1cmInRadiusRange110_280



ECAL_twoPhotonInTime10ns1cmInRadiusRange130_280



ECAL_twoPhotonInTime10ns1cmInRadiusRange150_280



ECAL_twoPhotonInTime10ns1cmInRadiusRange160_280

50

PADMEInternal

nPOT=5.63193e+09

- target 5k POT/bunch
- no target 5k POT/bunch
- target 10k POT/bunch
- no target 10k POT/bunch
- target 15k POT/bunch
- no target 15k POT/bunch
- target 20k POT/bunch
- no target 20k POT/bunch
- target 25k POT/bunch
- no target 25k POT/bunch

30

20

10

0

Target/NoTarget

10

1

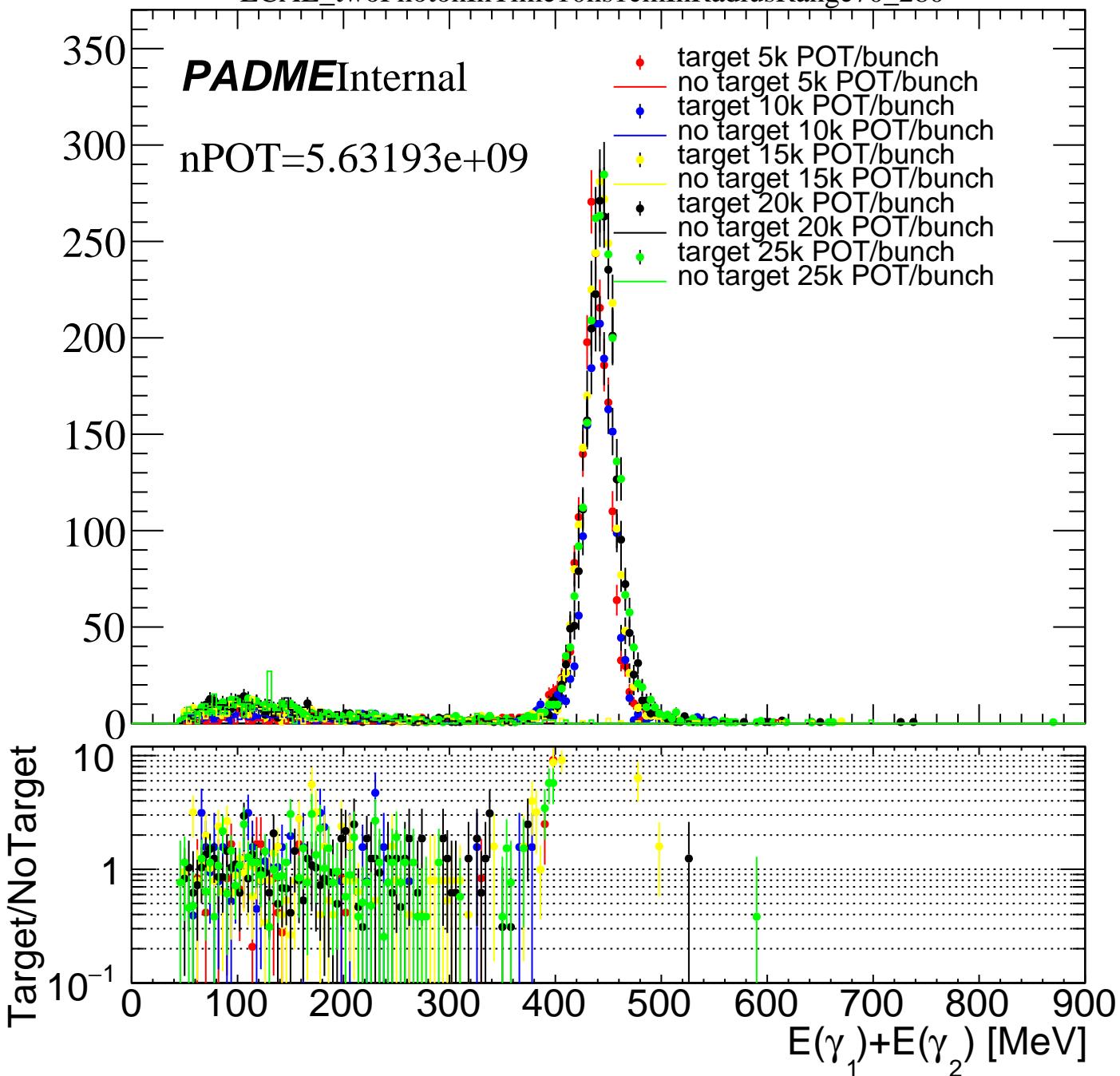
10⁻¹

0 100 200 300 400 500 600 700 800 900

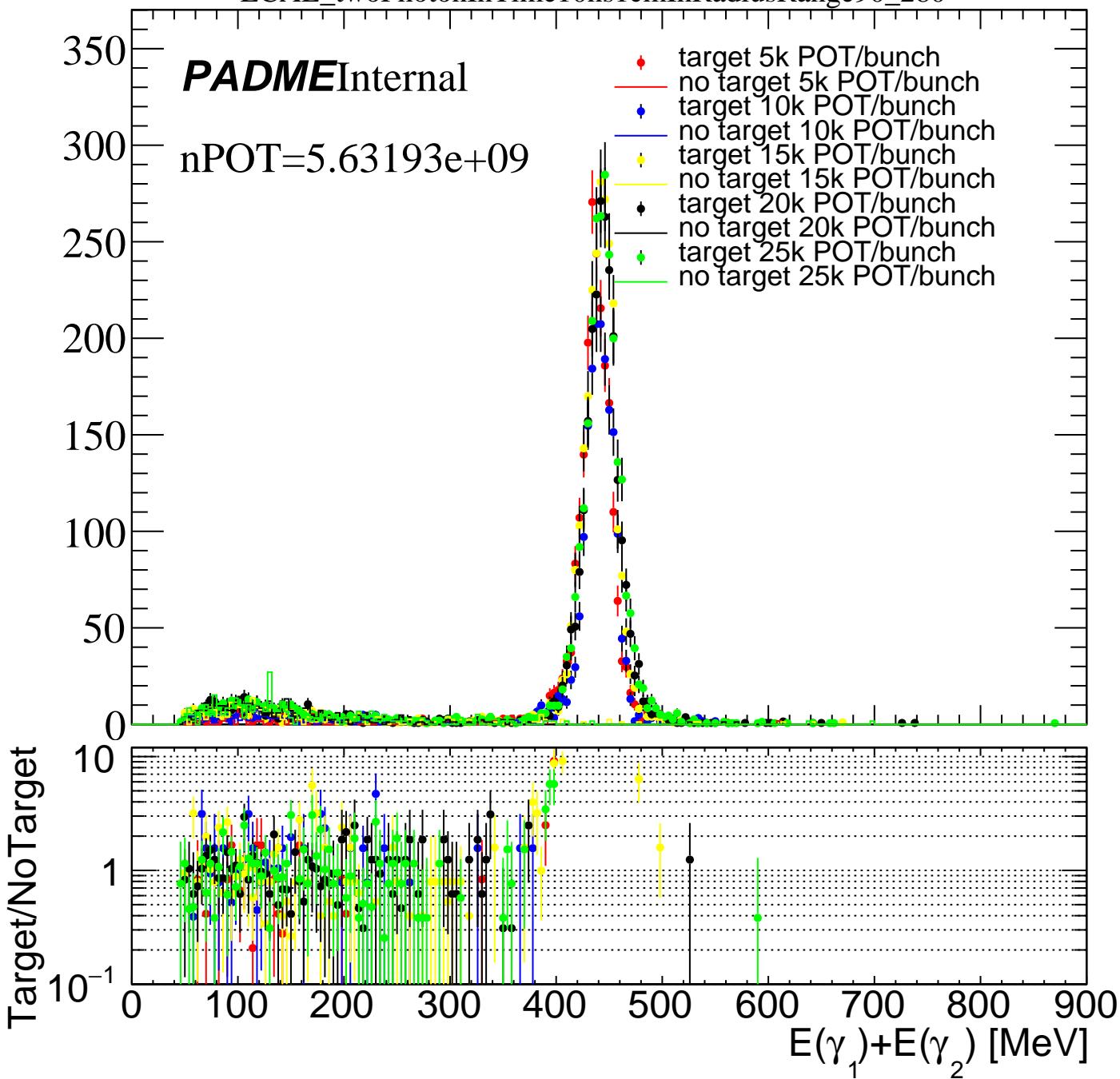
$E(\gamma_1) + E(\gamma_2)$ [MeV]

$E(\gamma_1) + E(\gamma_2)$ [MeV]

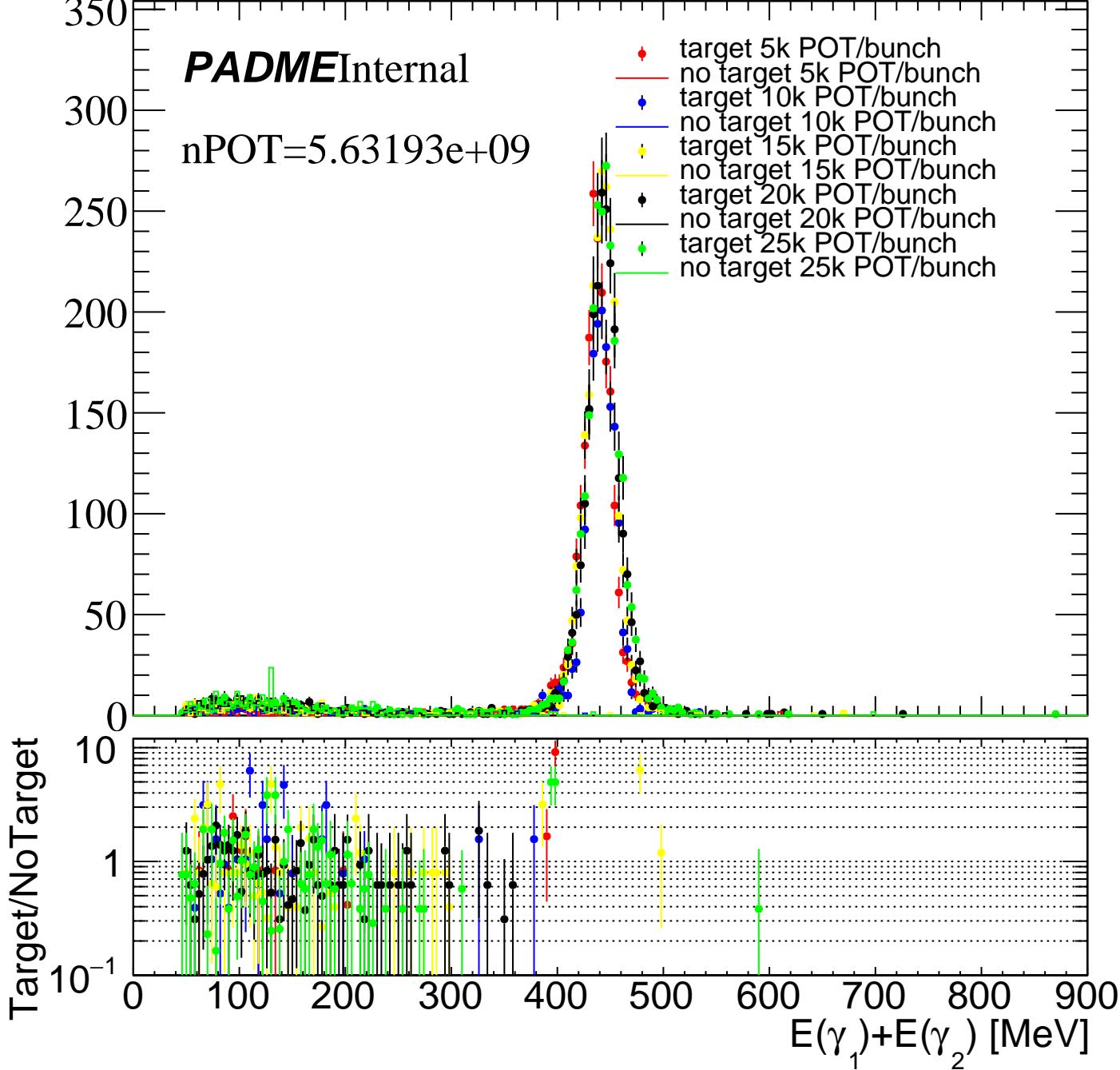
ECAL_twoPhotonInTime10ns1cmInRadiusRange70_280



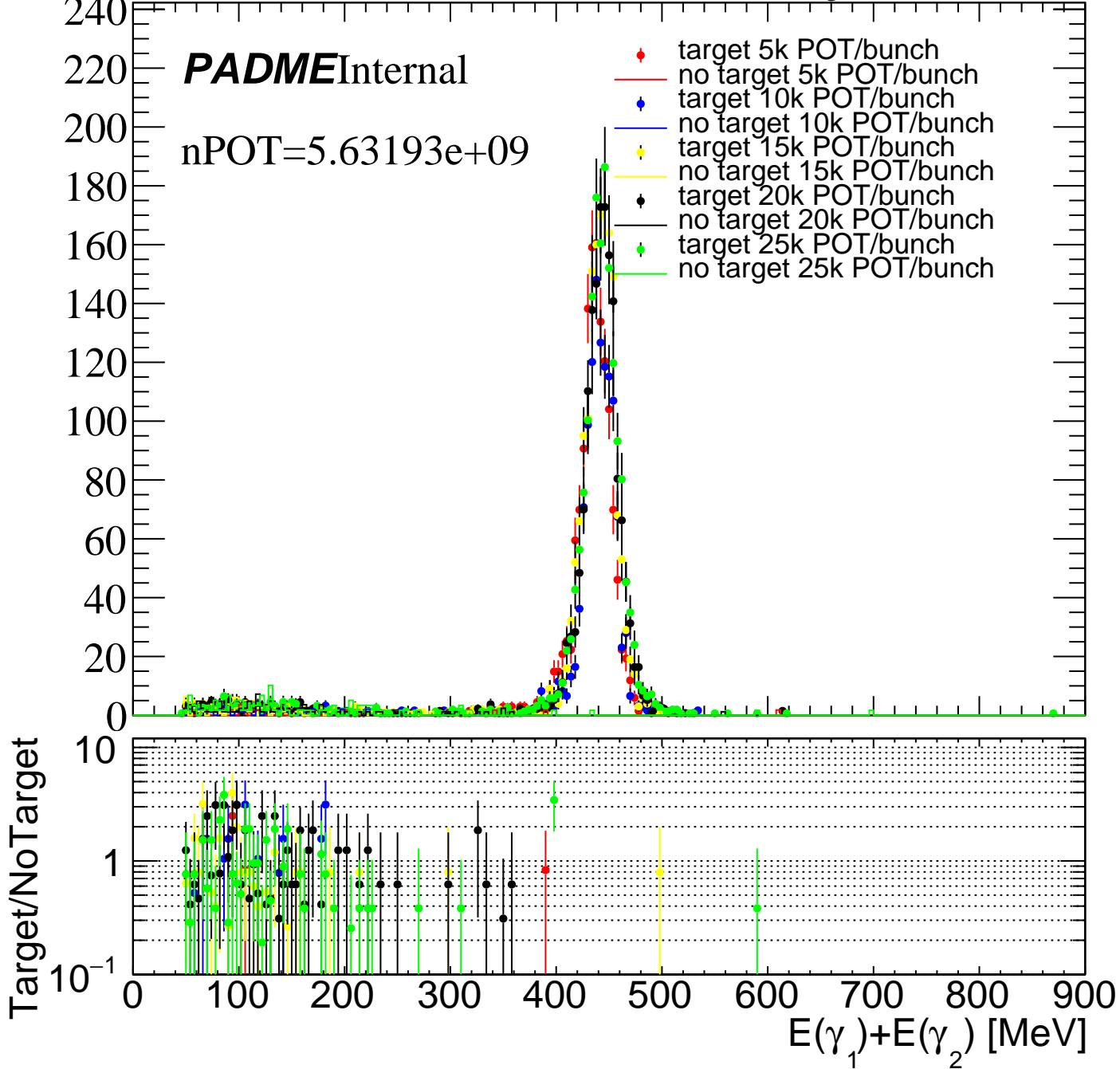
ECAL_twoPhotonInTime10ns1cmInRadiusRange90_280



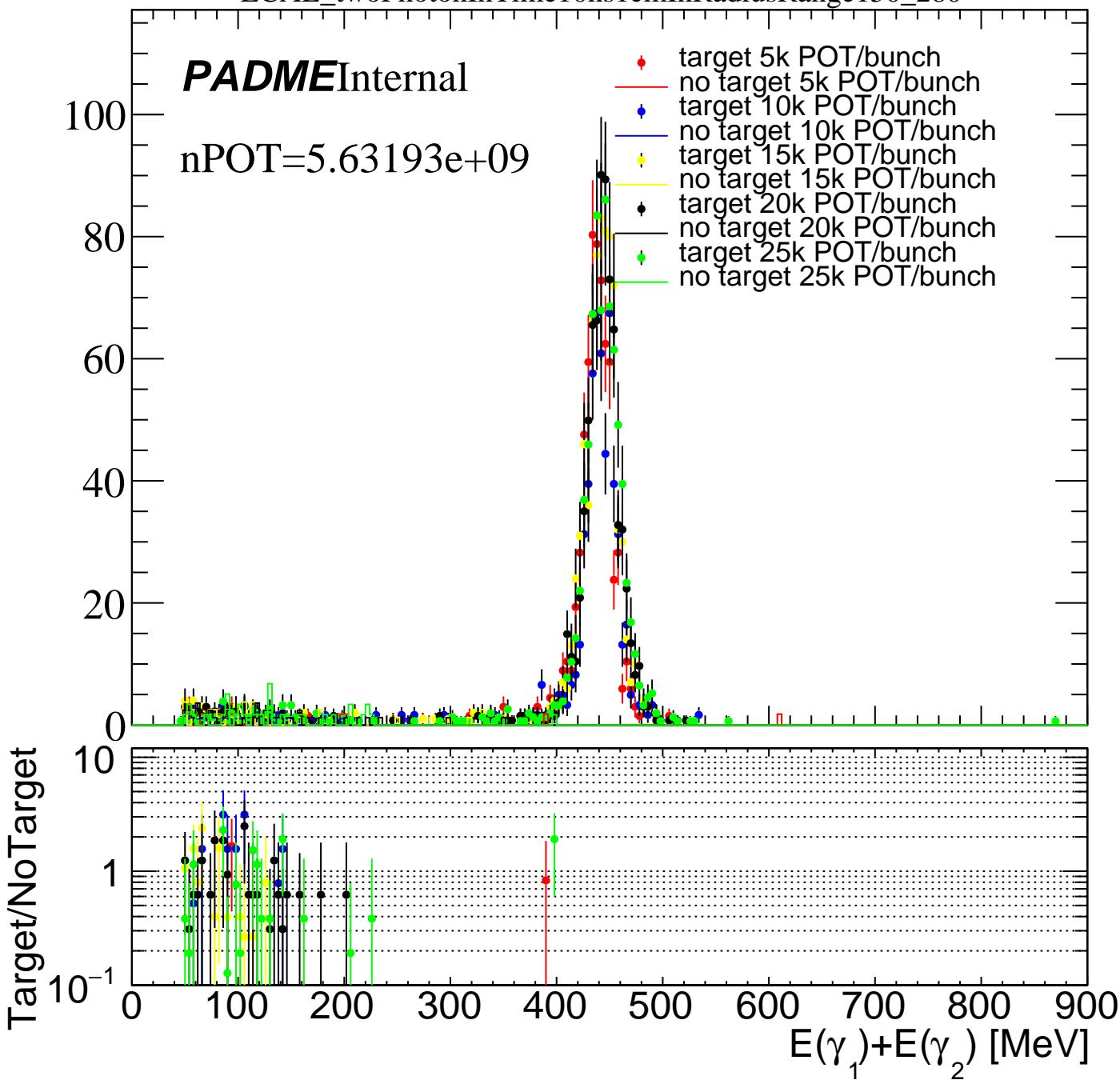
ECAL_twoPhotonInTime10ns1cmInRadiusRange110_280



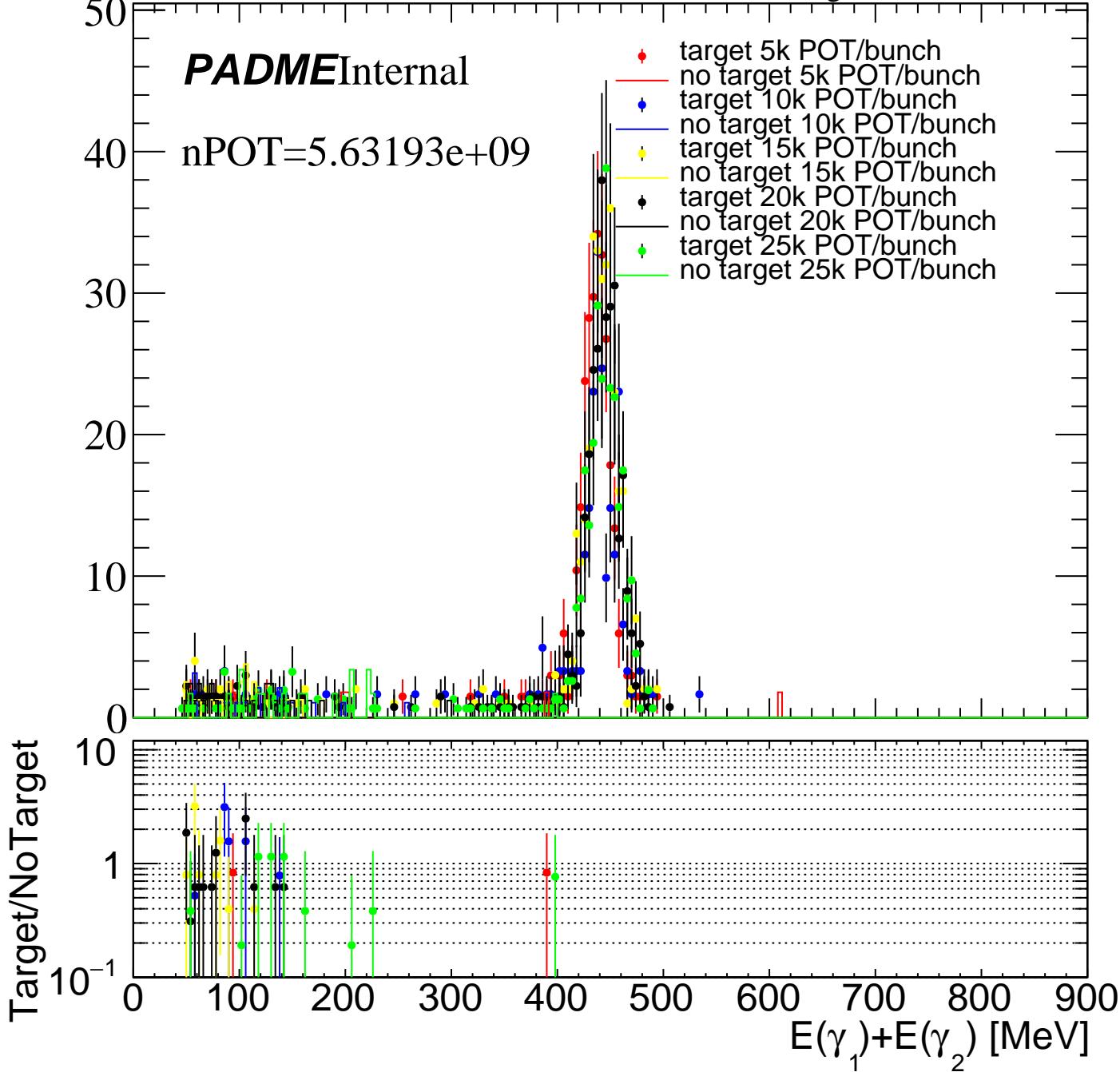
ECAL_twoPhotonInTime10ns1cmInRadiusRange130_280



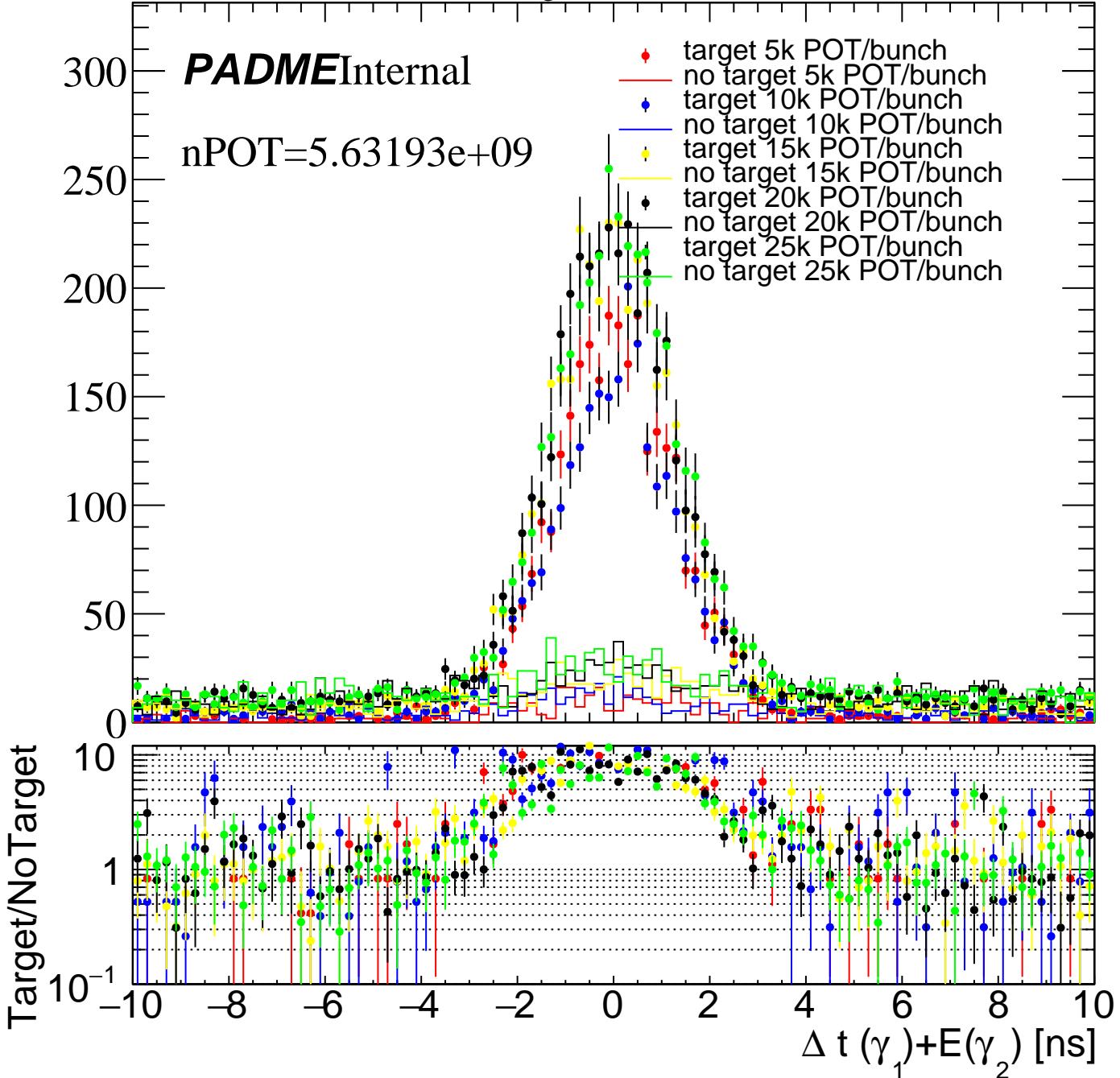
ECAL_twoPhotonInTime10ns1cmInRadiusRange150_280



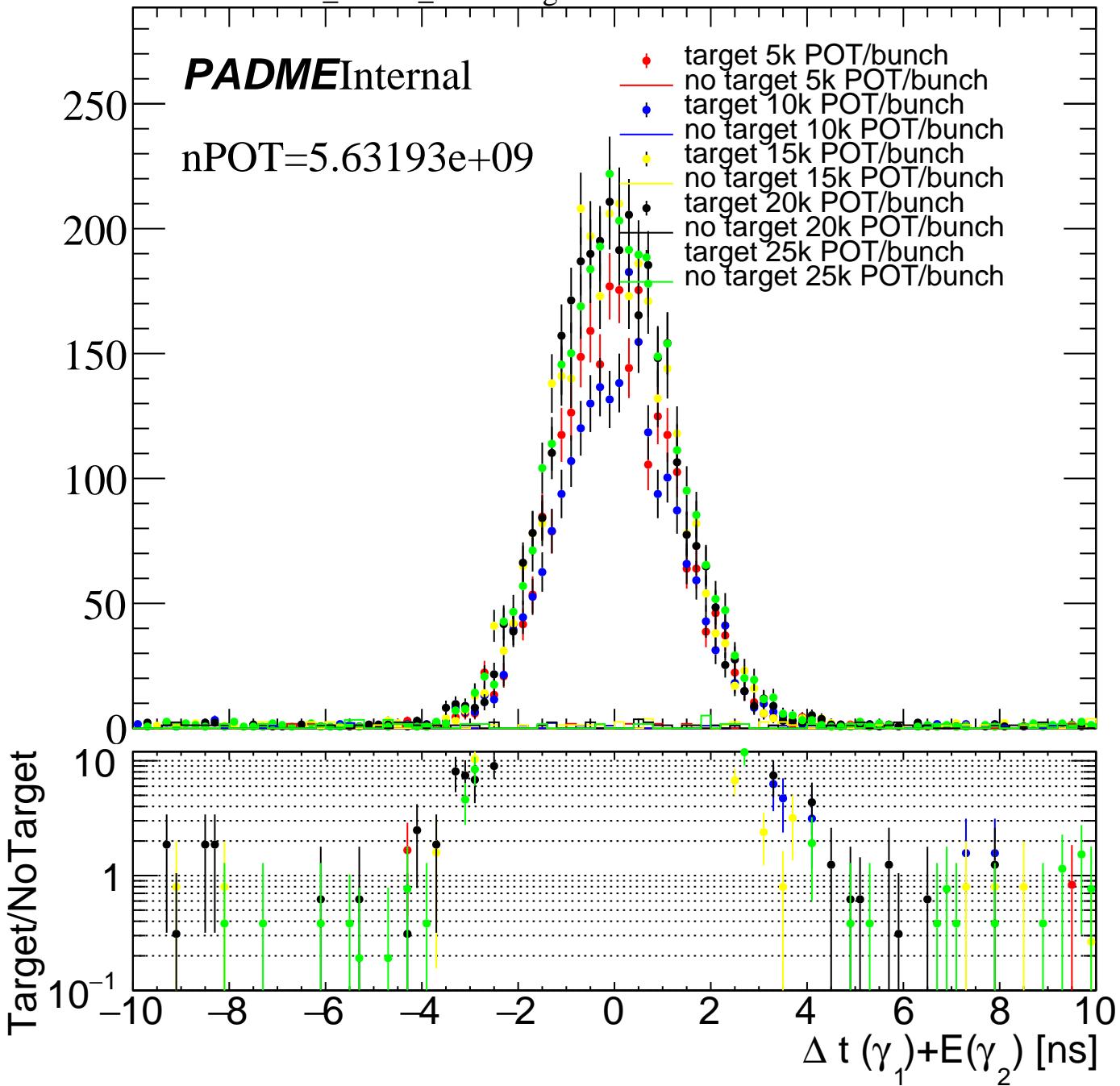
ECAL_twoPhotonInTime10ns1cmInRadiusRange160_280



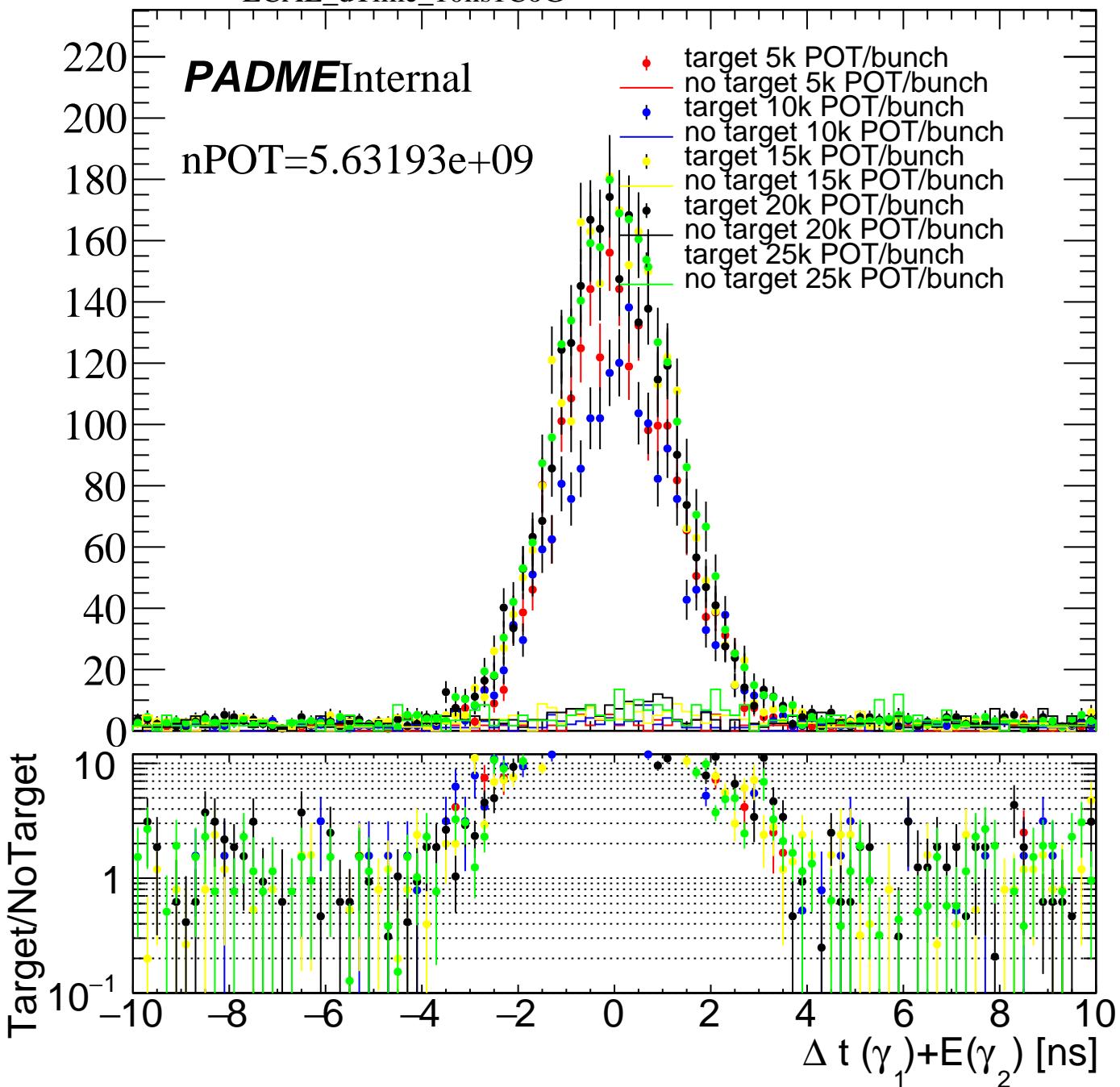
ECAL_dTime_10ns5DegreeDeltaTheta



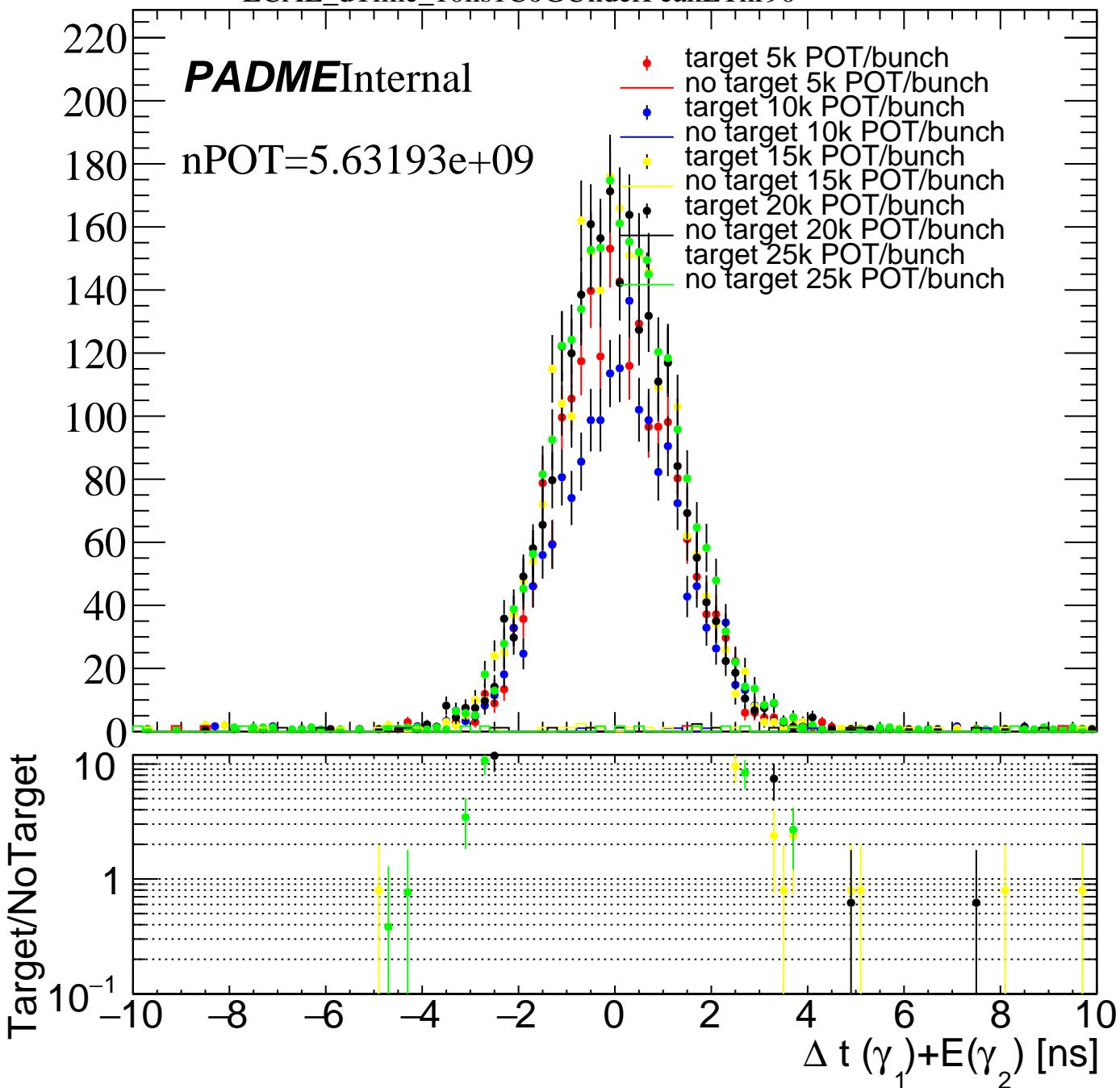
ECAL_dTime_10ns5DegreeDeltaThetaUnderPeakEThr90



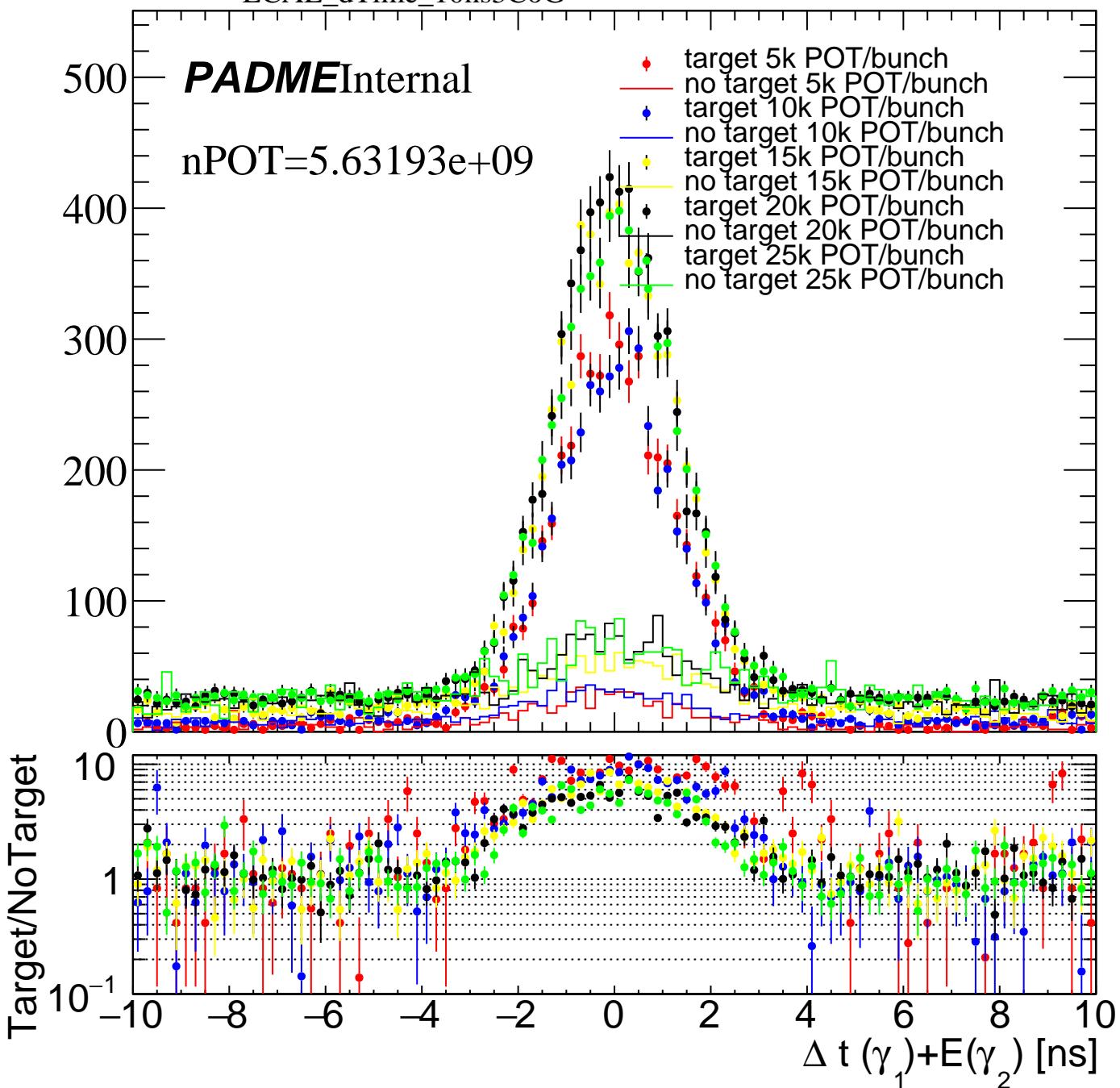
ECAL_dTime_10ns1CoG



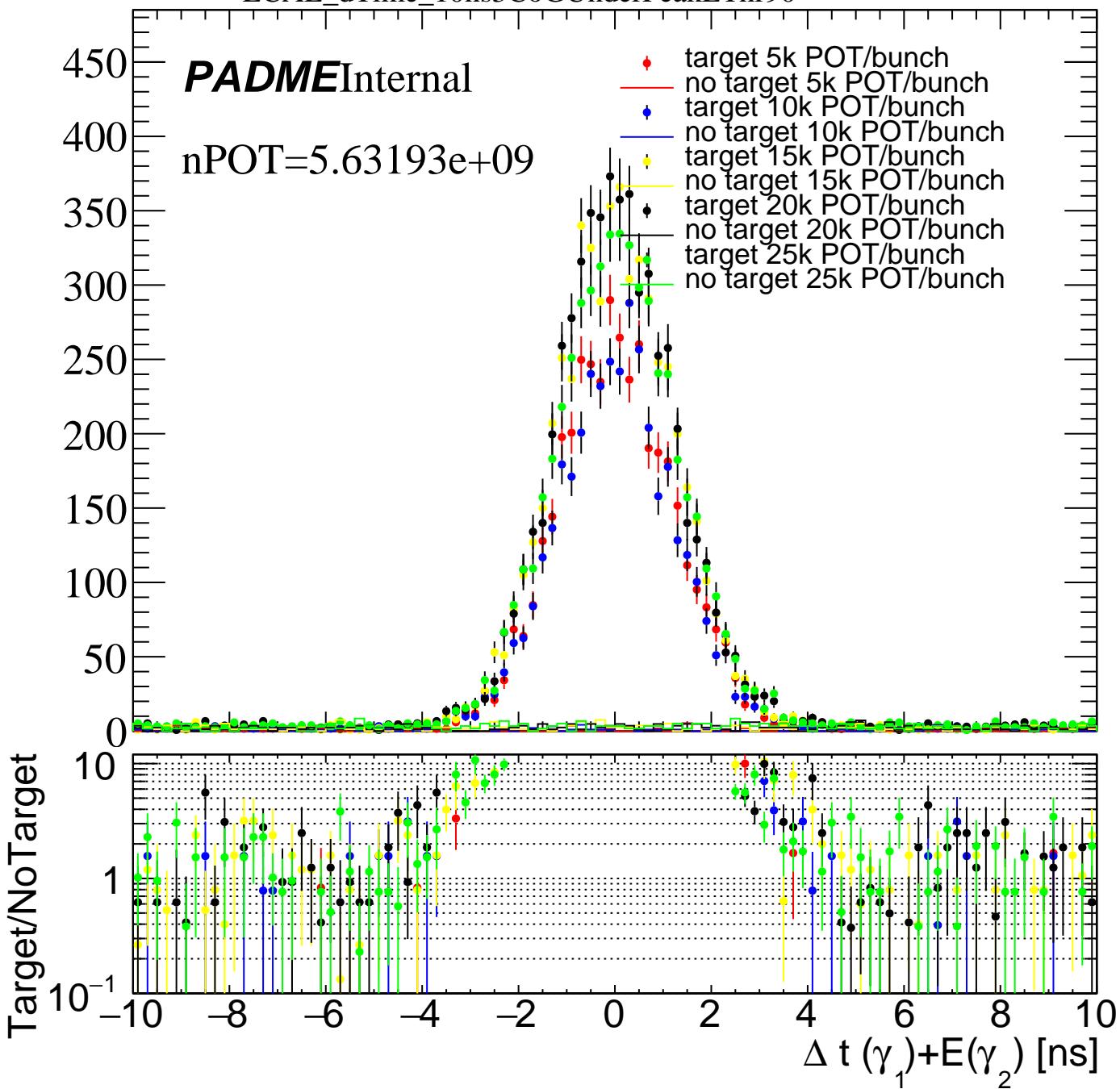
ECAL_dTime_10ns1CoGUnderPeakETHr90



ECAL_dTime_10ns3CoG



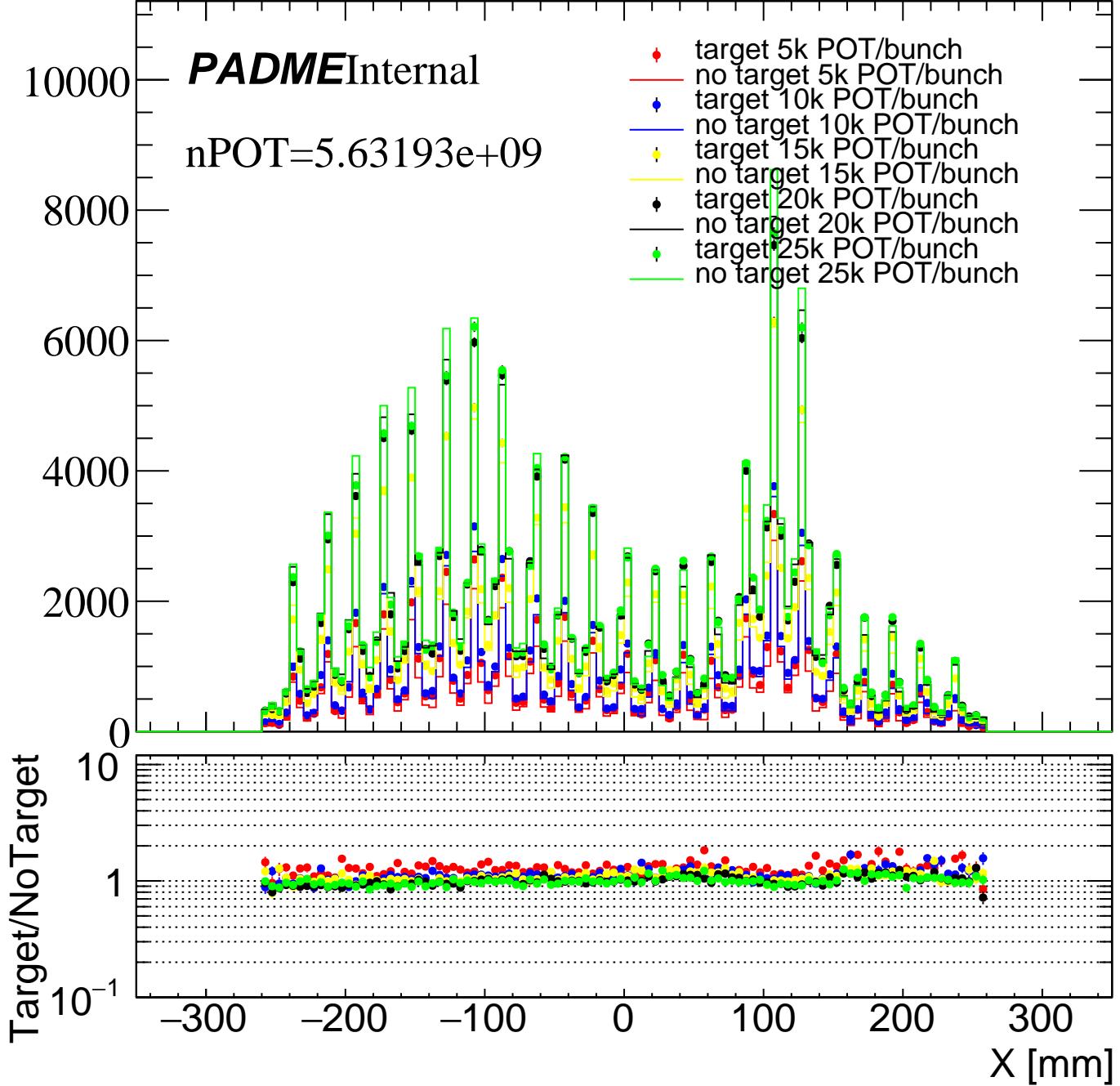
ECAL_dTime_10ns3CoGUnderPeakEThr90



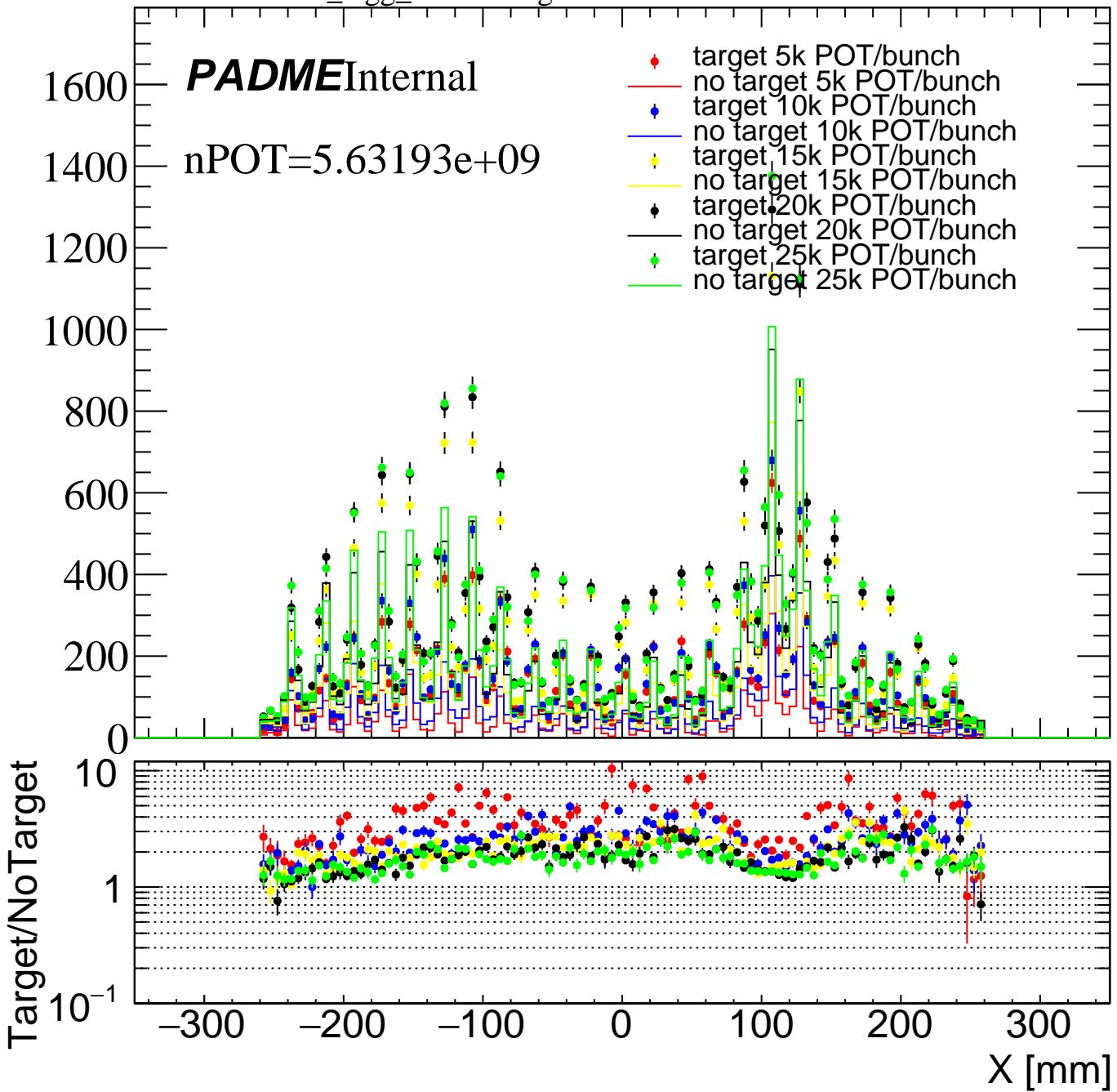
ECAL_Xgg_10ns

PADMEInternal
nPOT=5.63193e+09

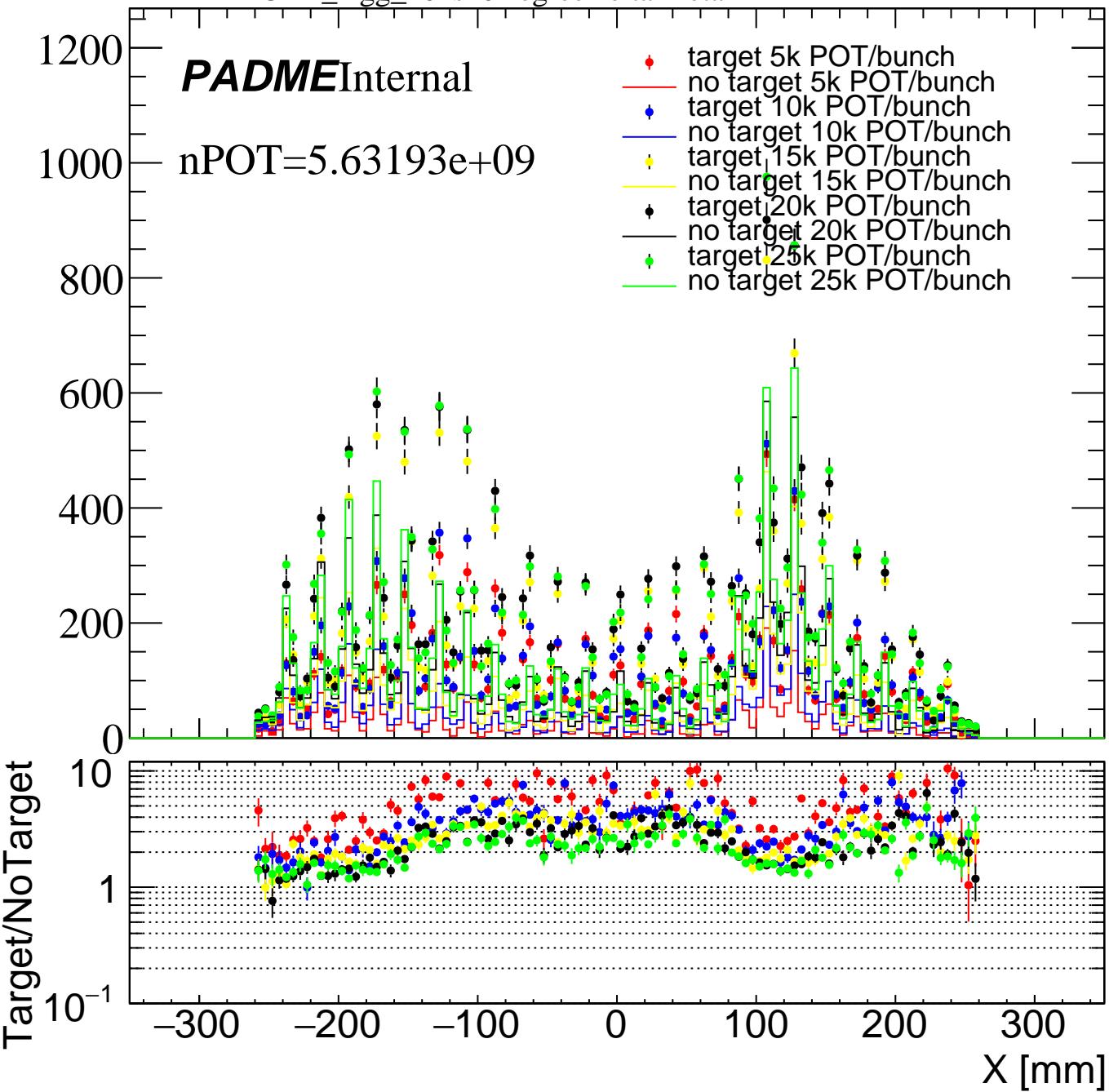
- target 5k POT/bunch
- no target 5k POT/bunch
- target 10k POT/bunch
- no target 10k POT/bunch
- target 15k POT/bunch
- no target 15k POT/bunch
- target 20k POT/bunch
- no target 20k POT/bunch
- target 25k POT/bunch
- no target 25k POT/bunch



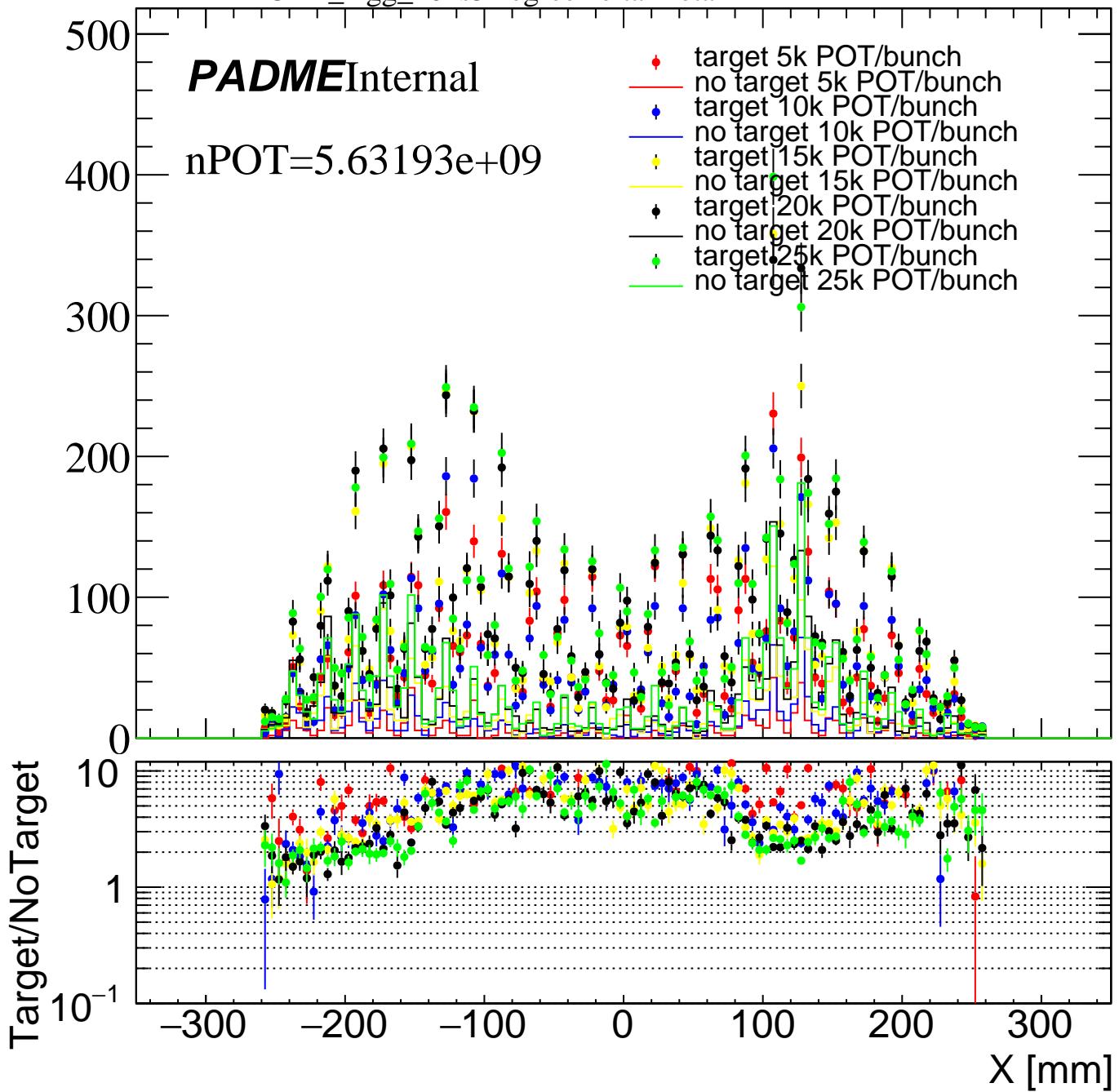
ECAL_Xgg_10ns20Degree



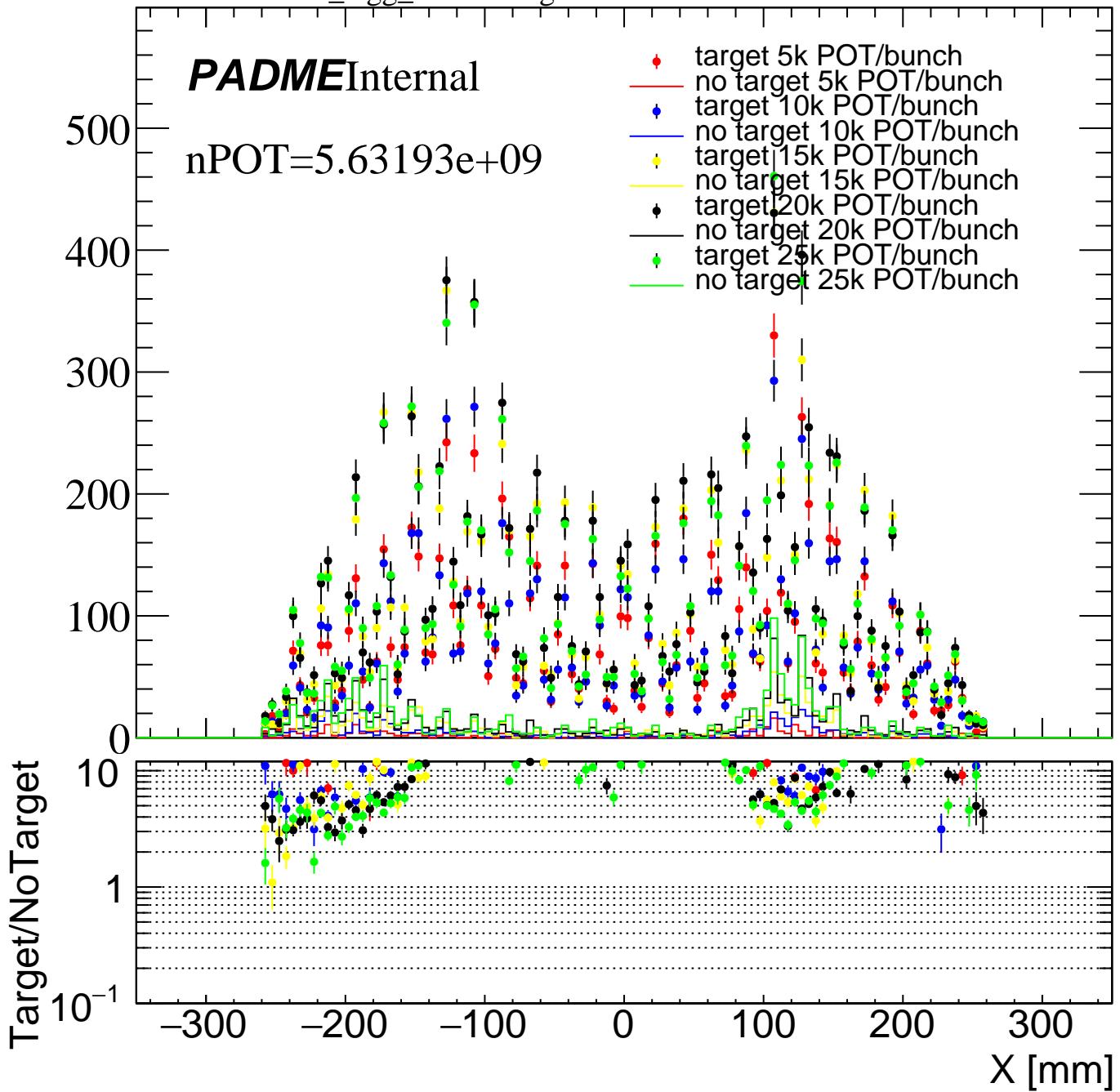
ECAL_Xgg_10ns20DegreeDeltaTheta



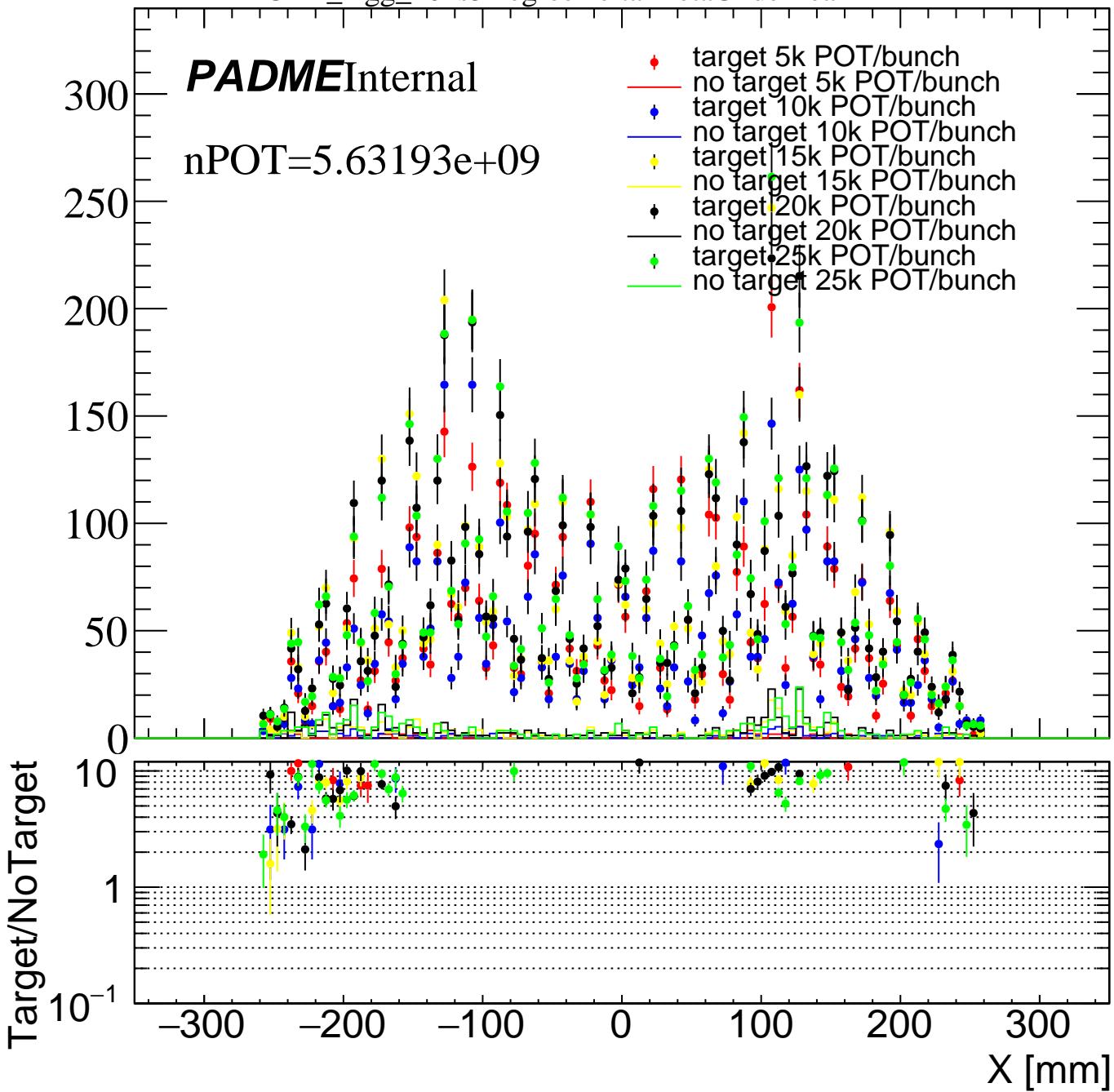
ECAL_Xgg_10ns5DegreeDeltaTheta



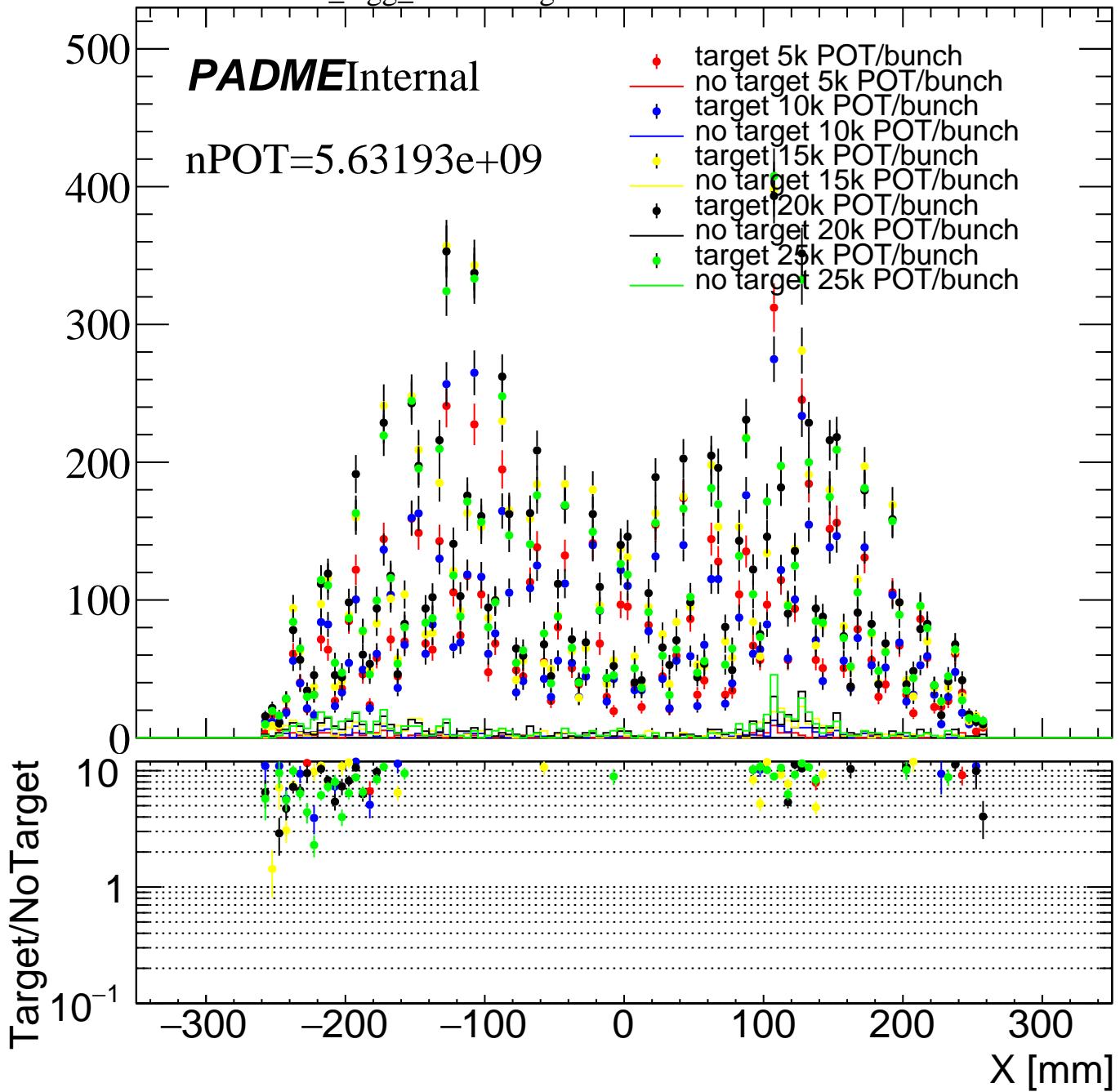
ECAL_Xgg_10ns20DegreeDeltaThetaUnderPeak



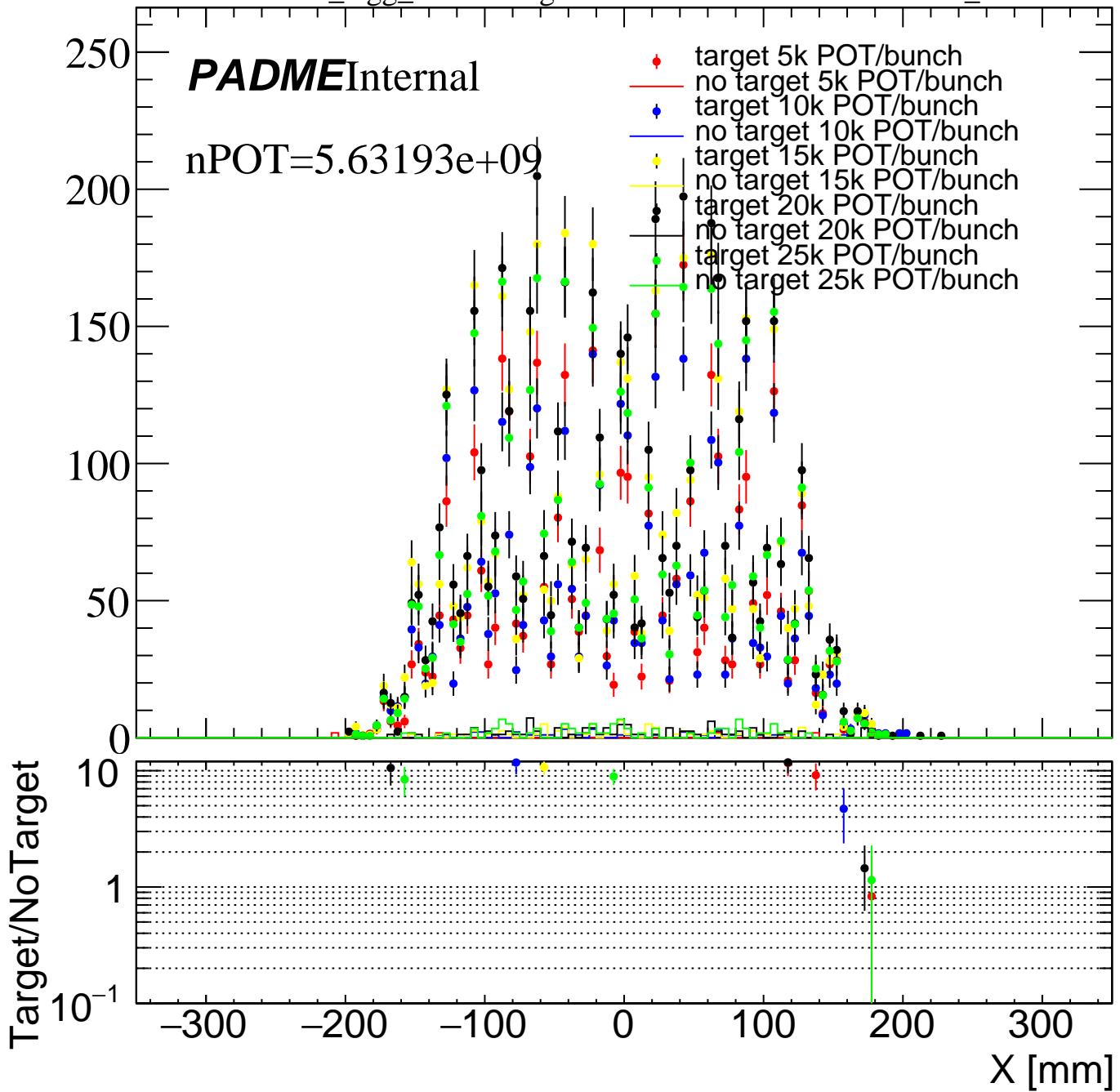
ECAL_Xgg_10ns5DegreeDeltaThetaUnderPeak



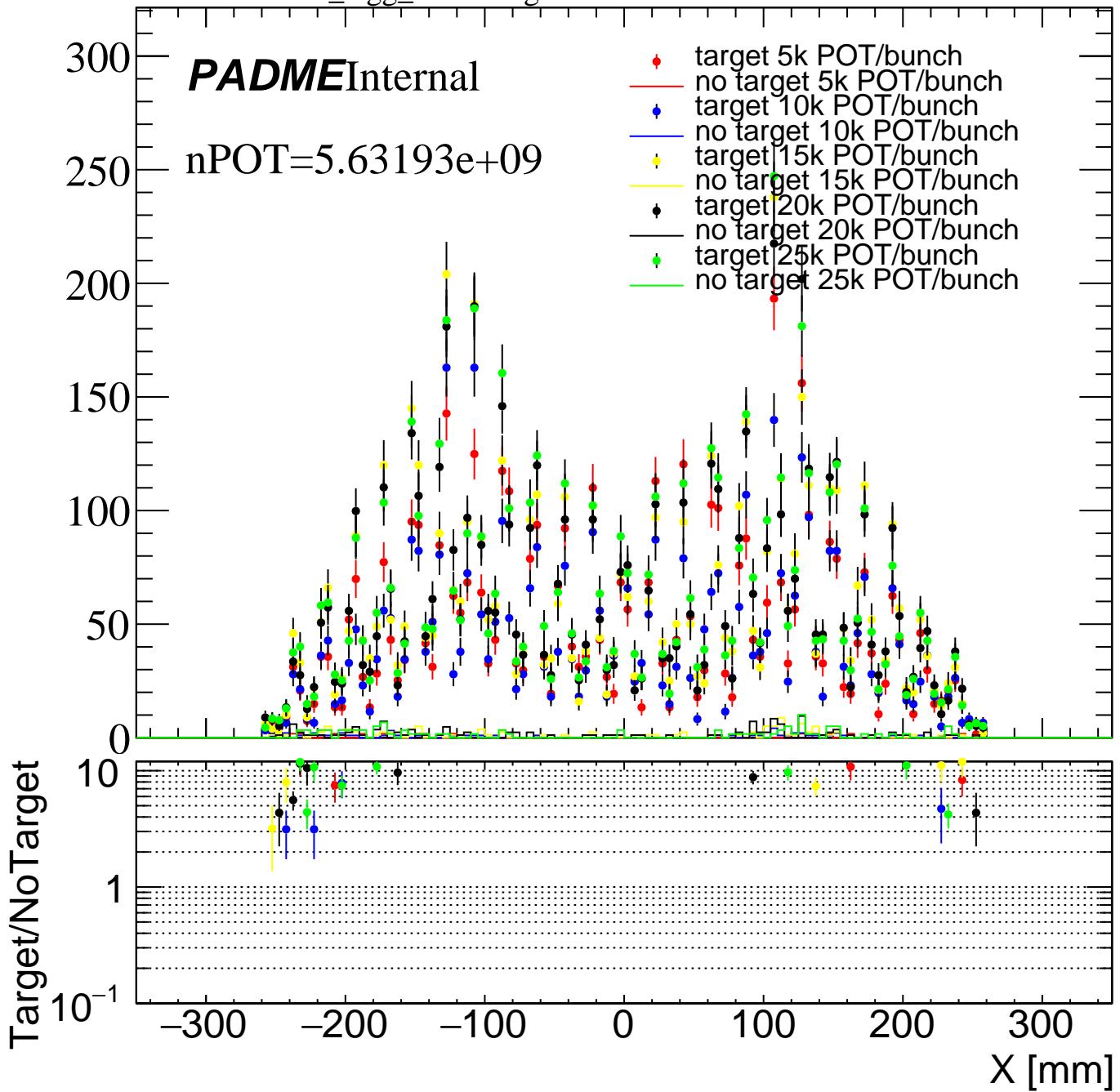
ECAL_Xgg_10ns20DegreeDeltaThetaUnderPeakEThr90



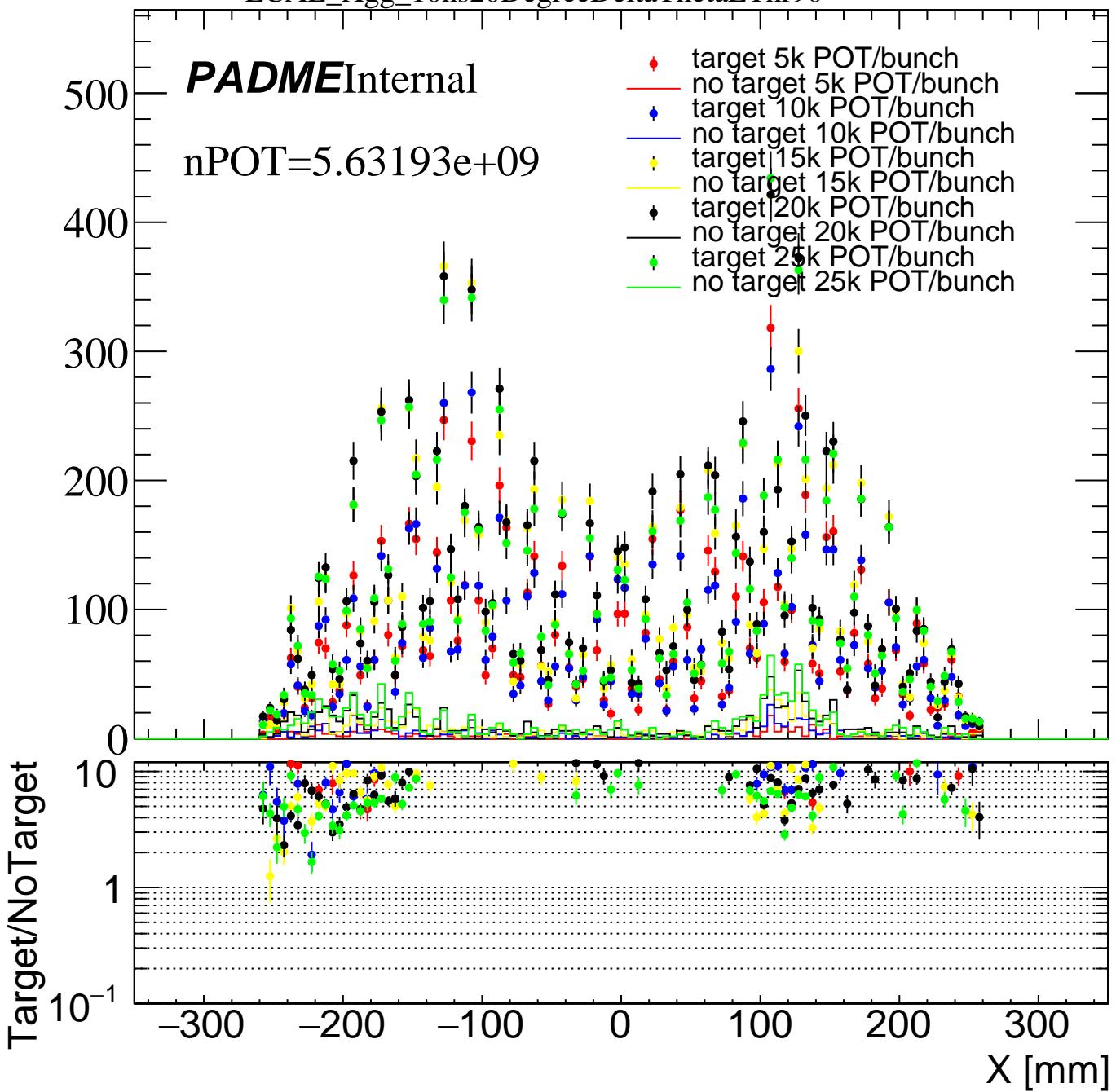
ECAL_Xgg_10ns20DegreeDeltaThetaUnderPeakEThr90_FRY



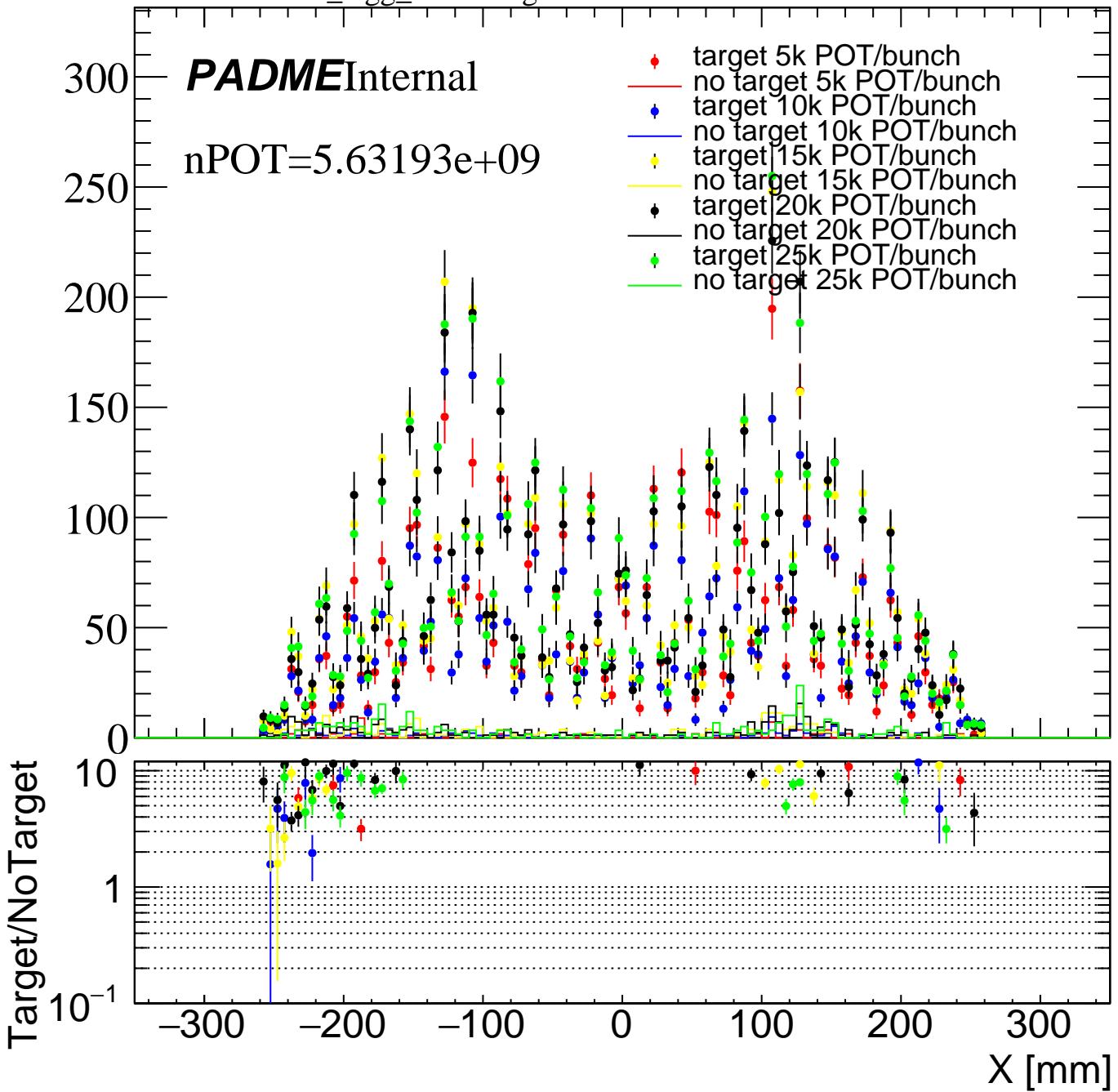
ECAL_Xgg_10ns5DegreeDeltaThetaUnderPeakEThr90



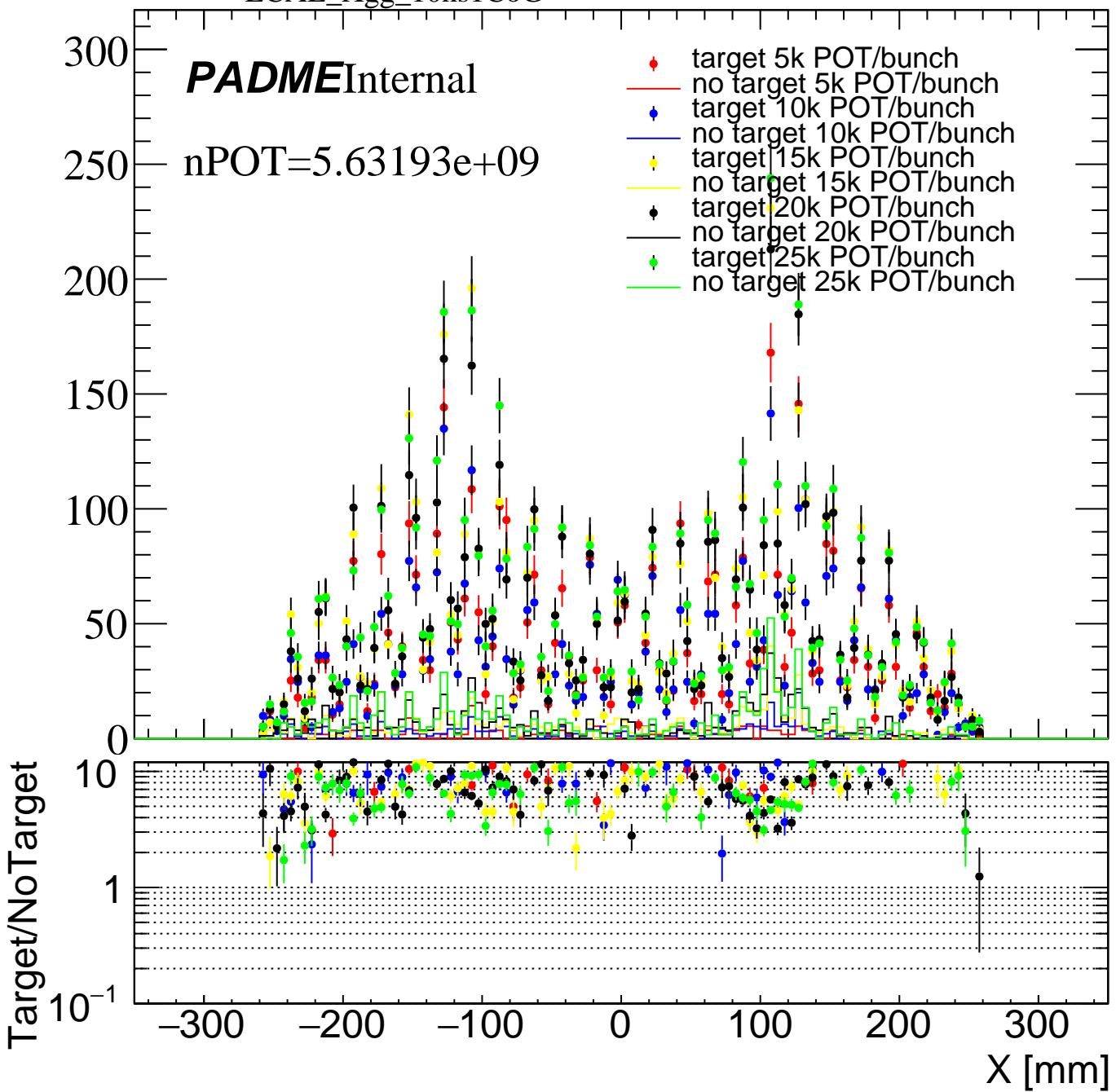
ECAL_Xgg_10ns20DegreeDeltaThetaEThr90



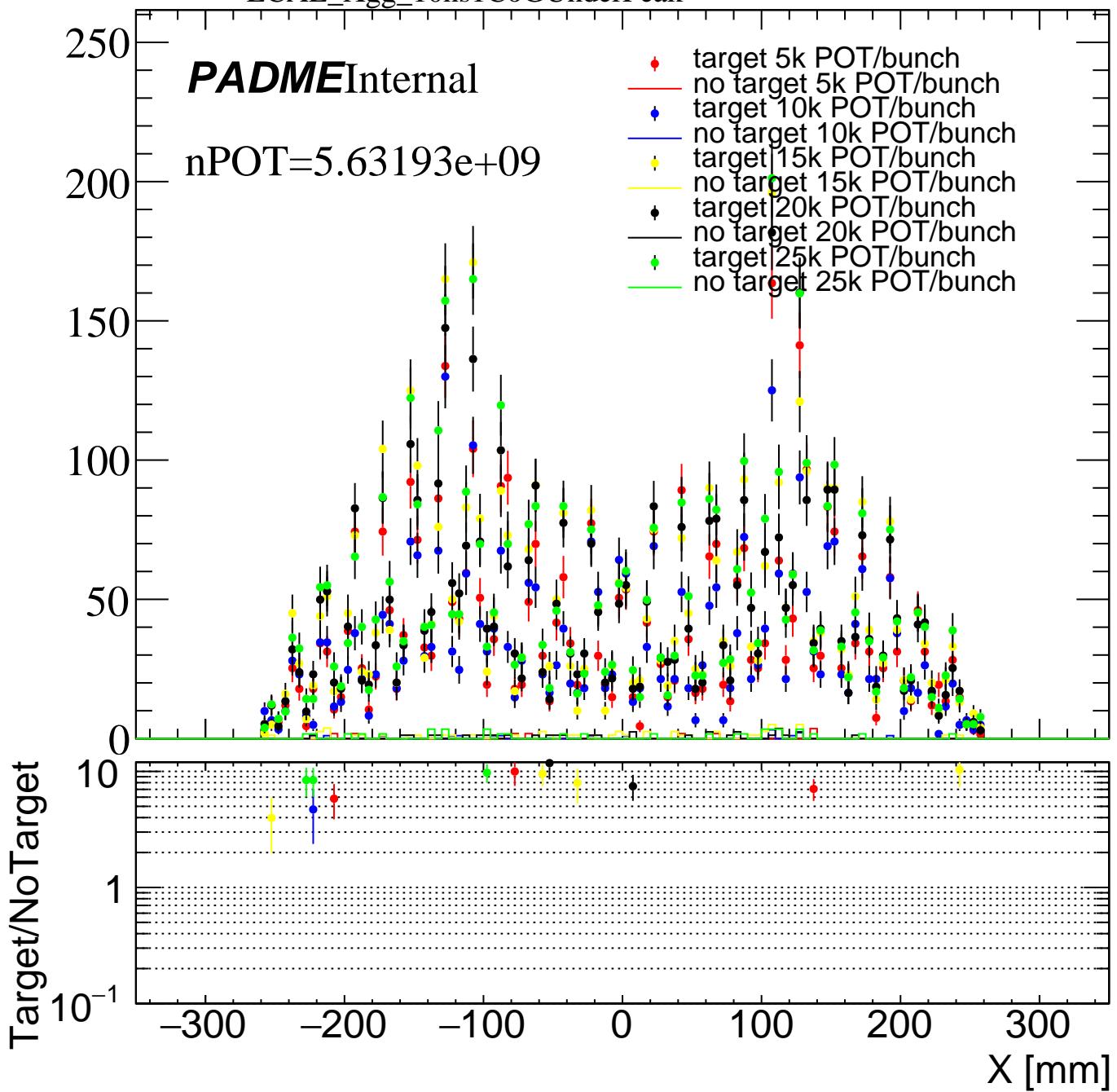
ECAL_Xgg_10ns5DegreeDeltaThetaEThr90



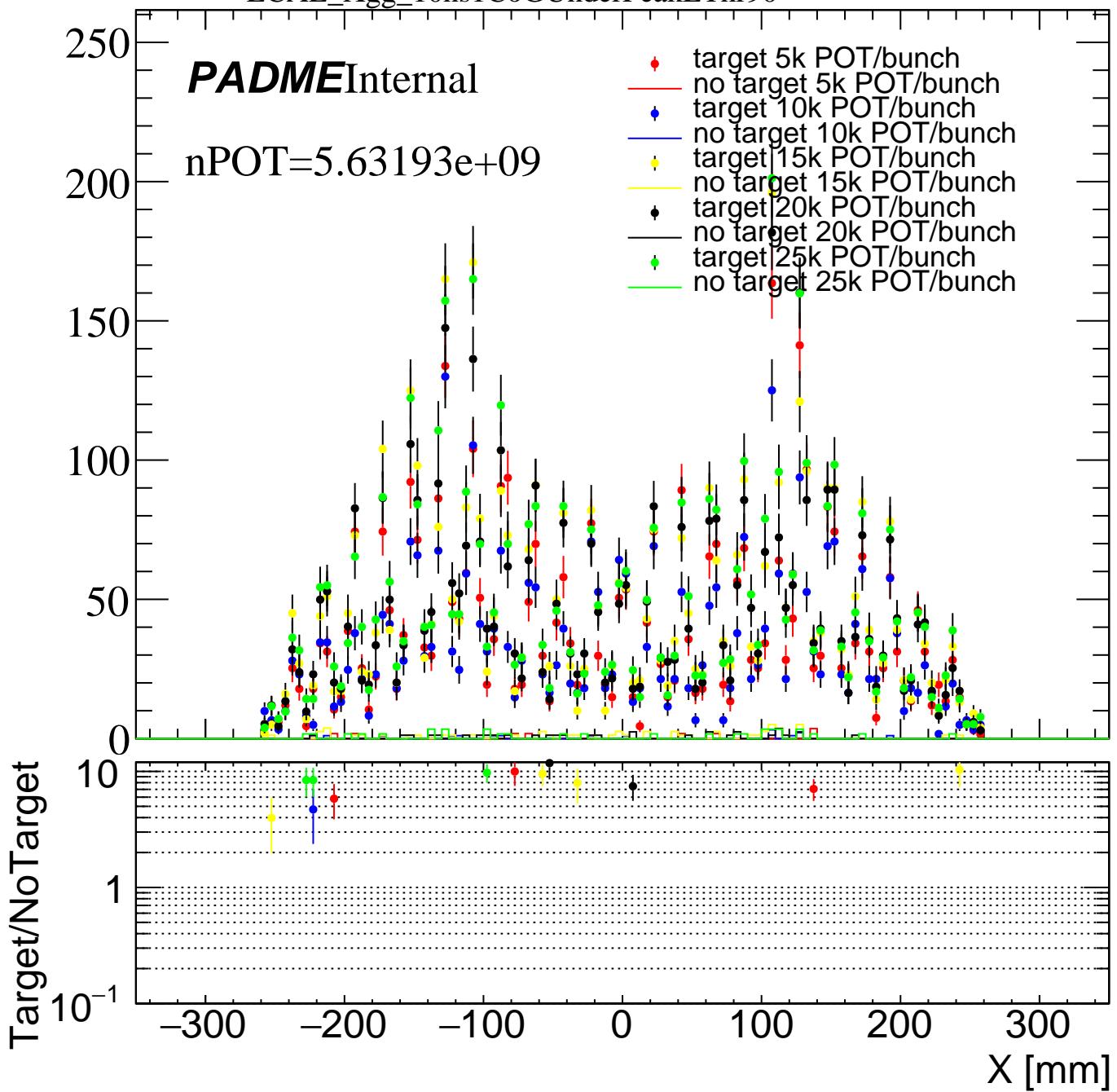
ECAL_Xgg_10ns1CoG



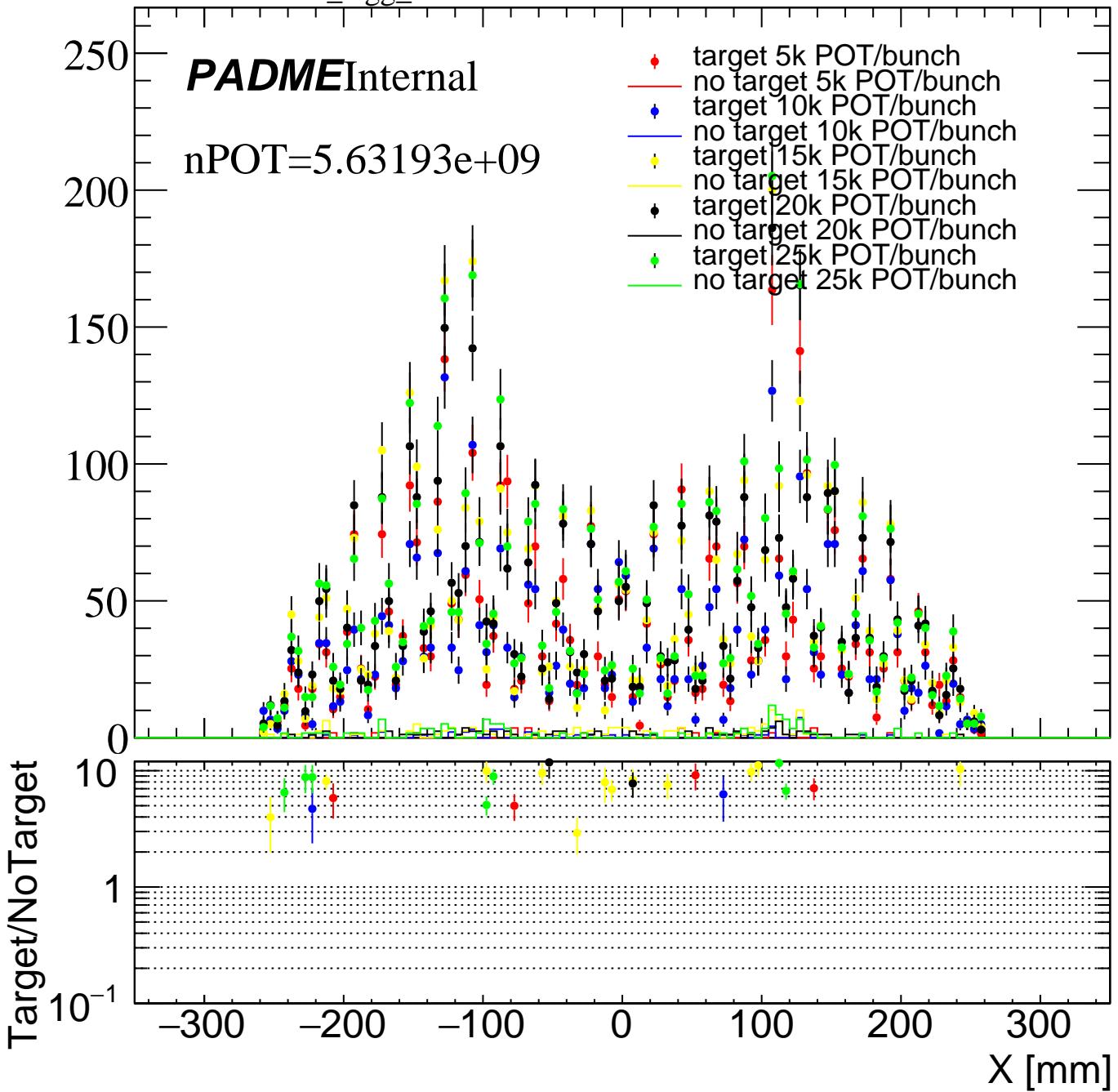
ECAL_Xgg_10ns1CoGUnderPeak



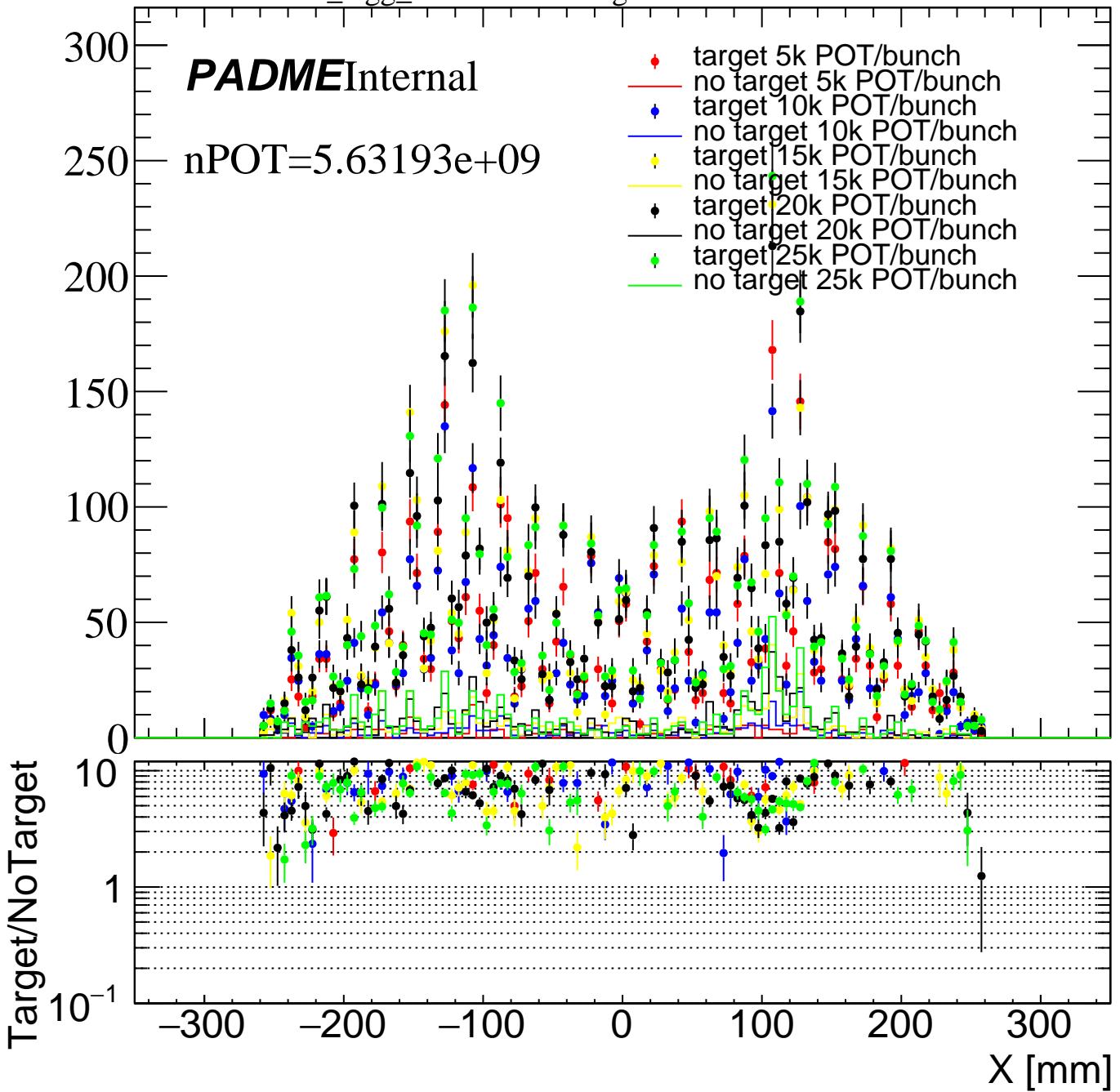
ECAL_Xgg_10ns1CoGUnderPeakEThr90



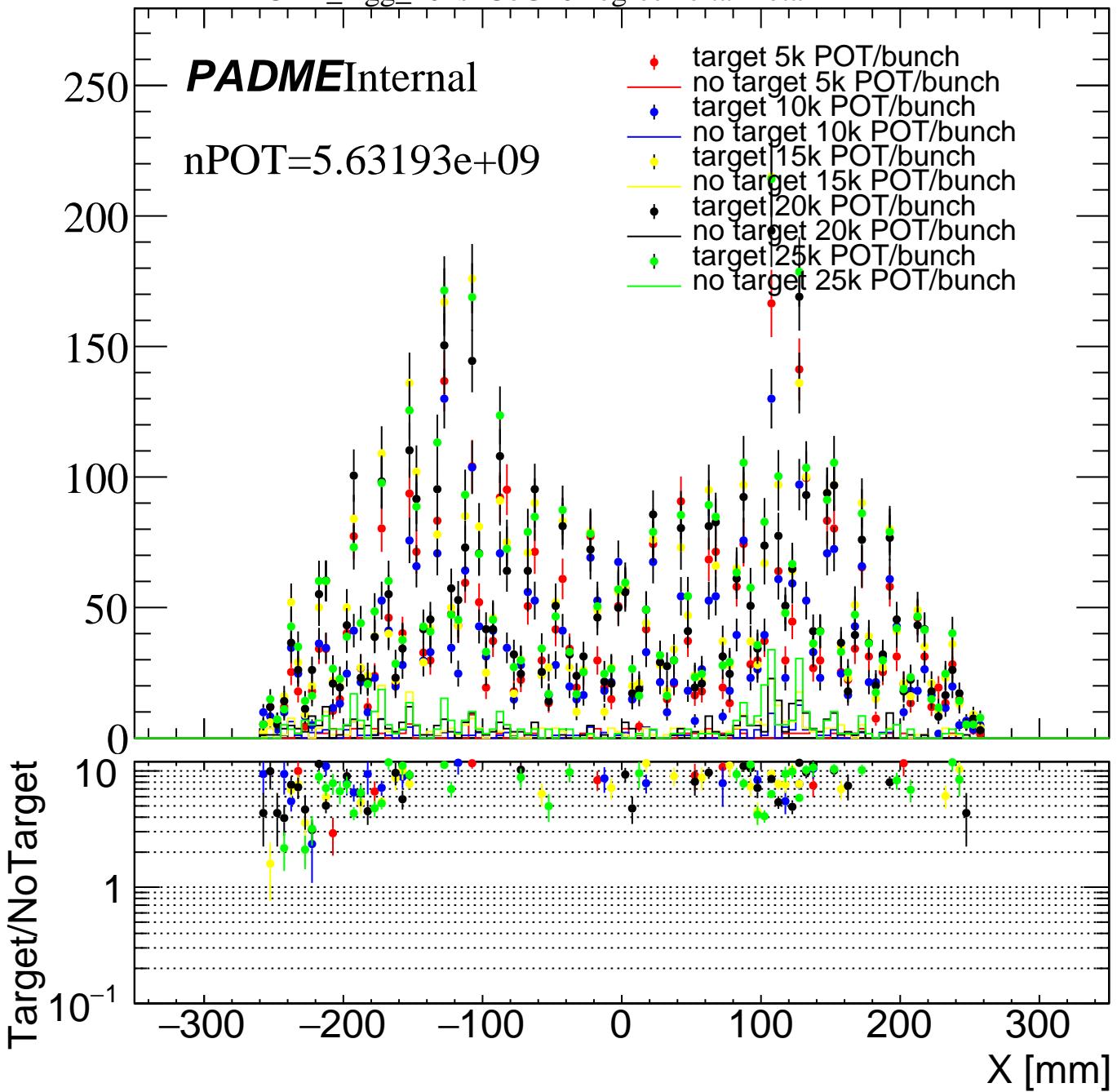
ECAL_Xgg_10ns1CoGEThr90



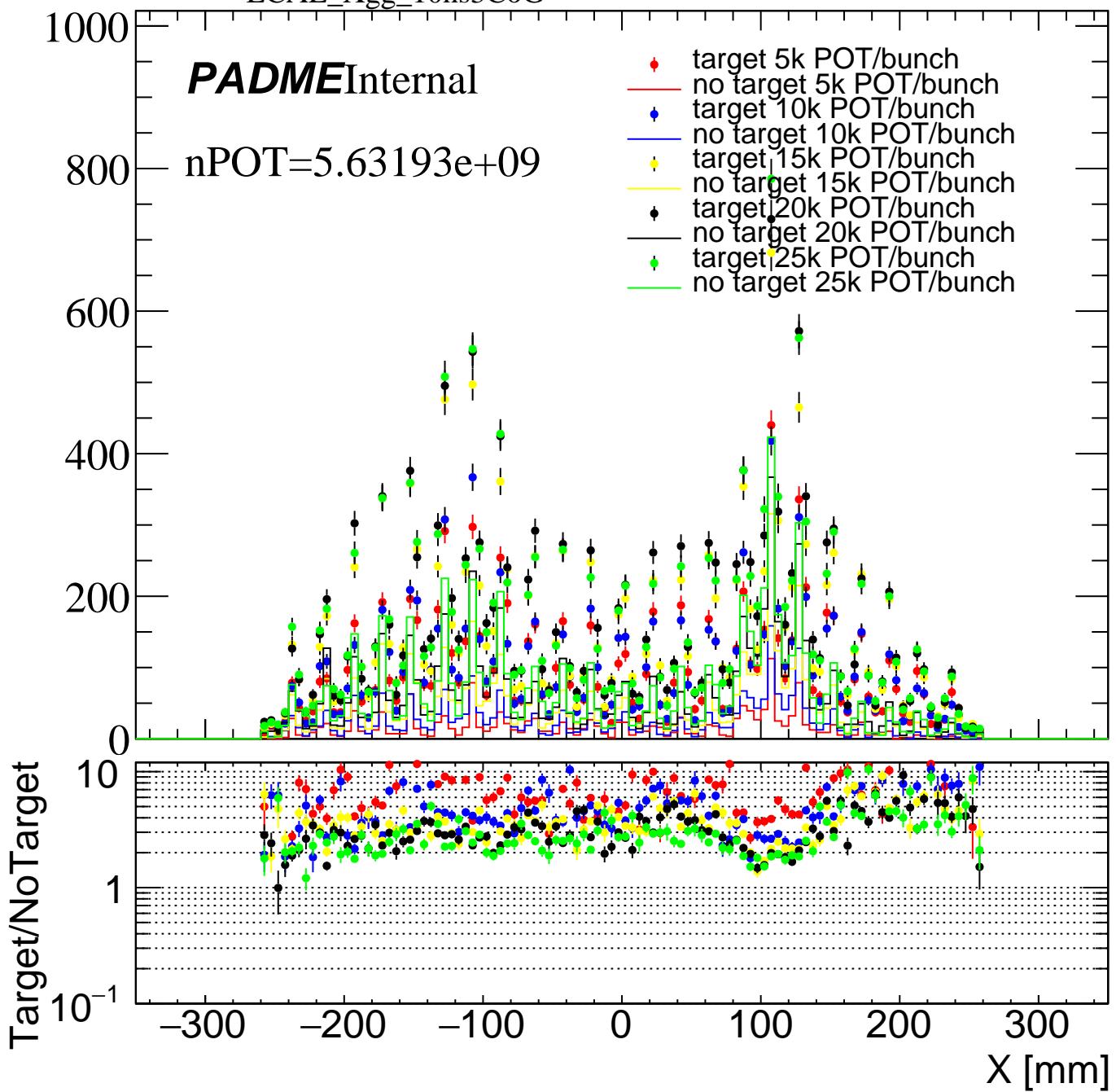
ECAL_Xgg_10ns1CoG20Degree



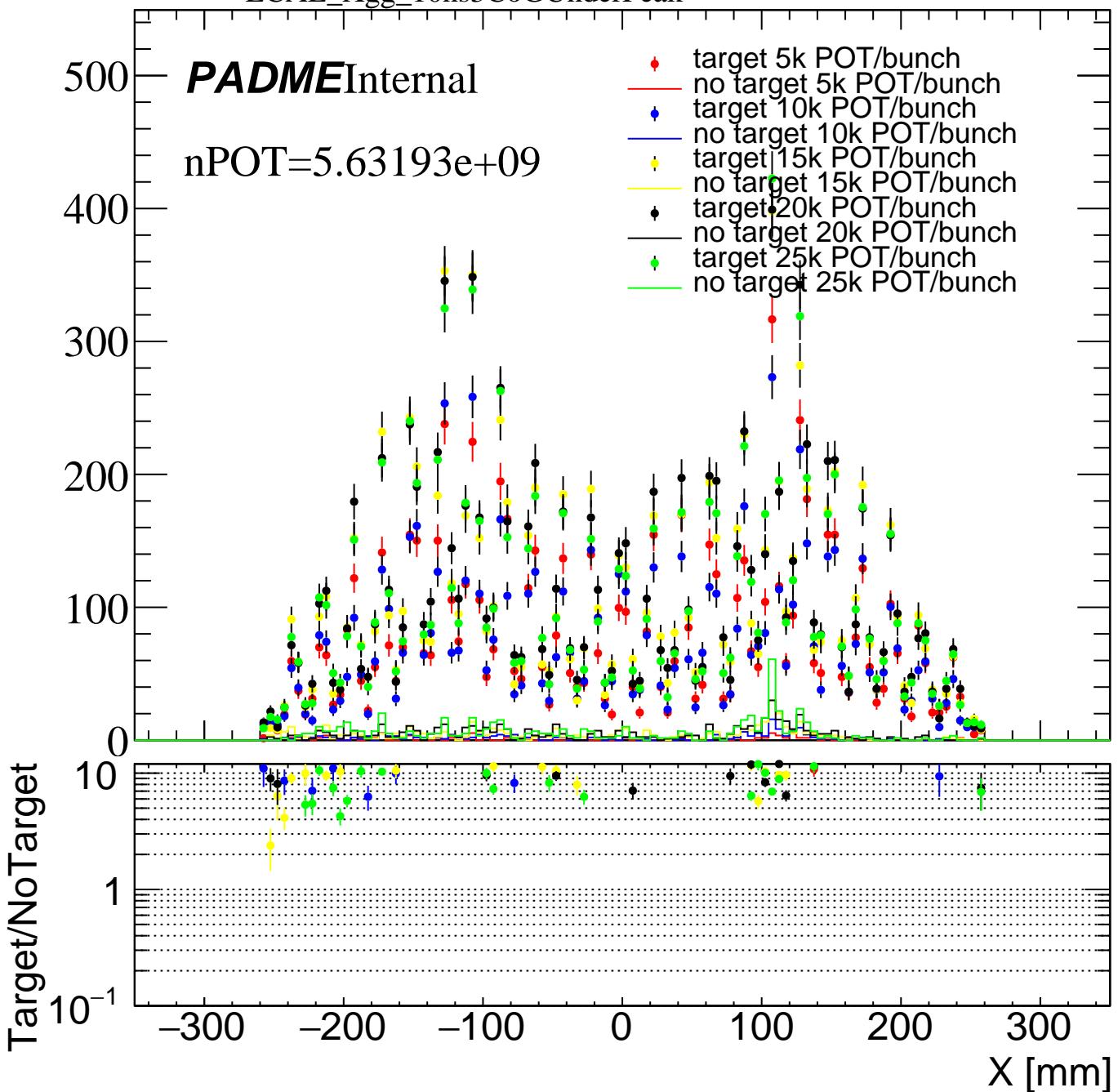
ECAL_Xgg_10ns1CoG20DegreeDeltaTheta



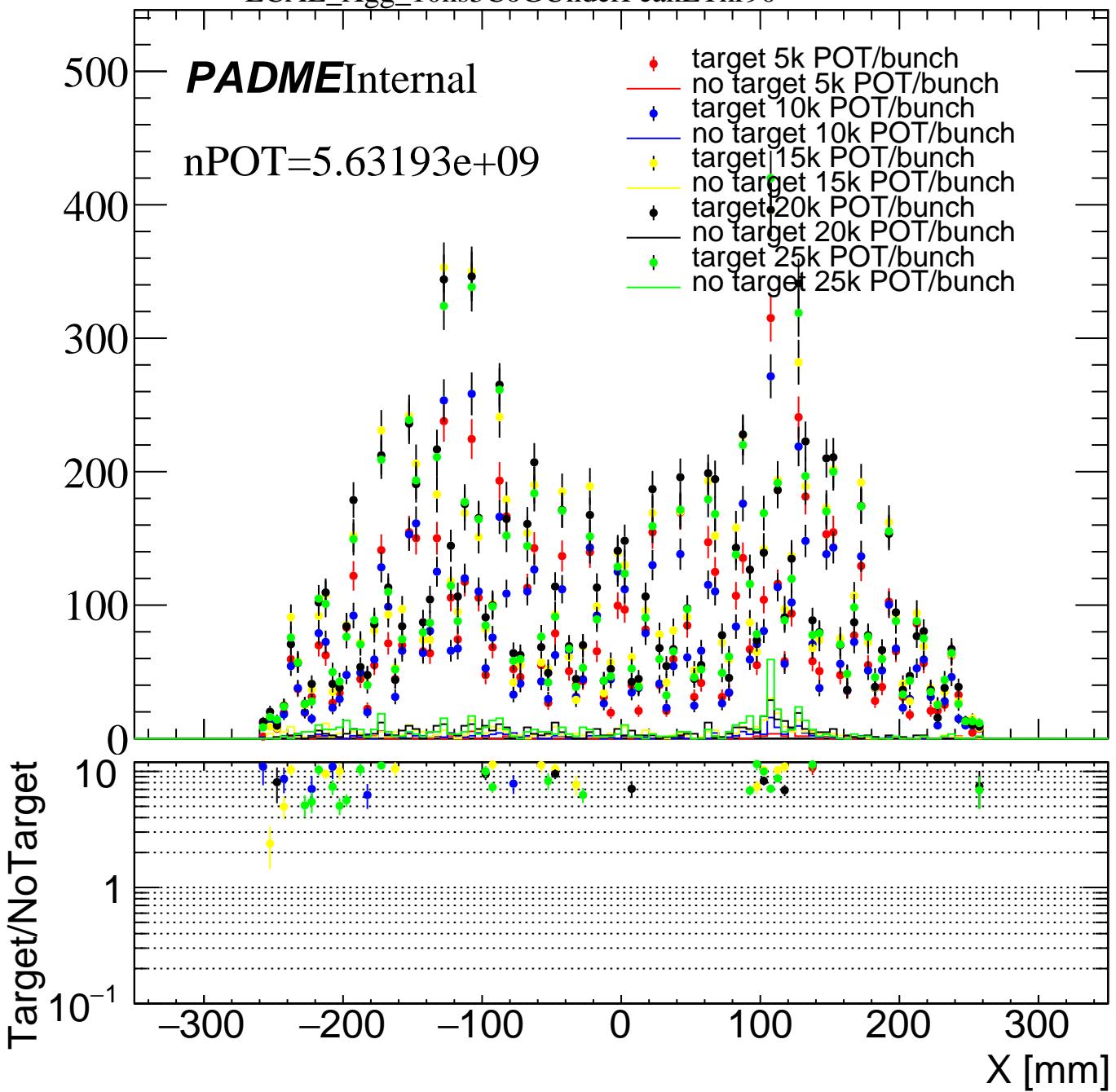
ECAL_Xgg_10ns3CoG



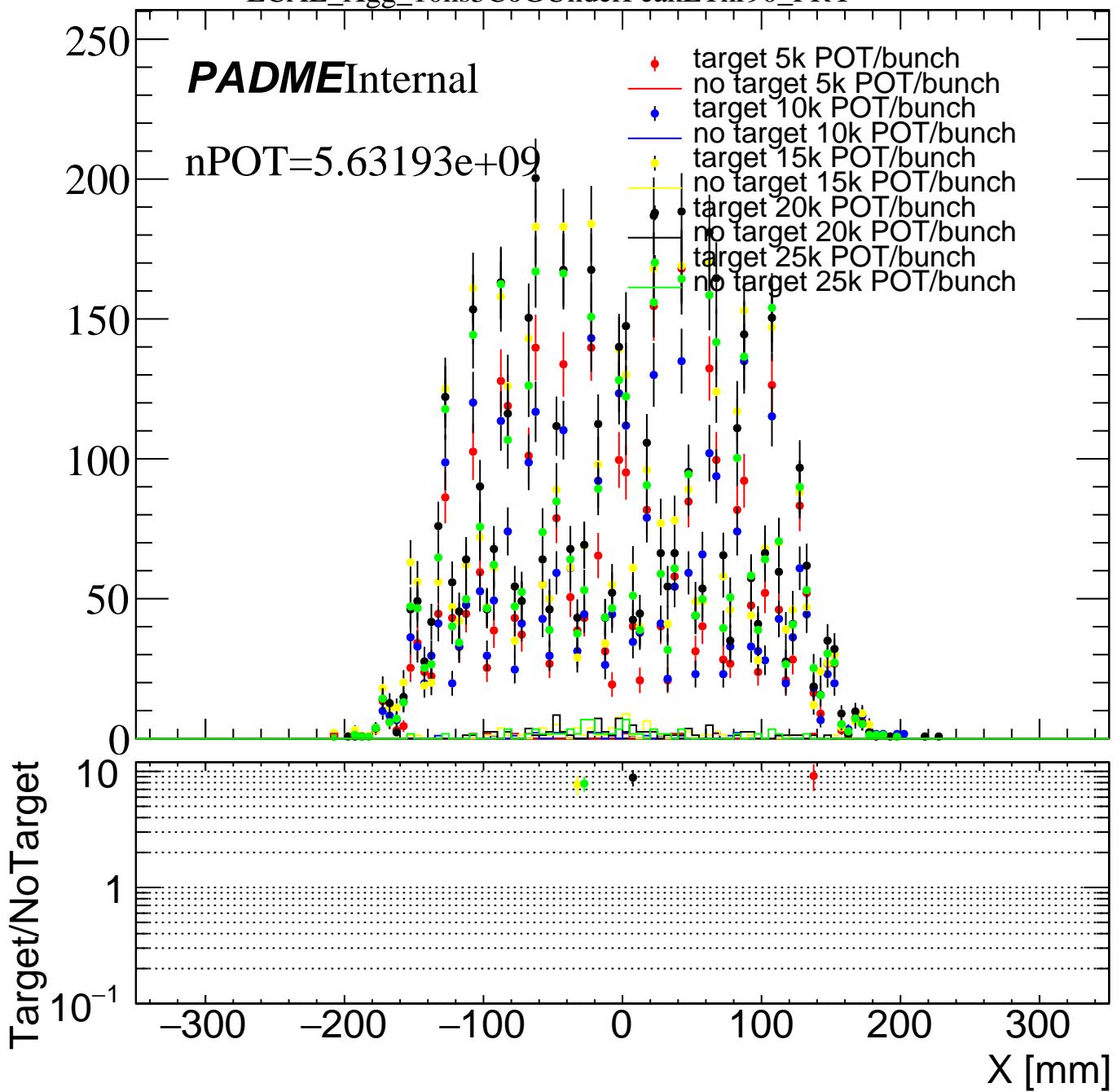
ECAL_Xgg_10ns3CoGUnderPeak



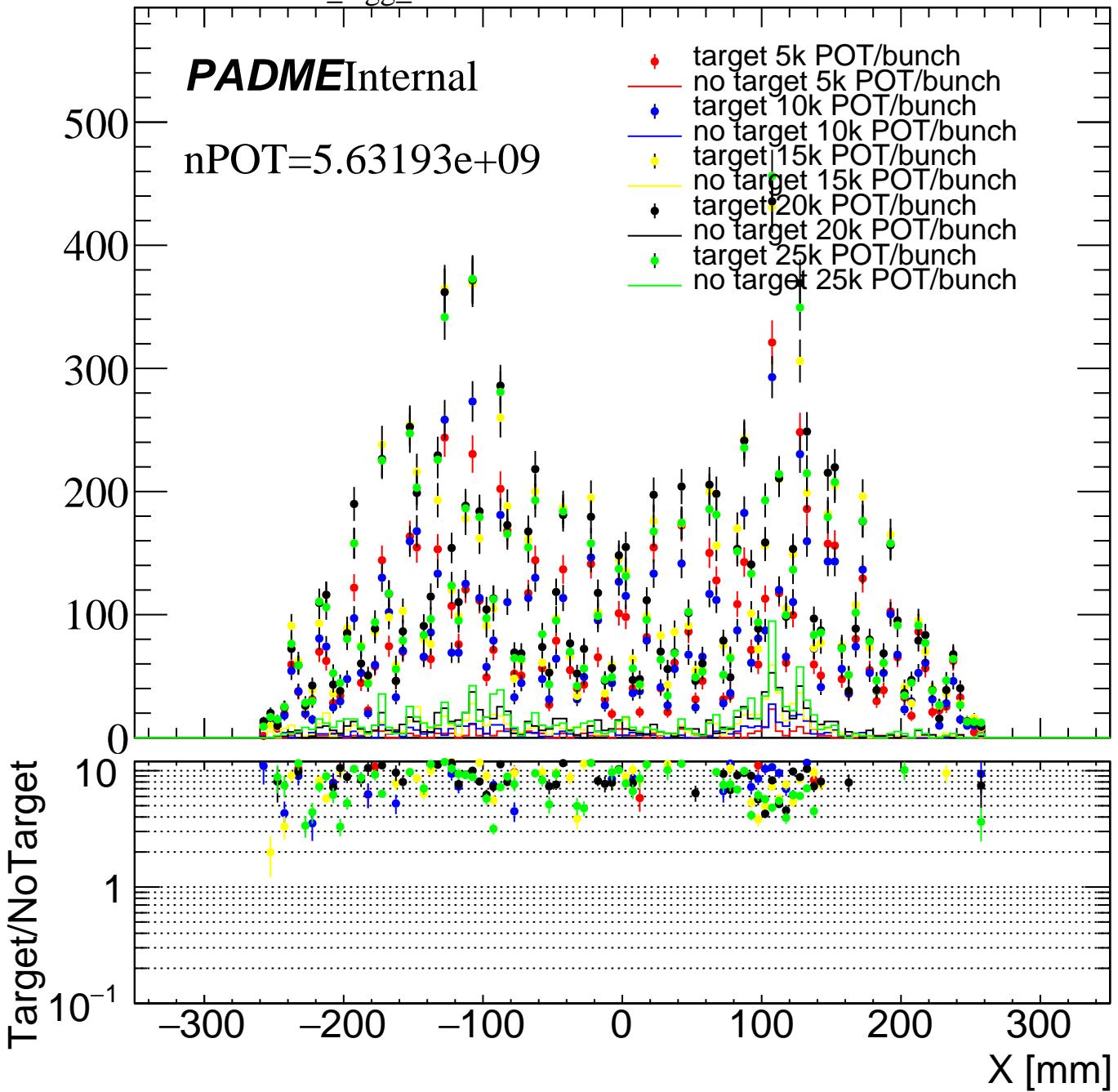
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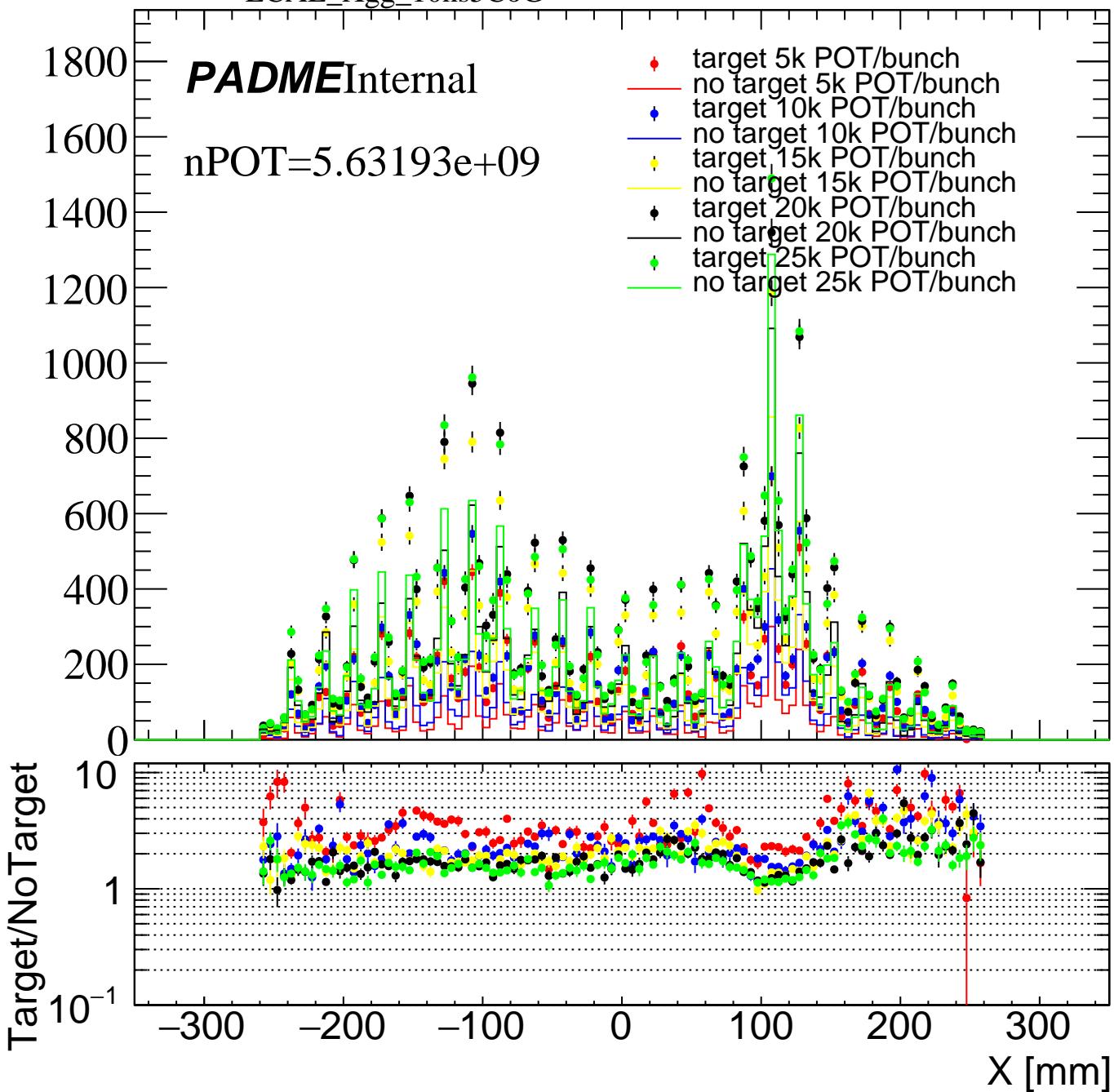
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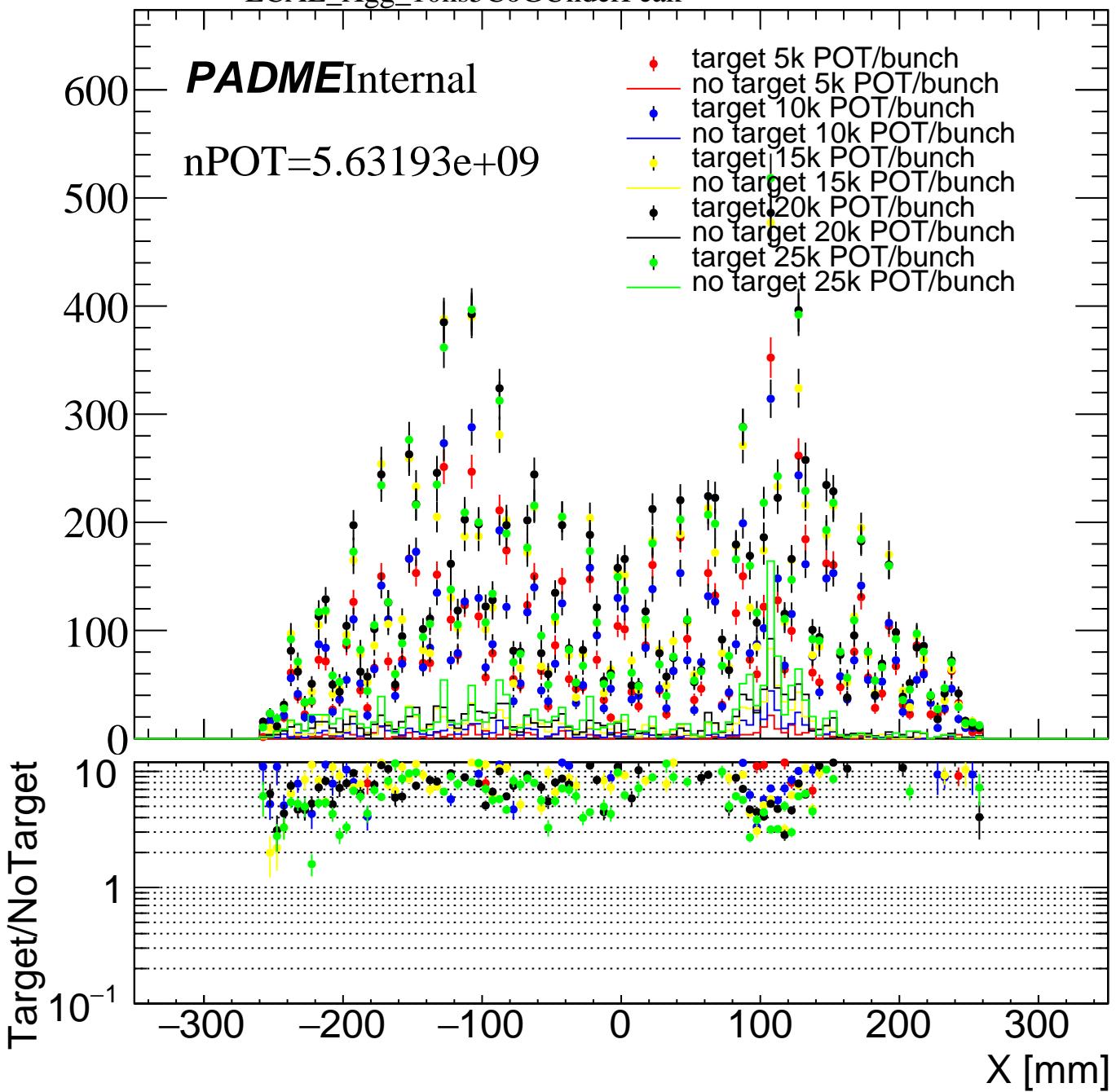
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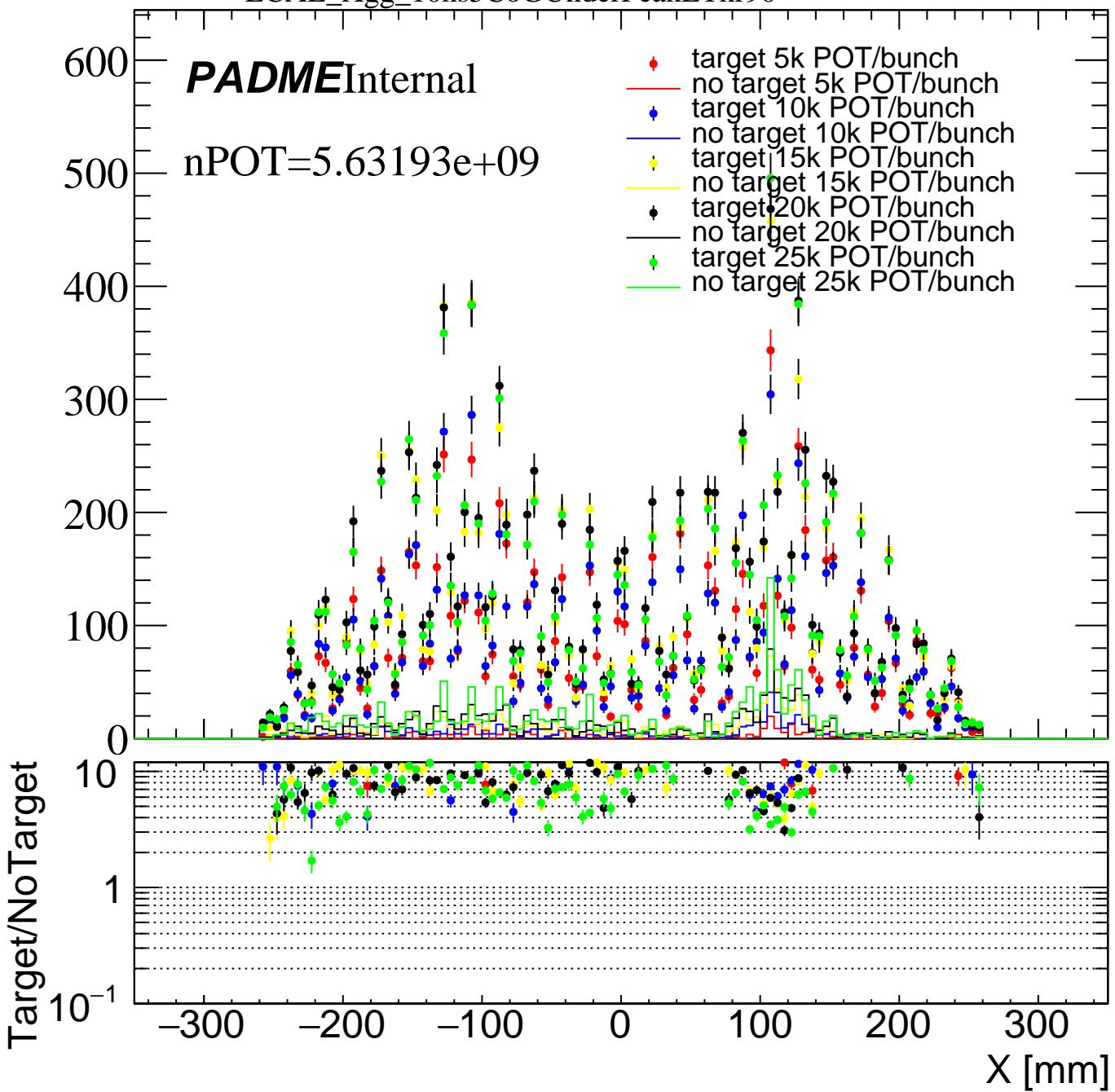
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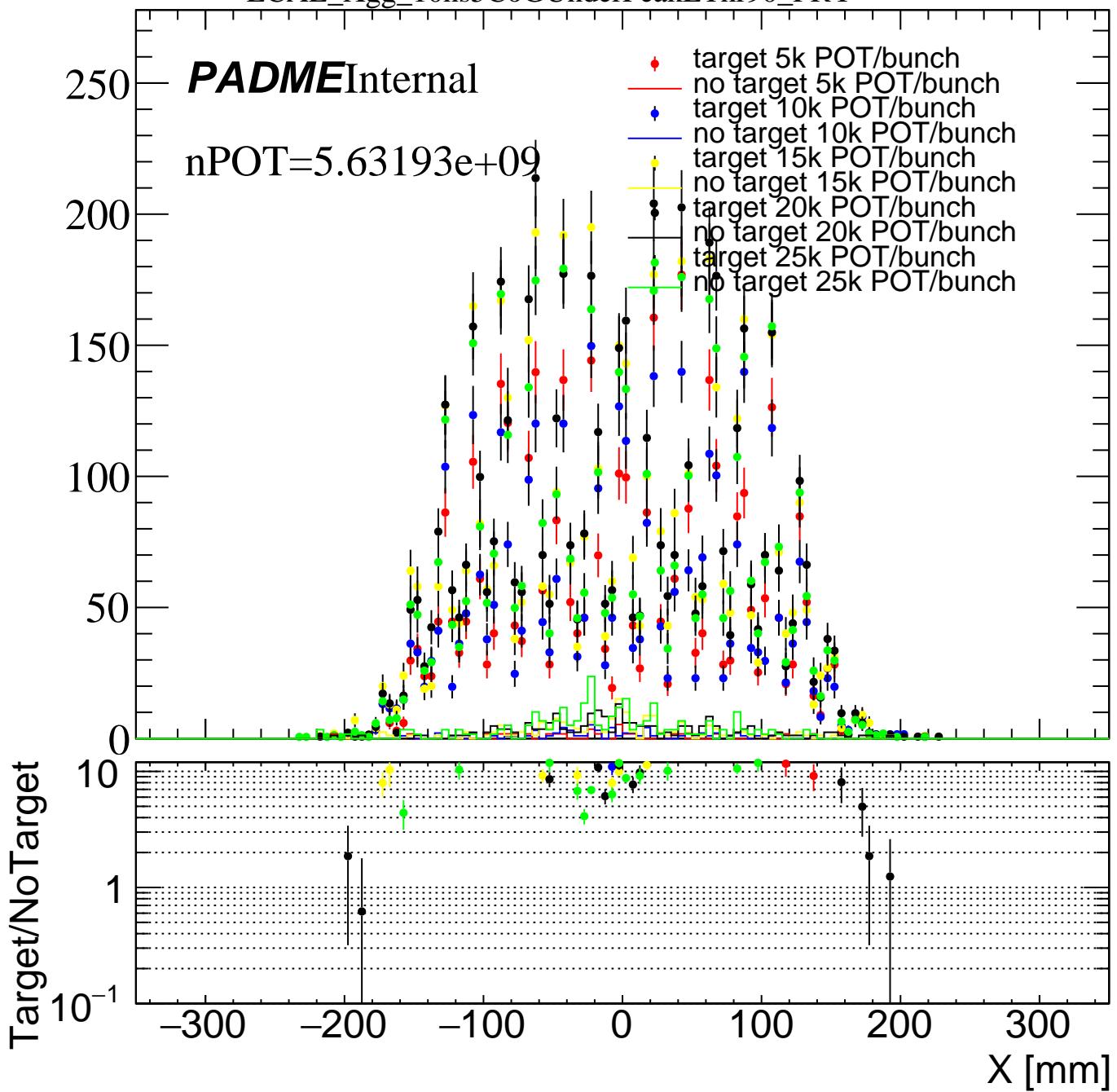
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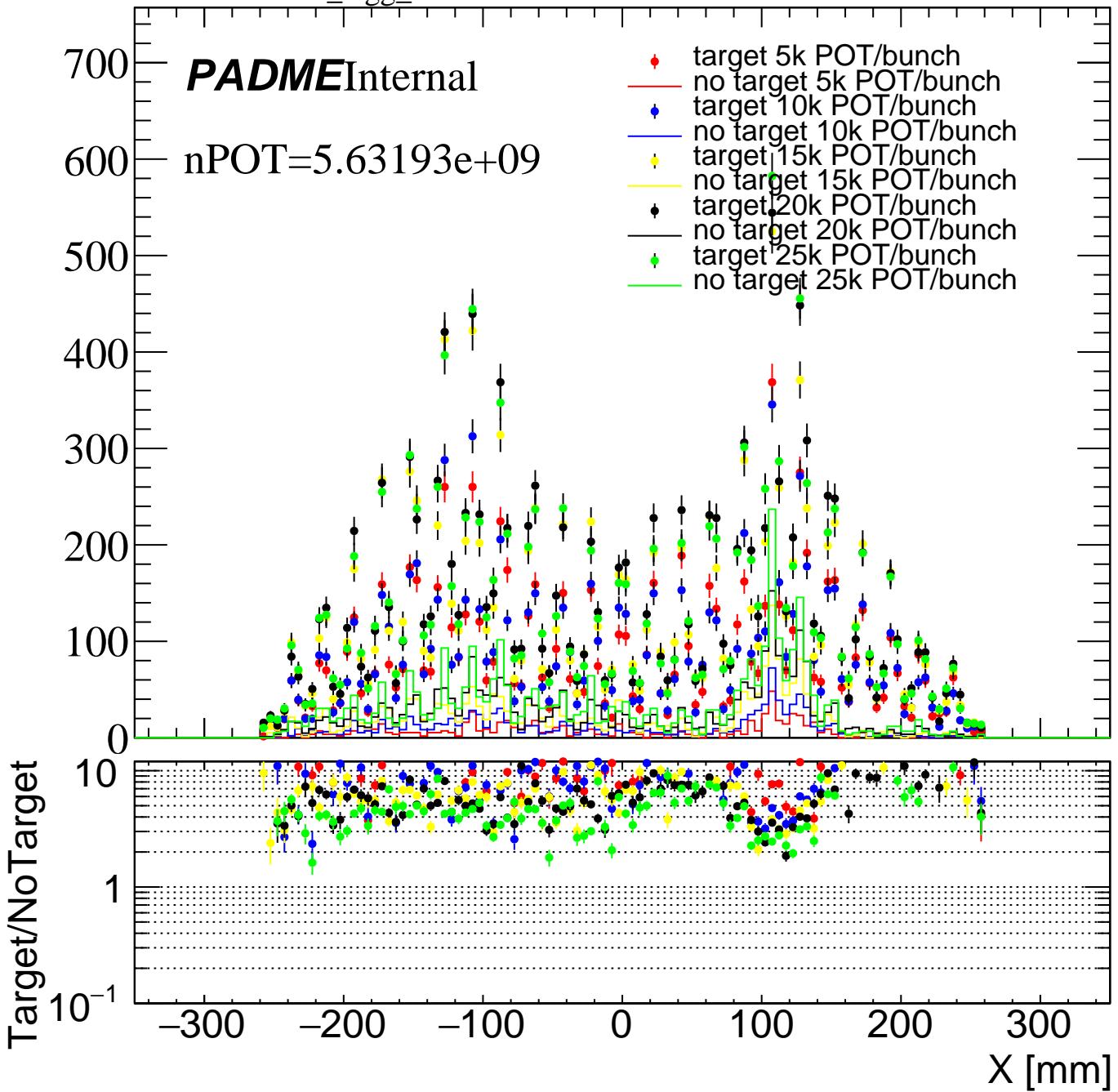
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ECAL_Xgg_10ns5CoGUnderPeakEThr90_FRY



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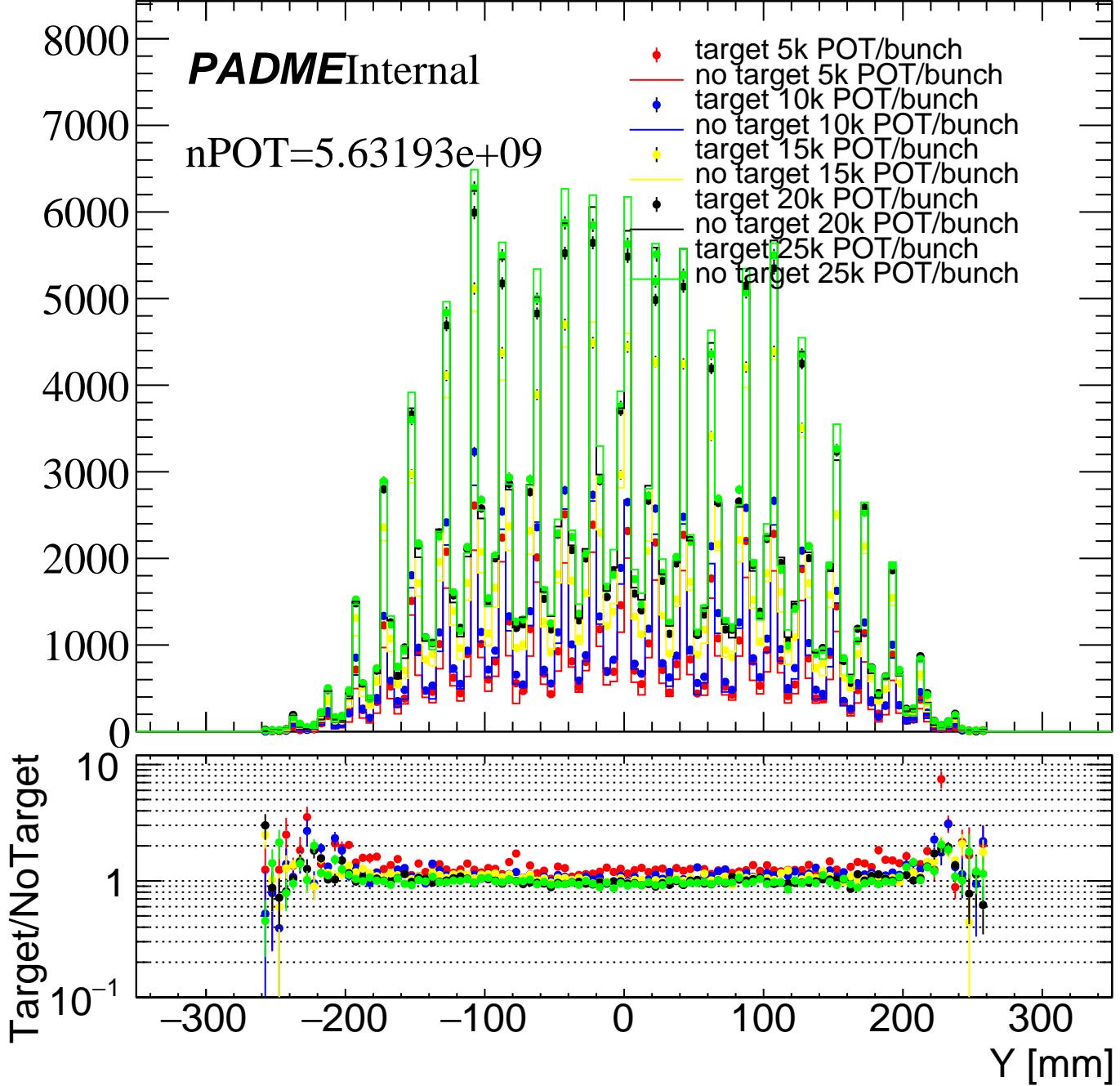


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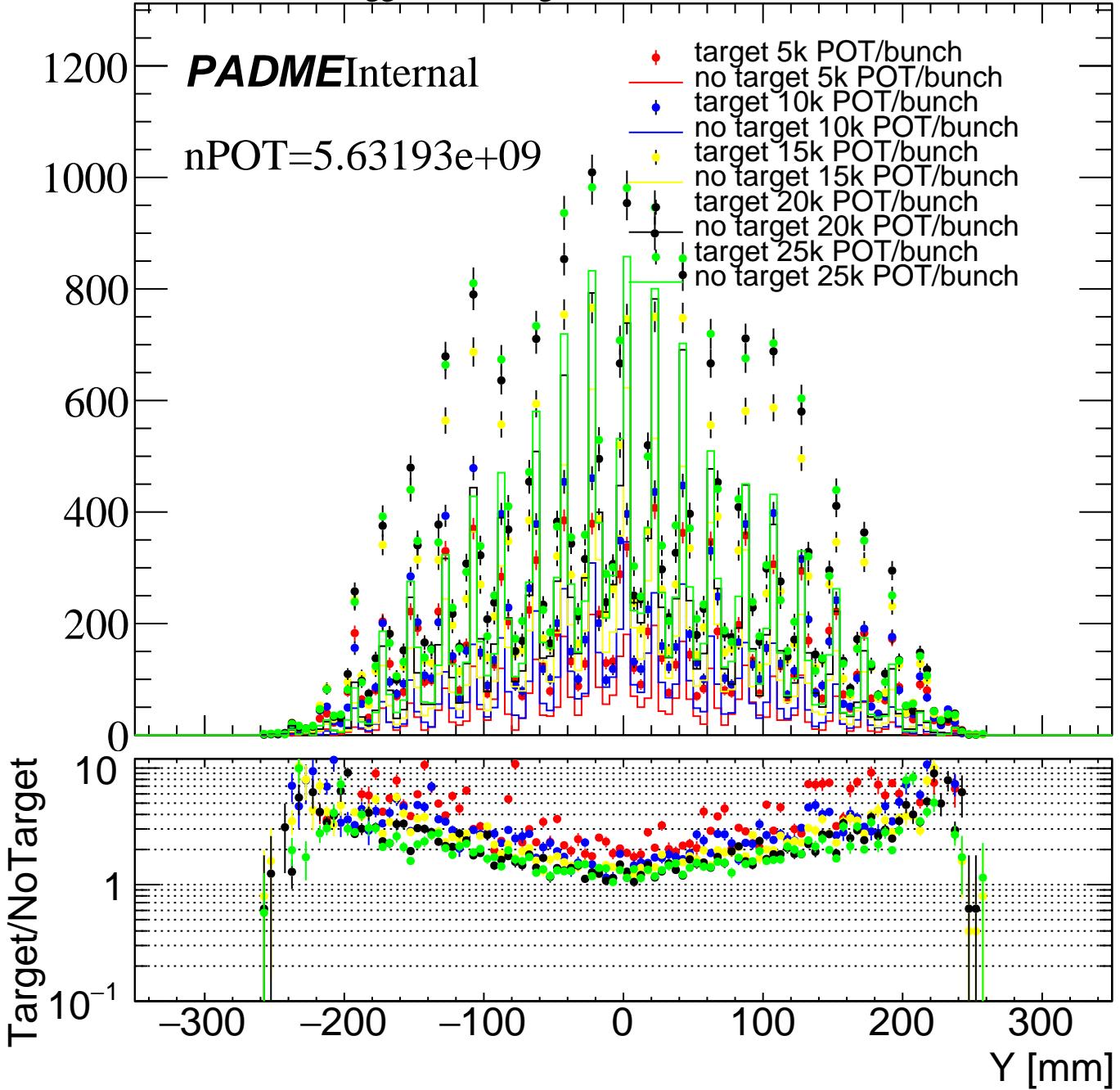
PADMEInternal

nPOT=5.63193e+09

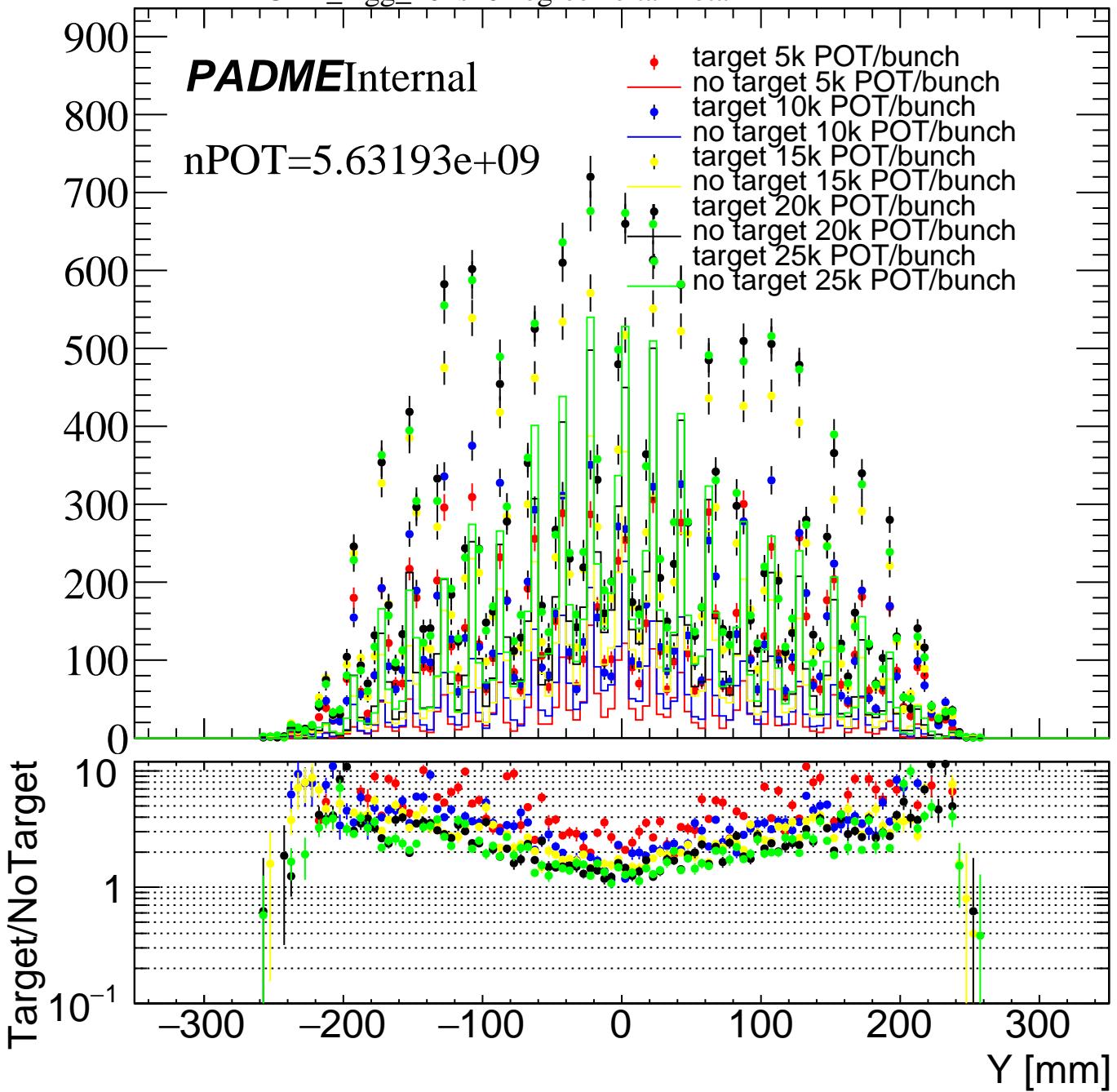
- target 5k POT/bunch
- no target 5k POT/bunch
- target 10k POT/bunch
- no target 10k POT/bunch
- target 15k POT/bunch
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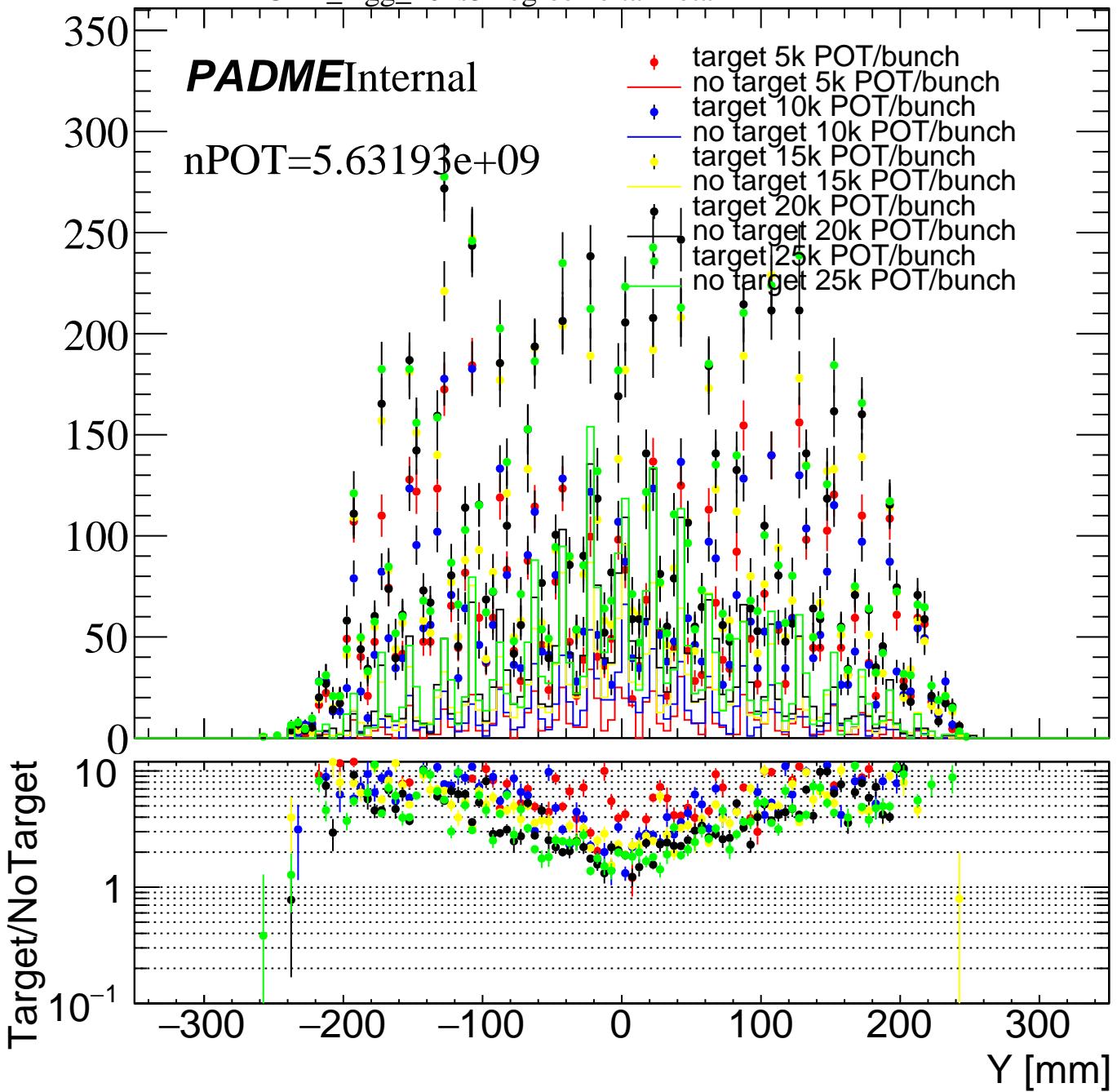
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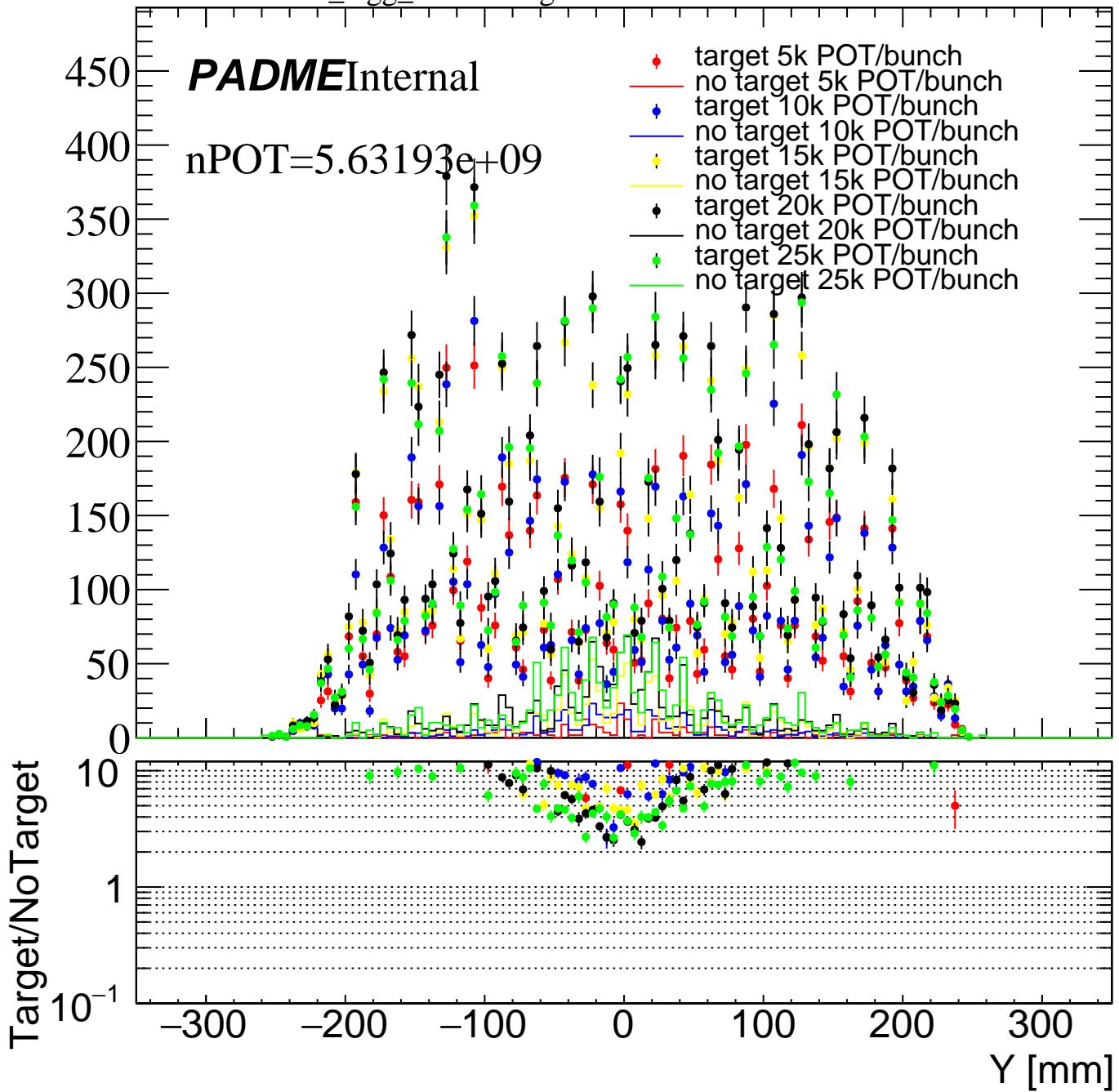
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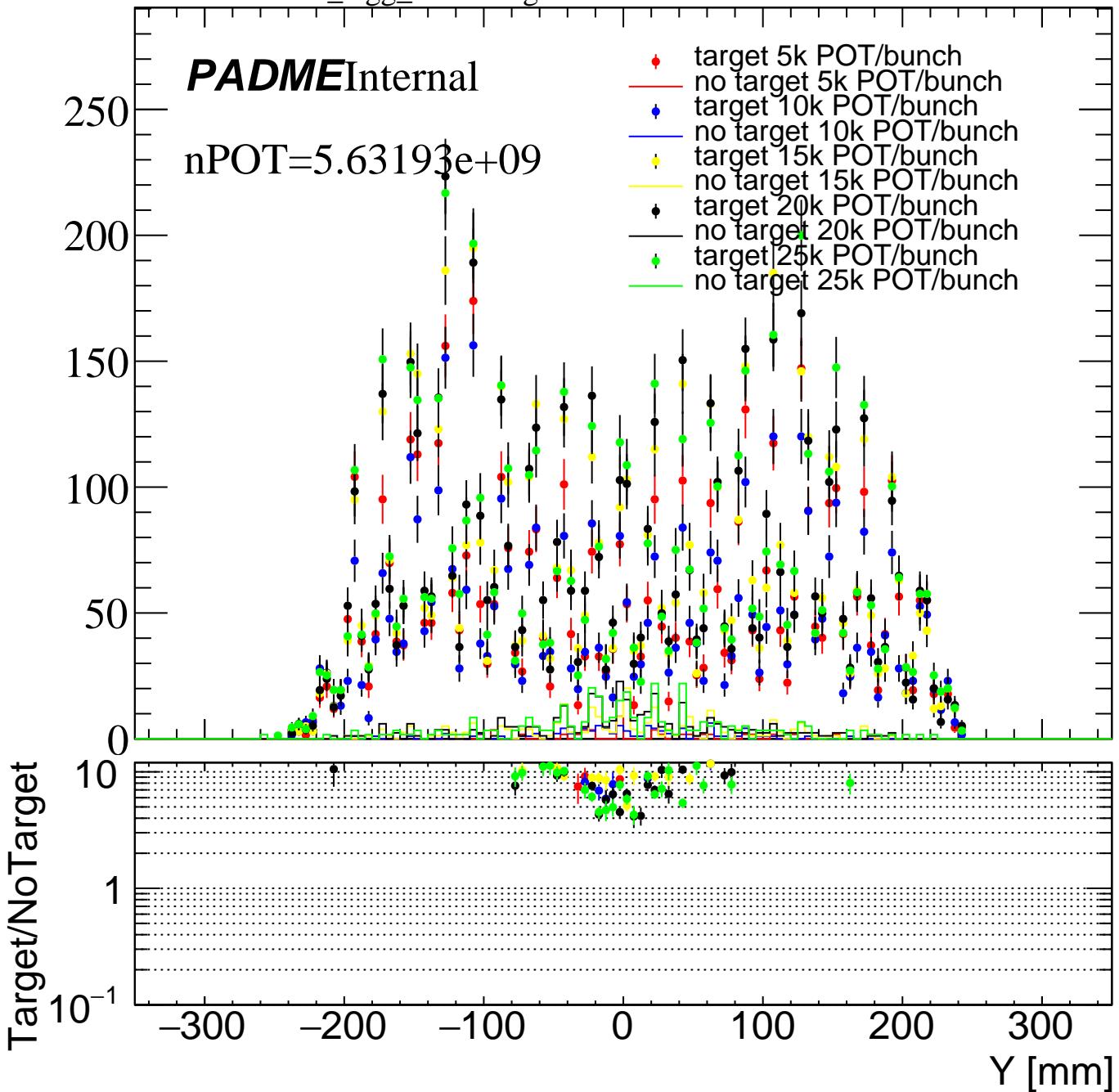
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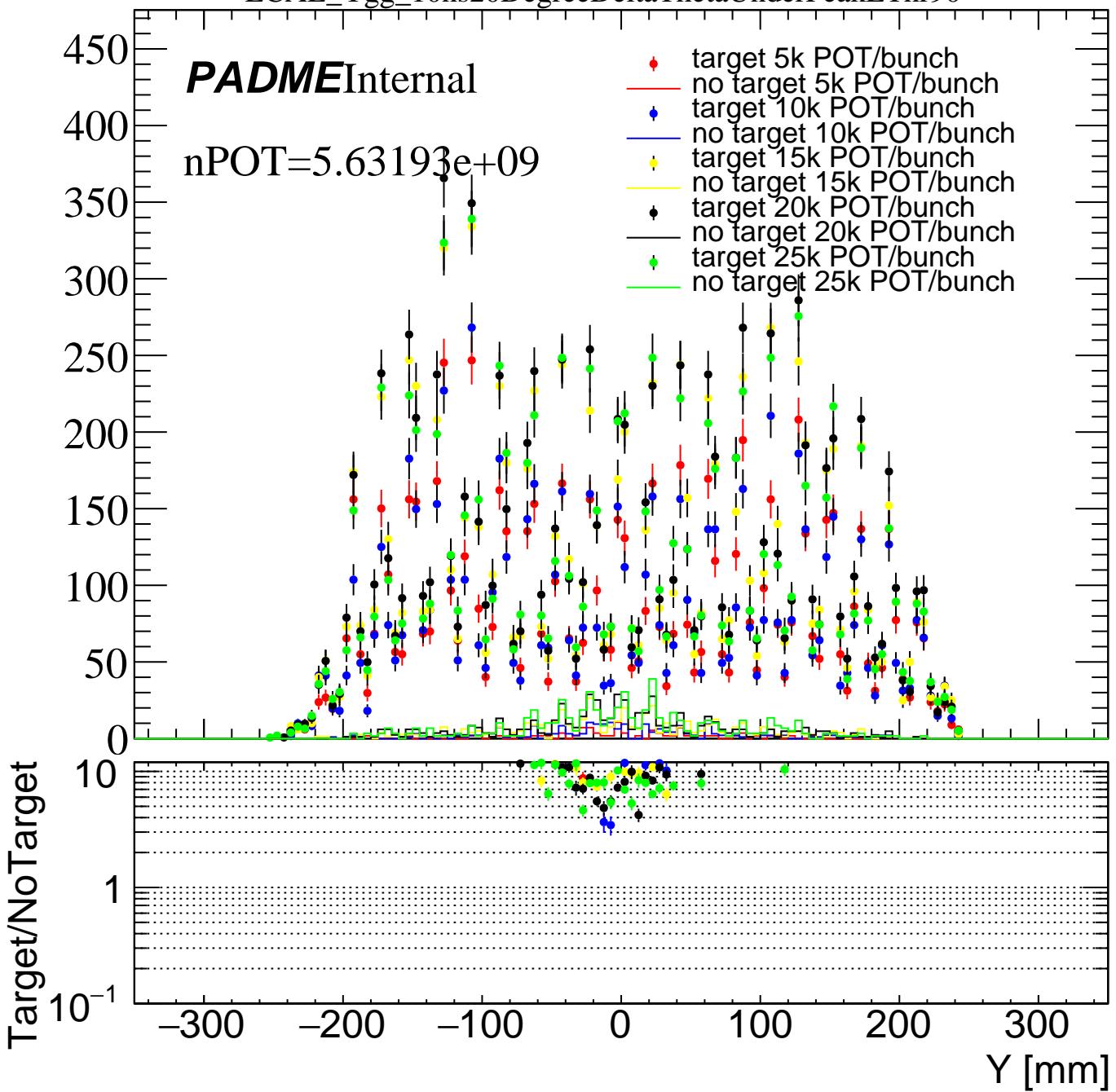
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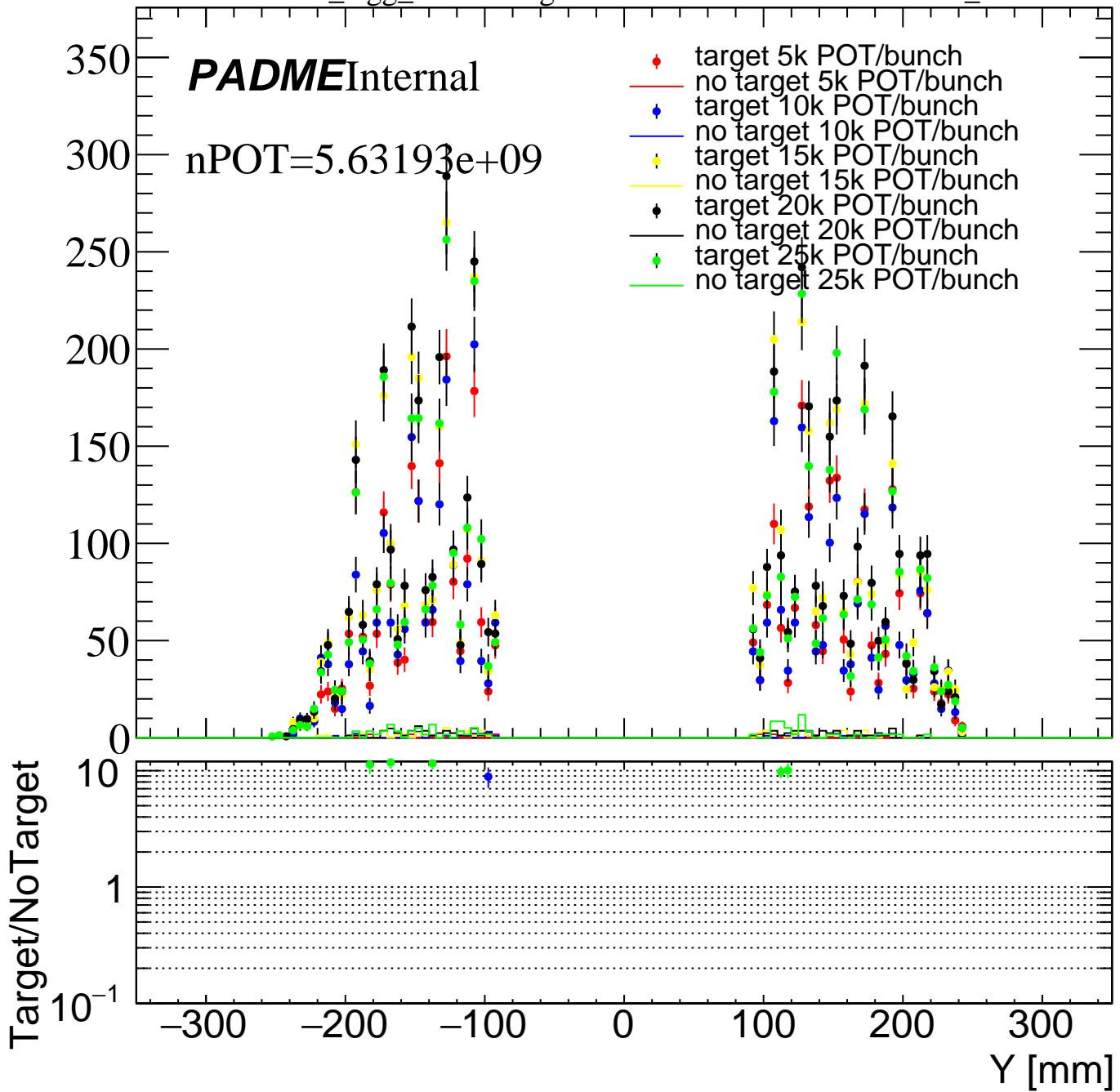
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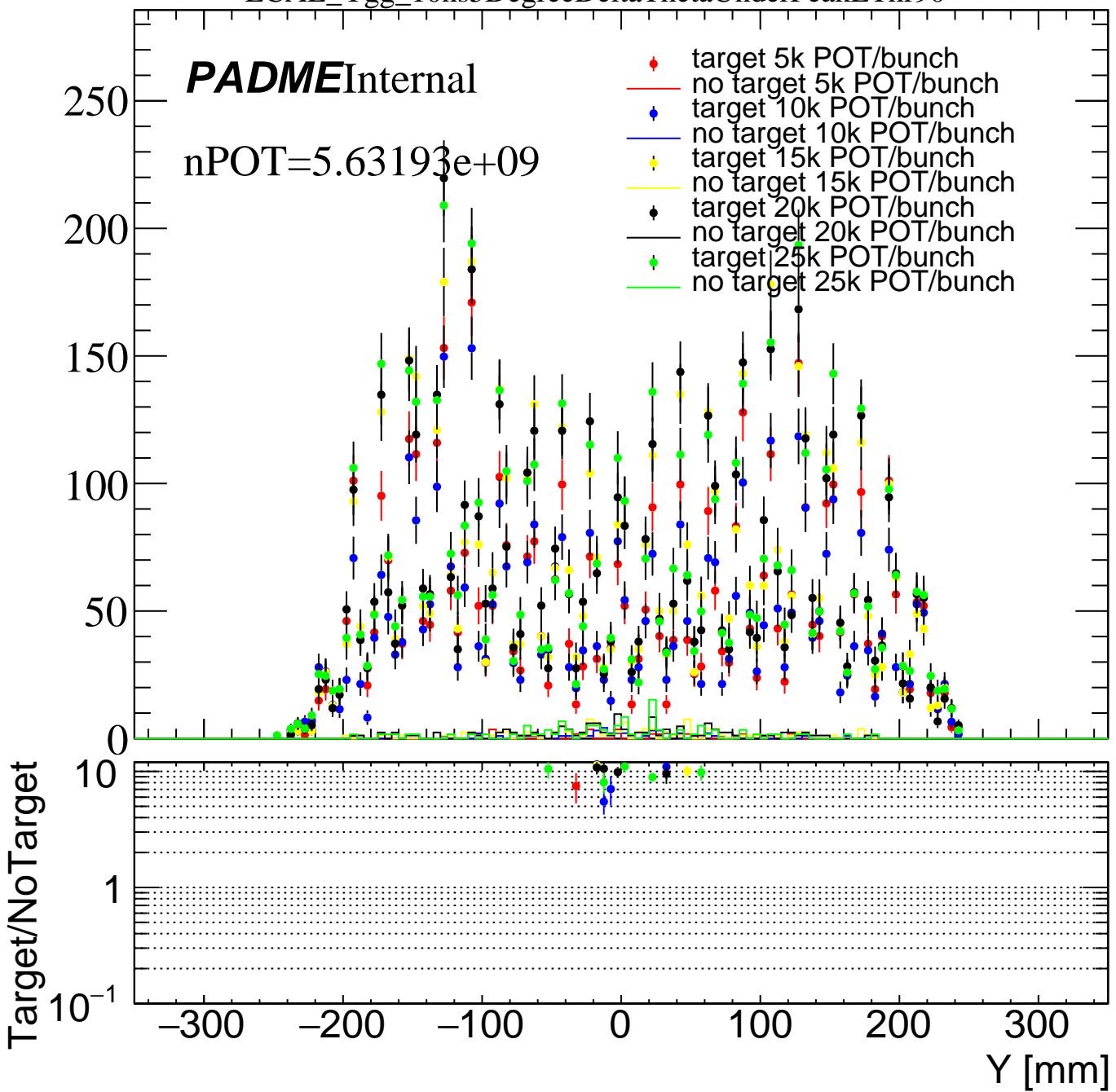
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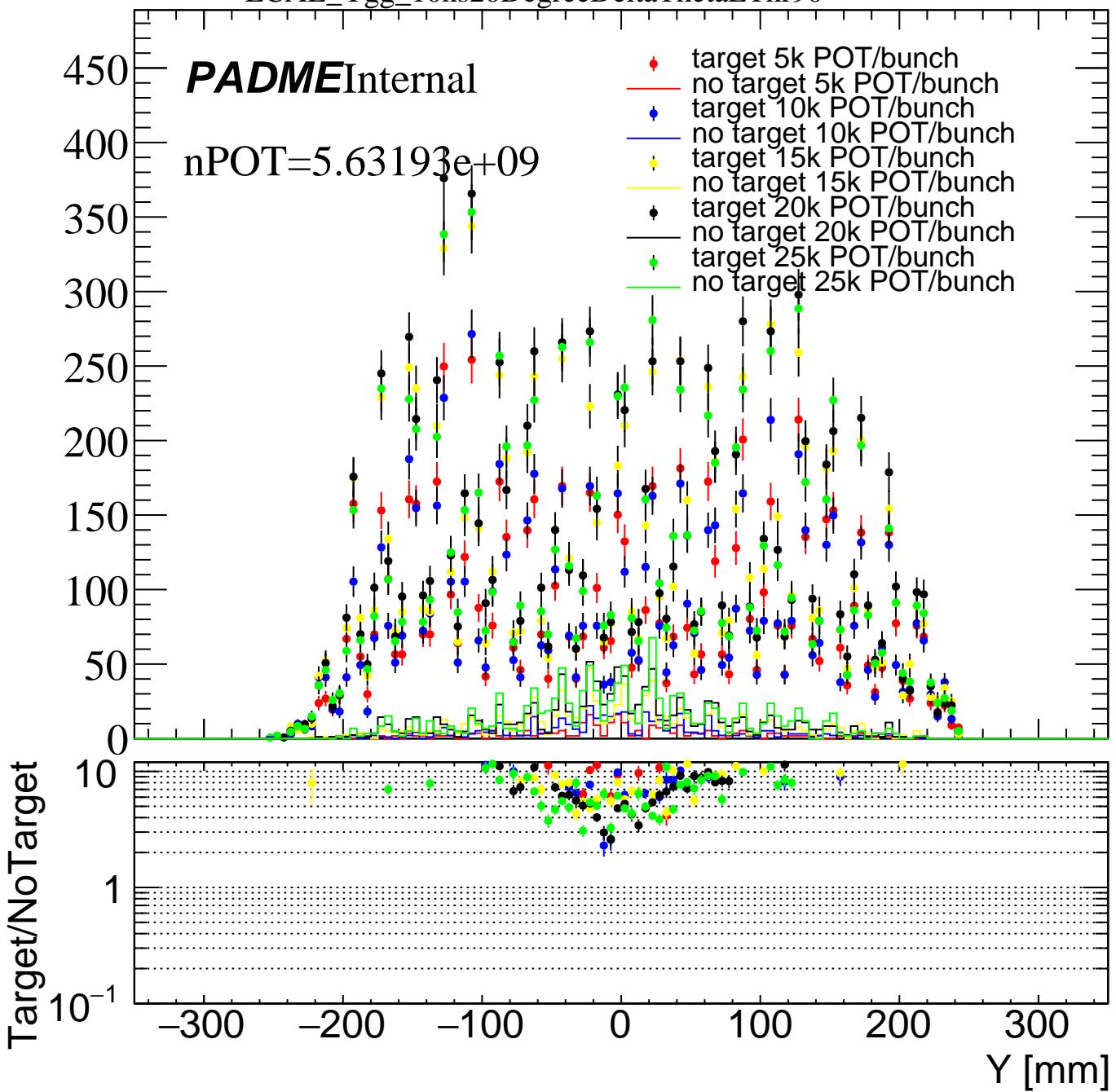
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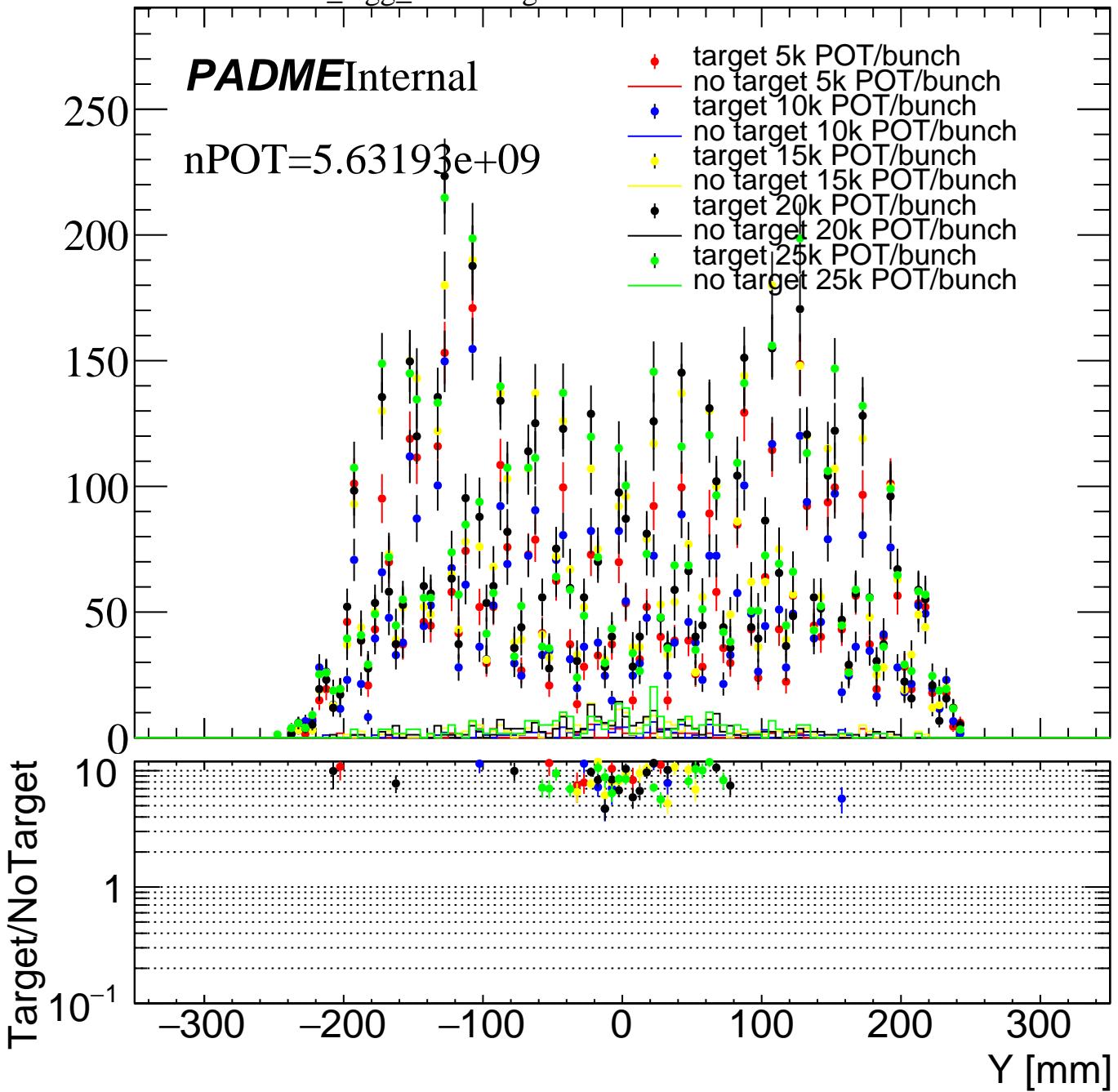
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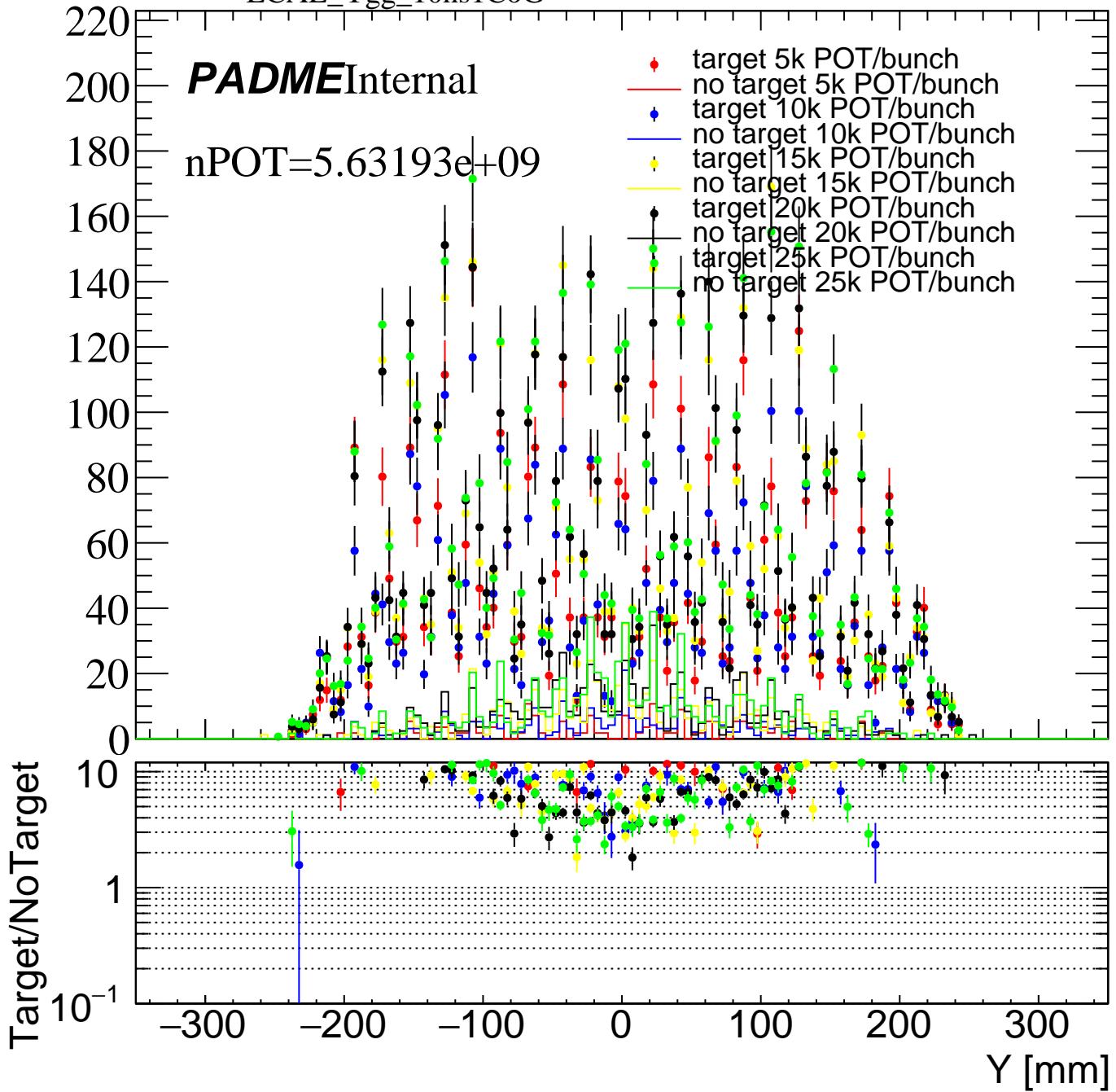
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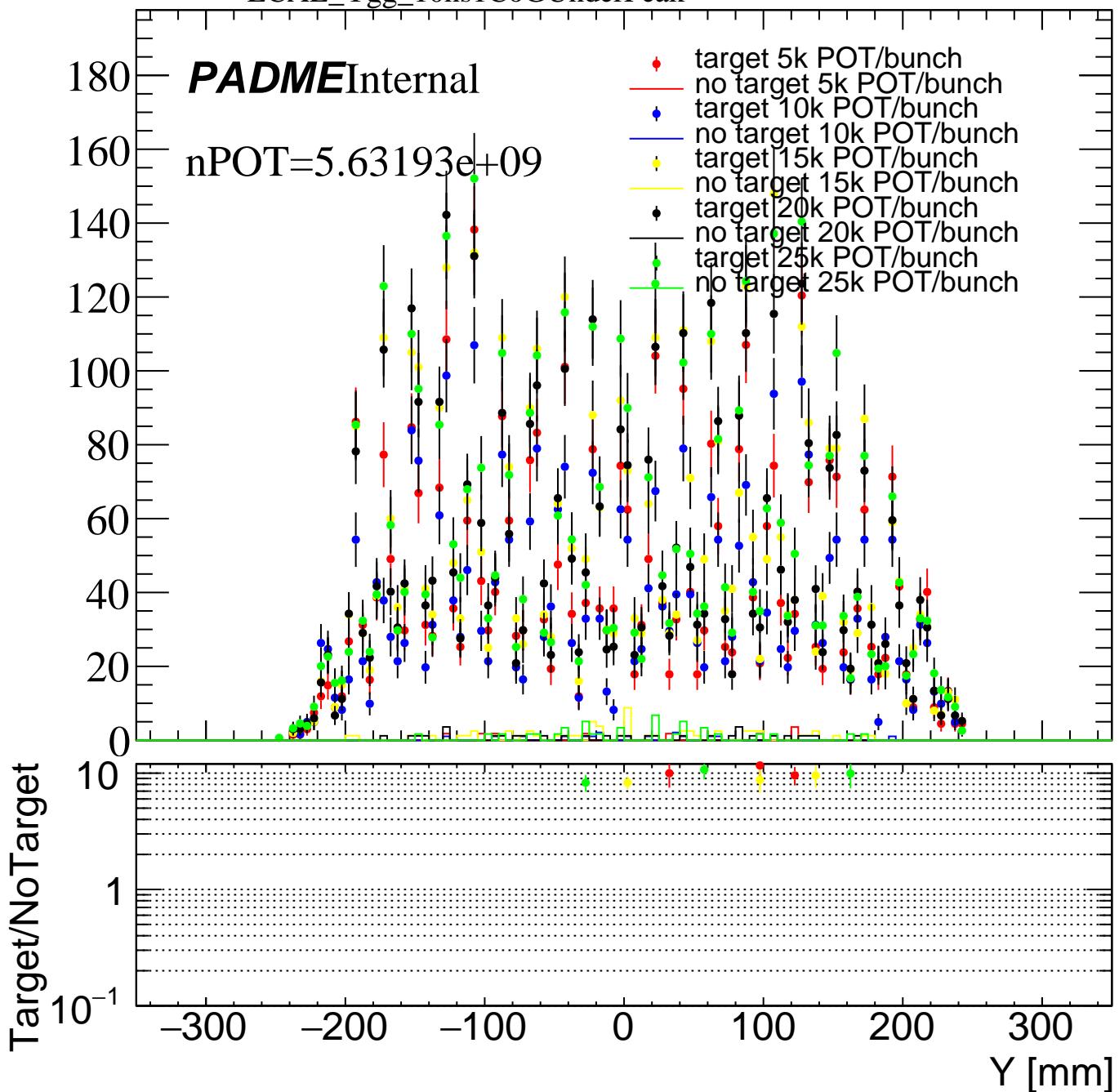
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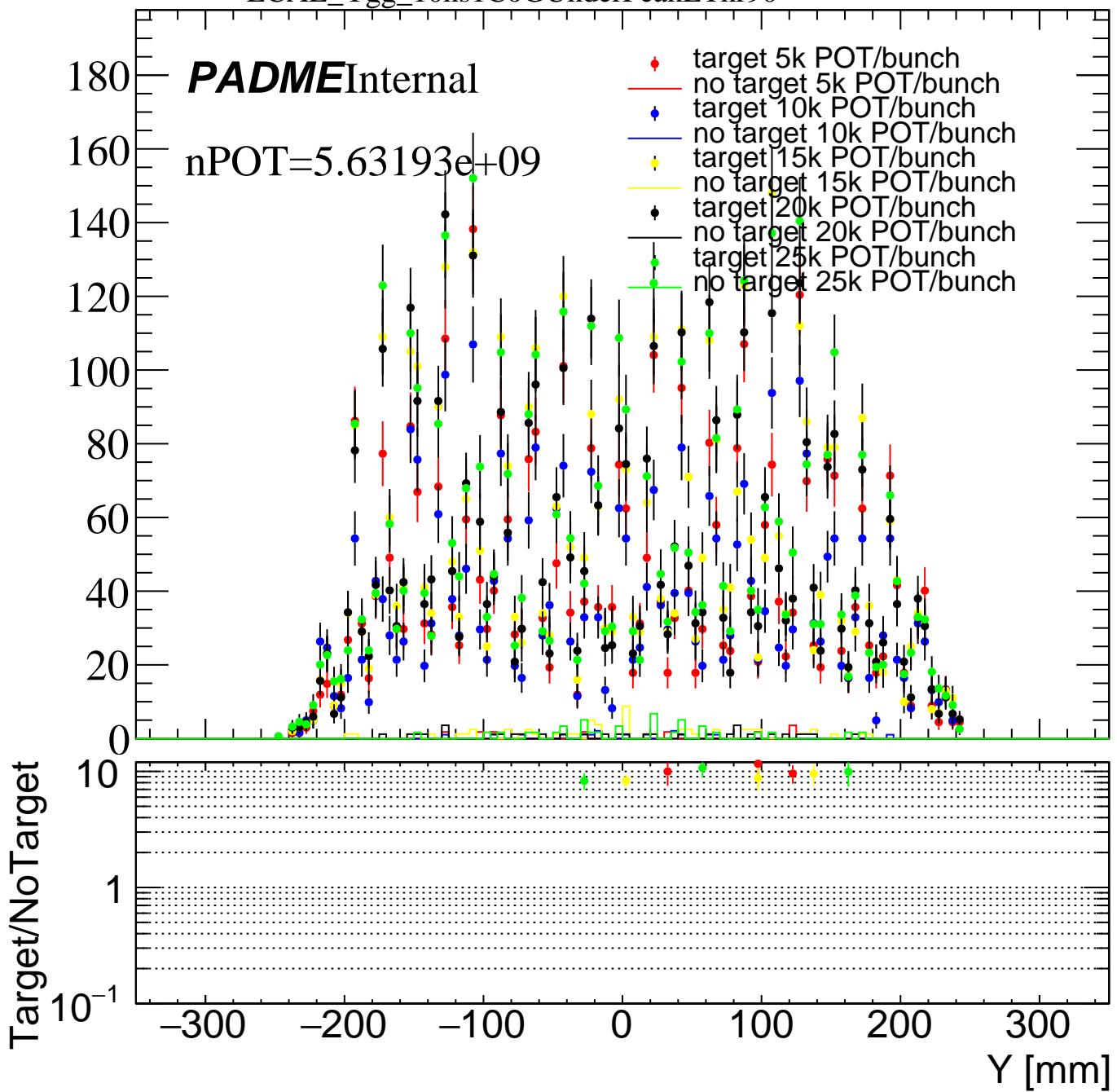
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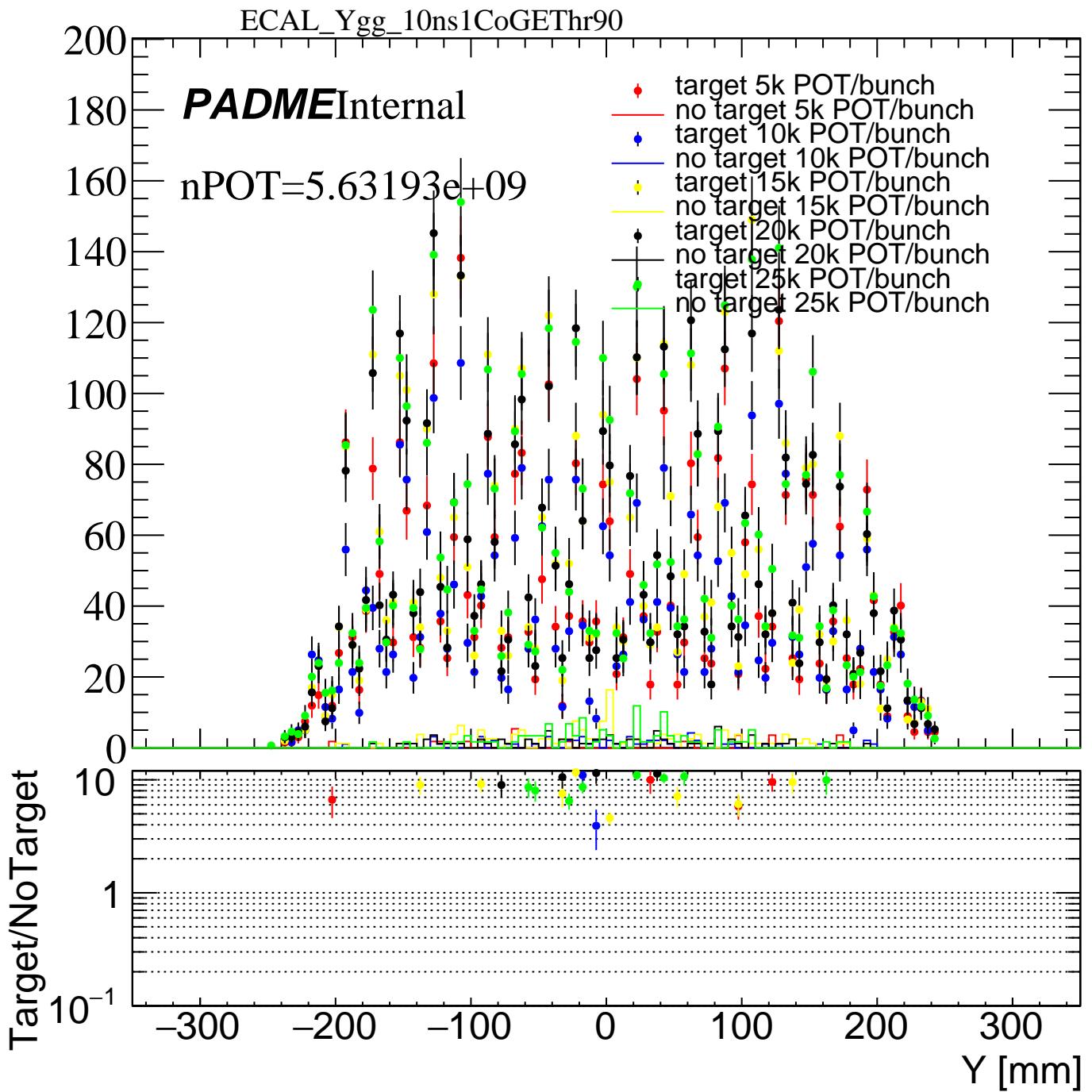


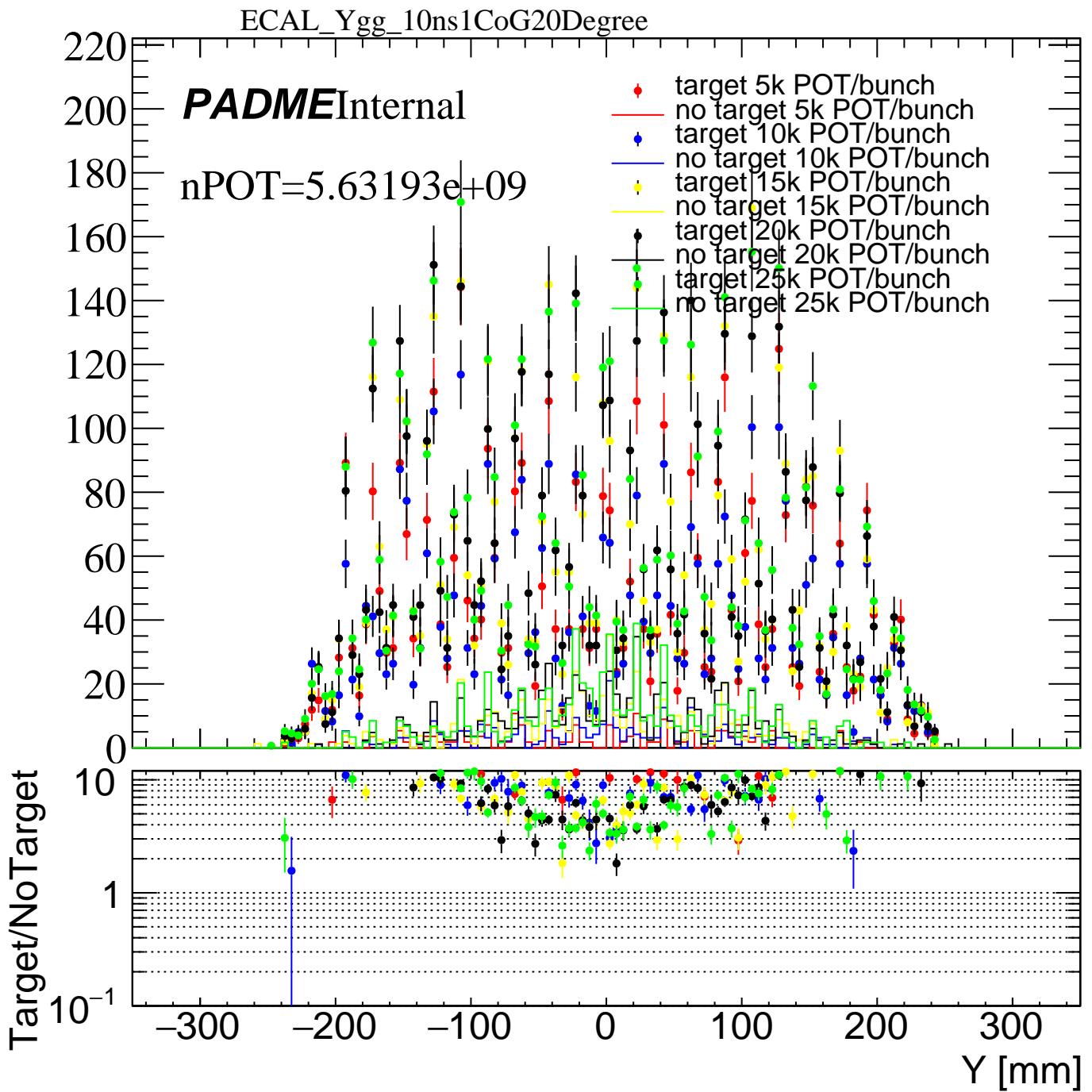
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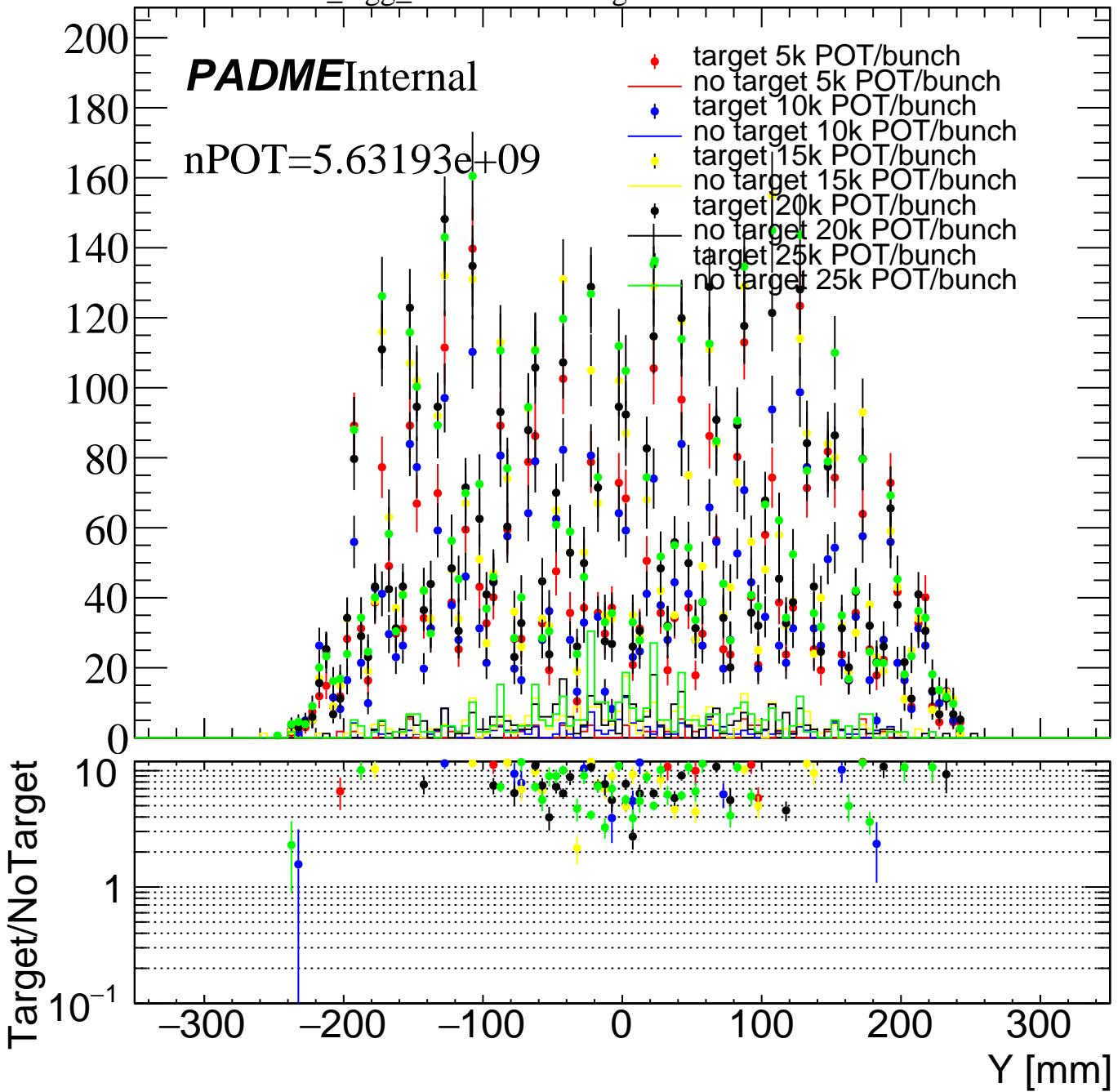
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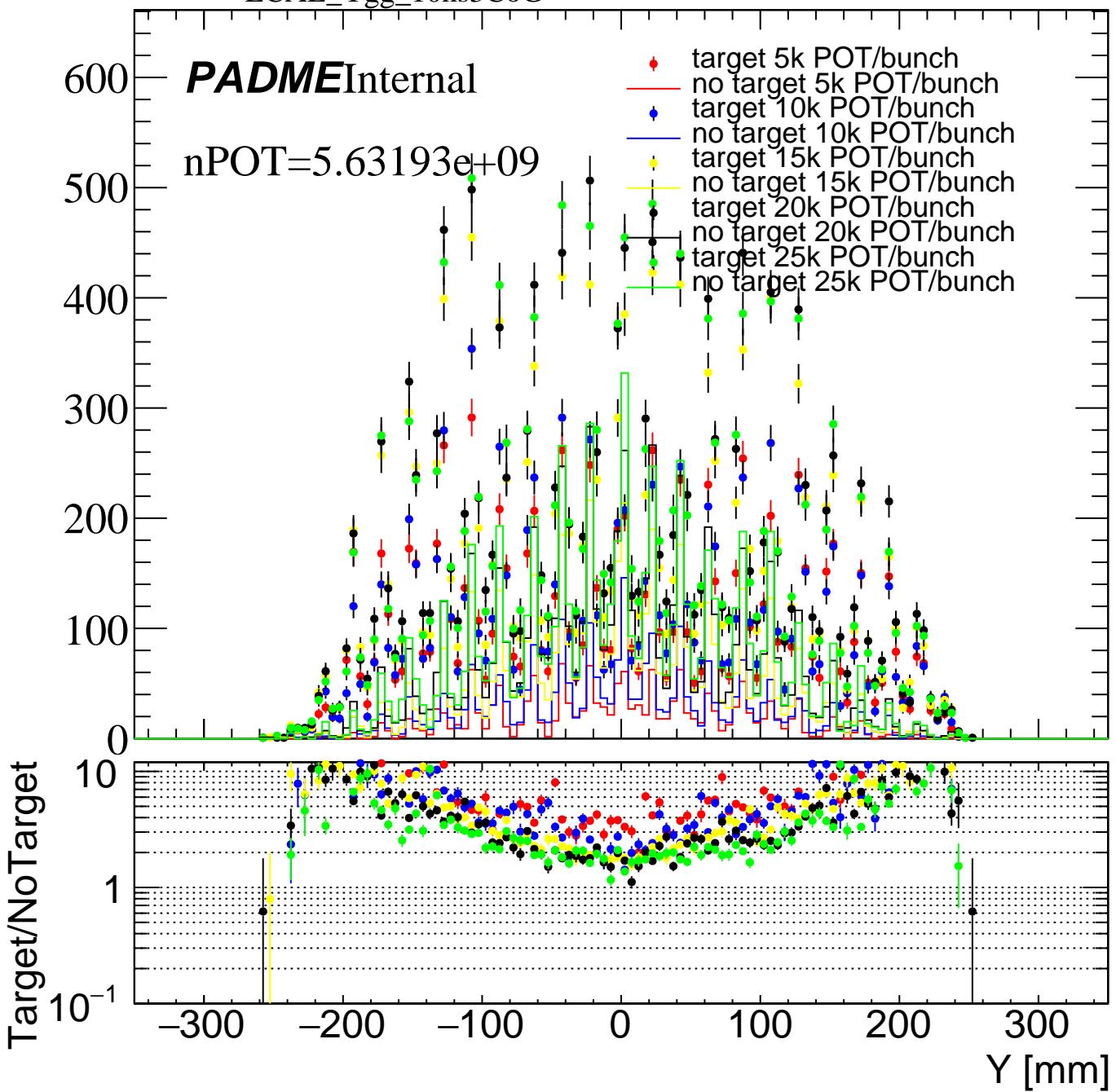




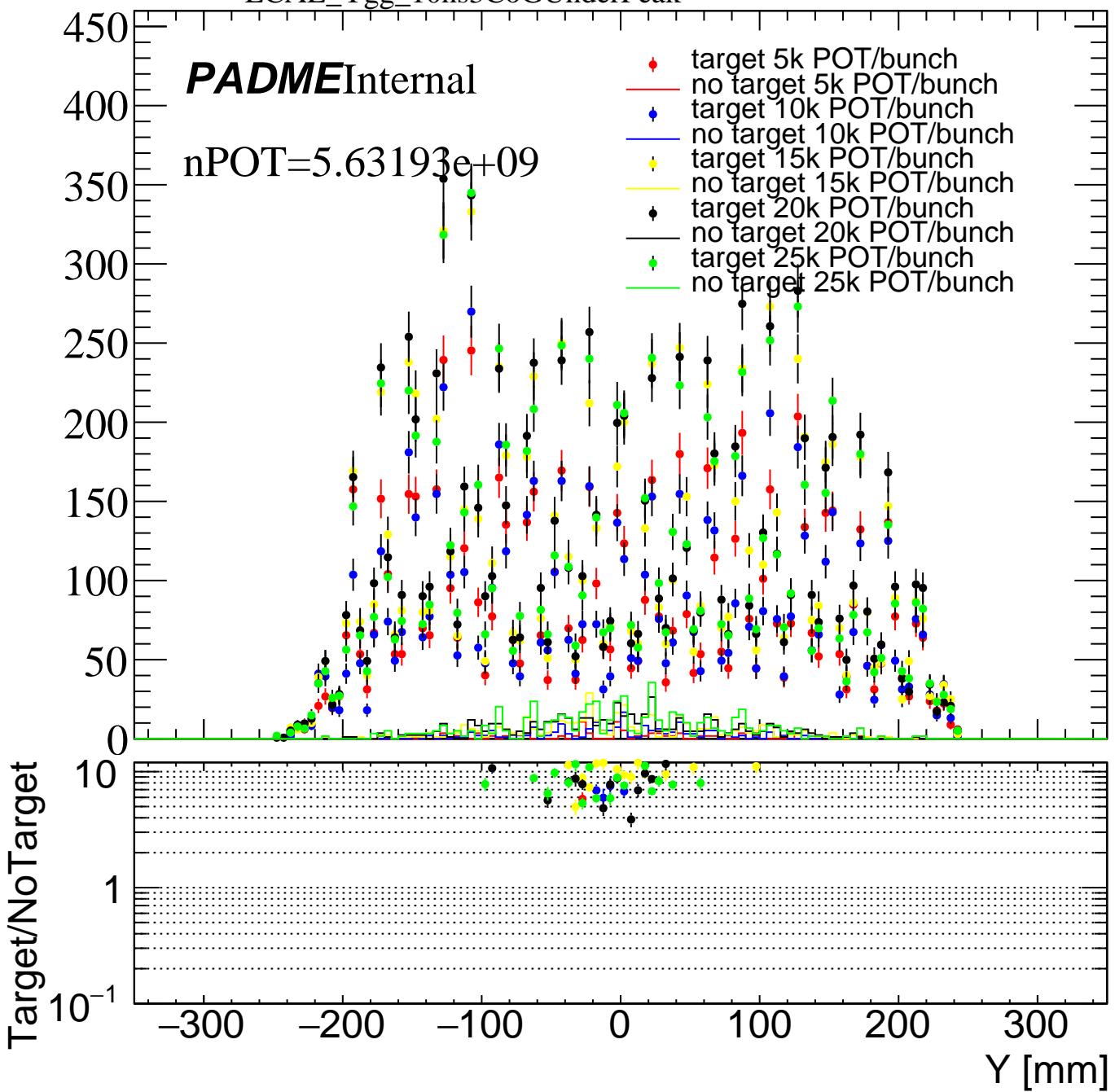
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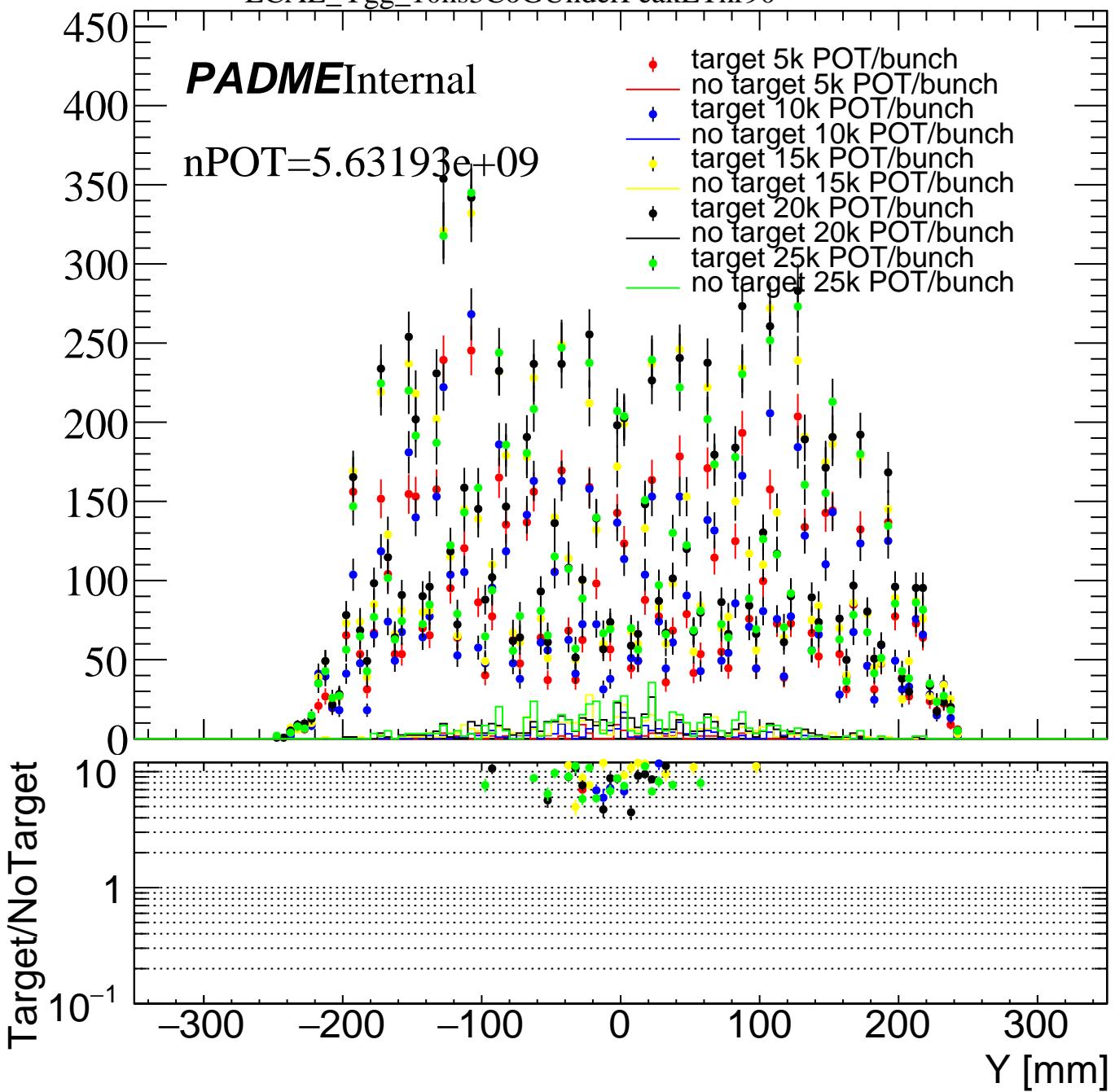
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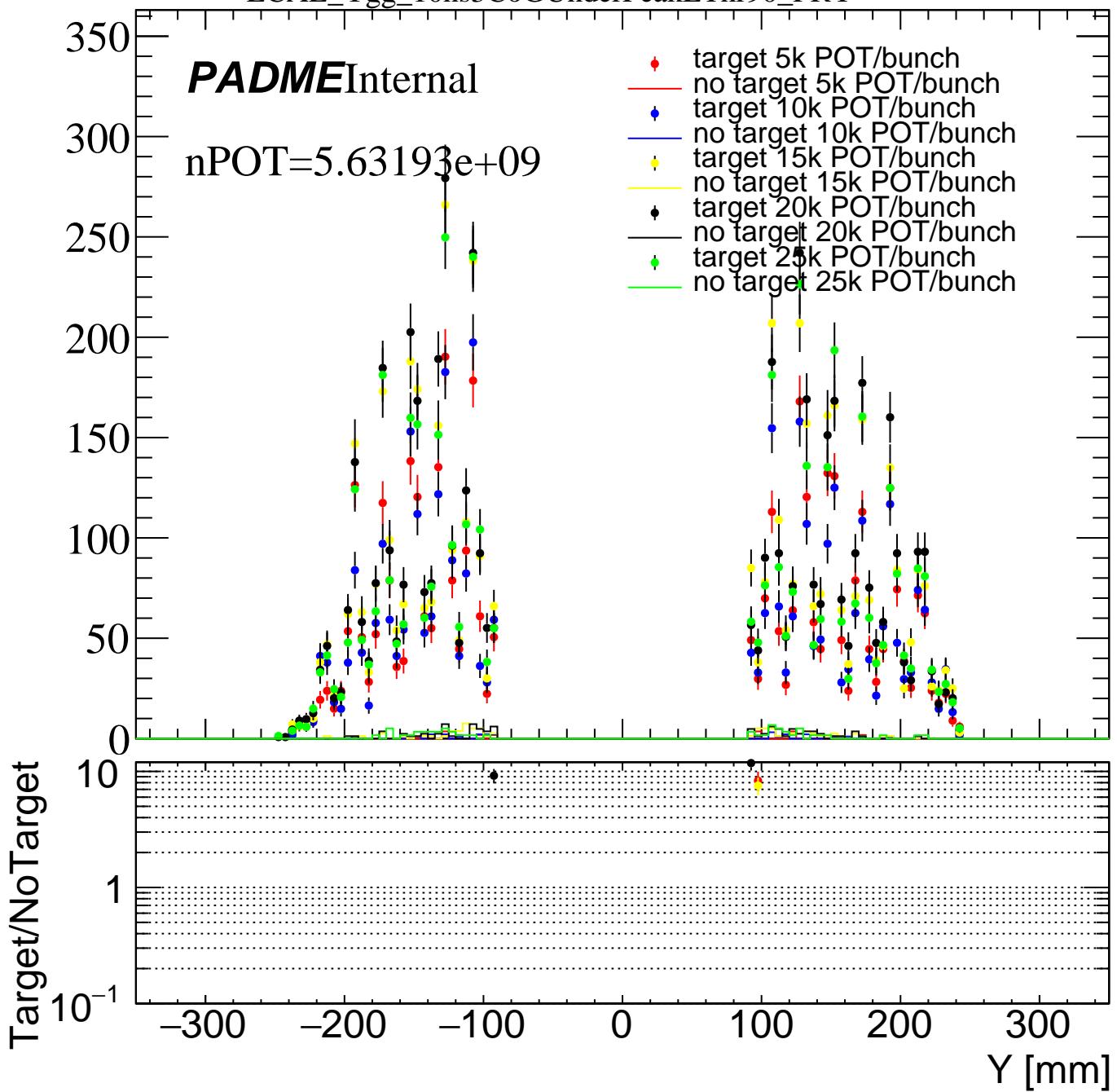
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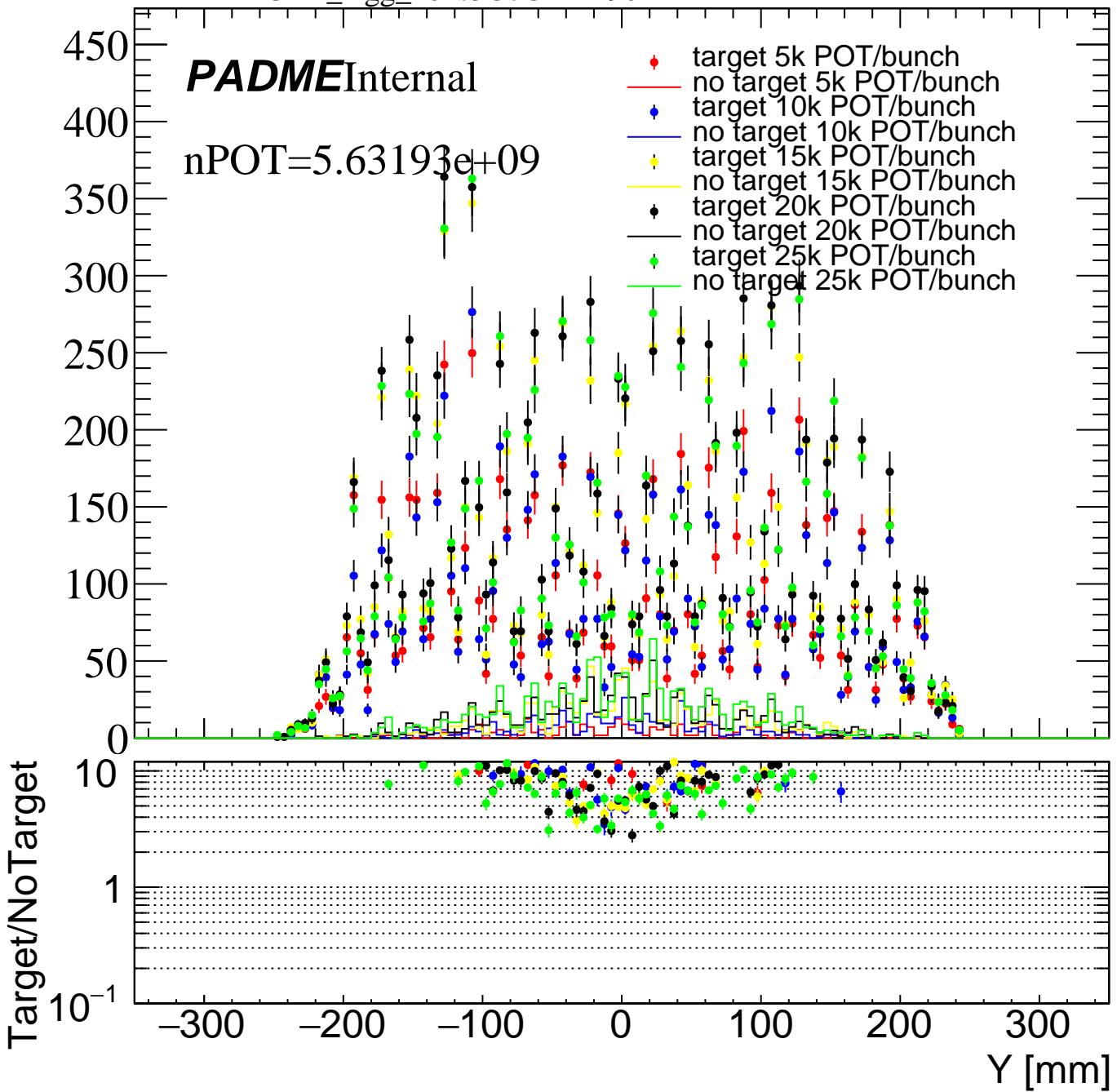
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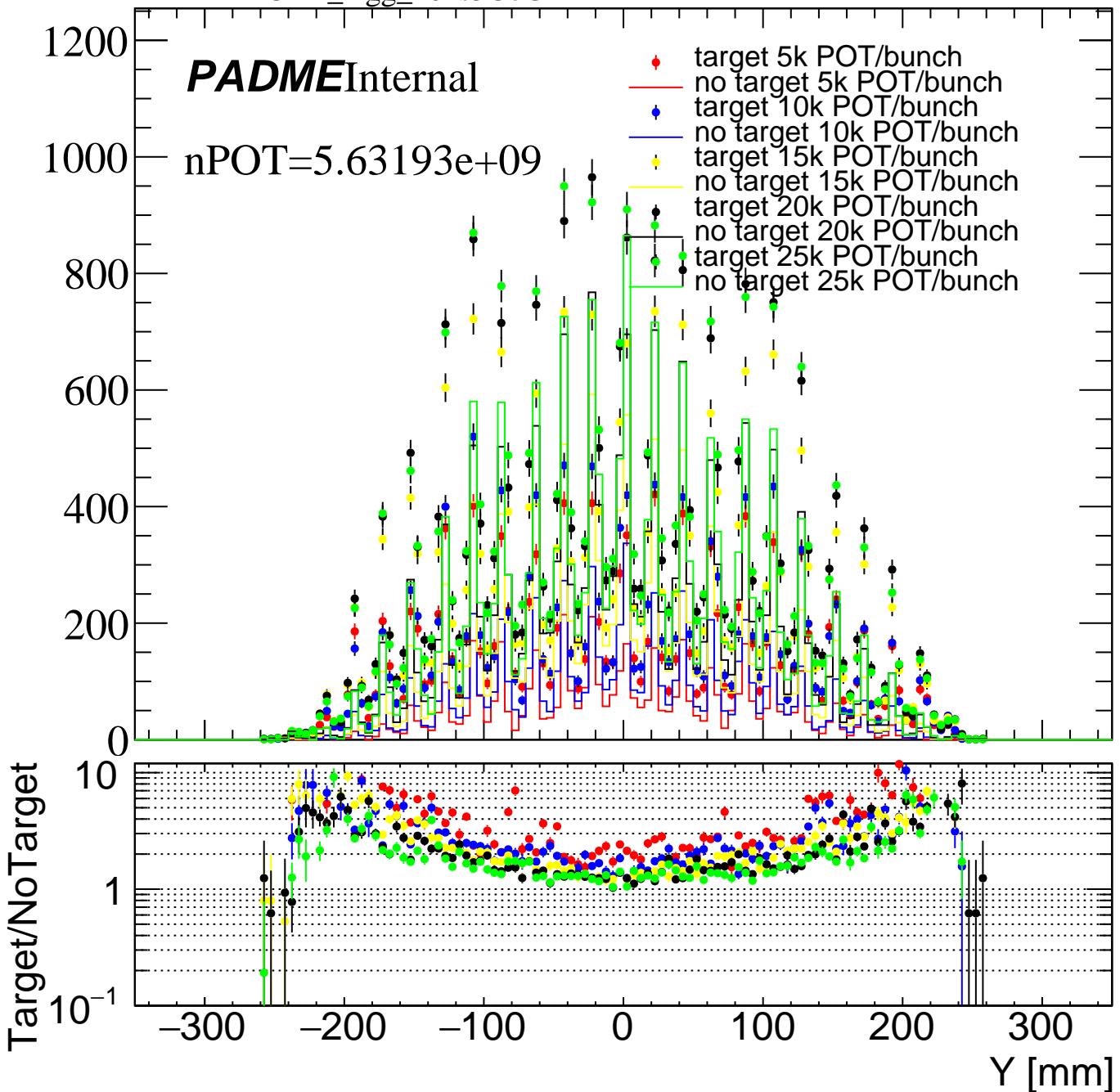
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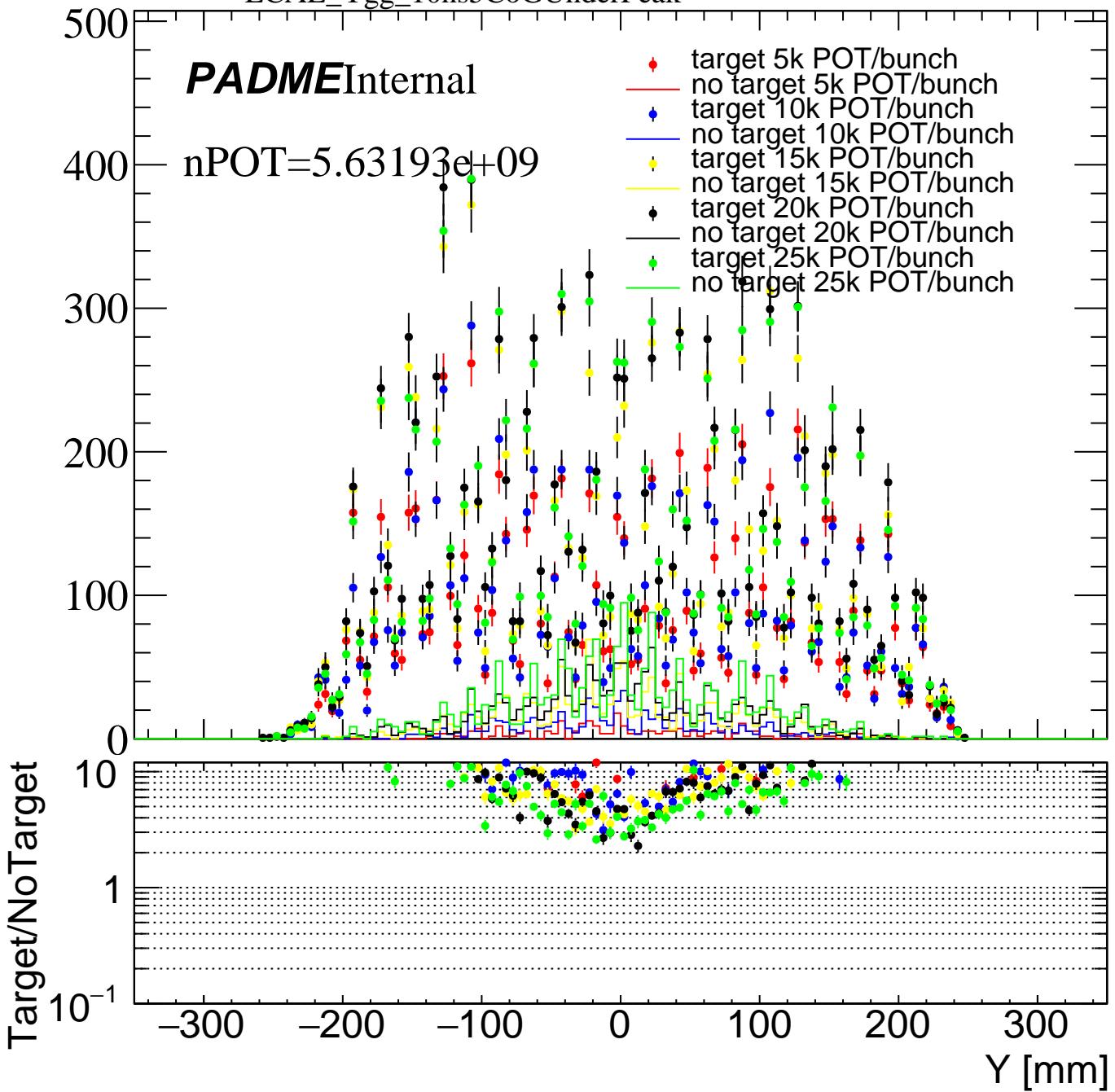
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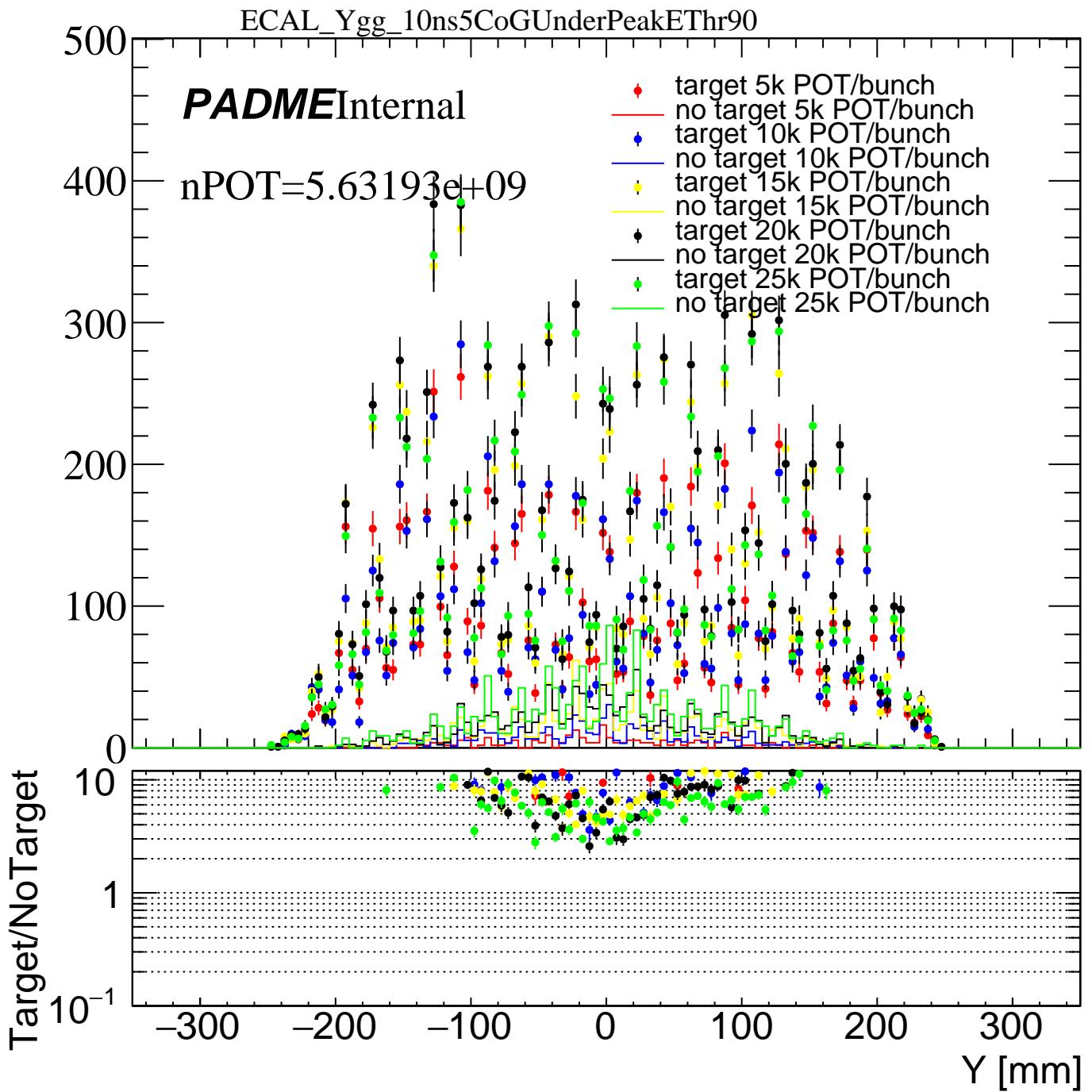


ECAL_Ygg_10ns5CoG

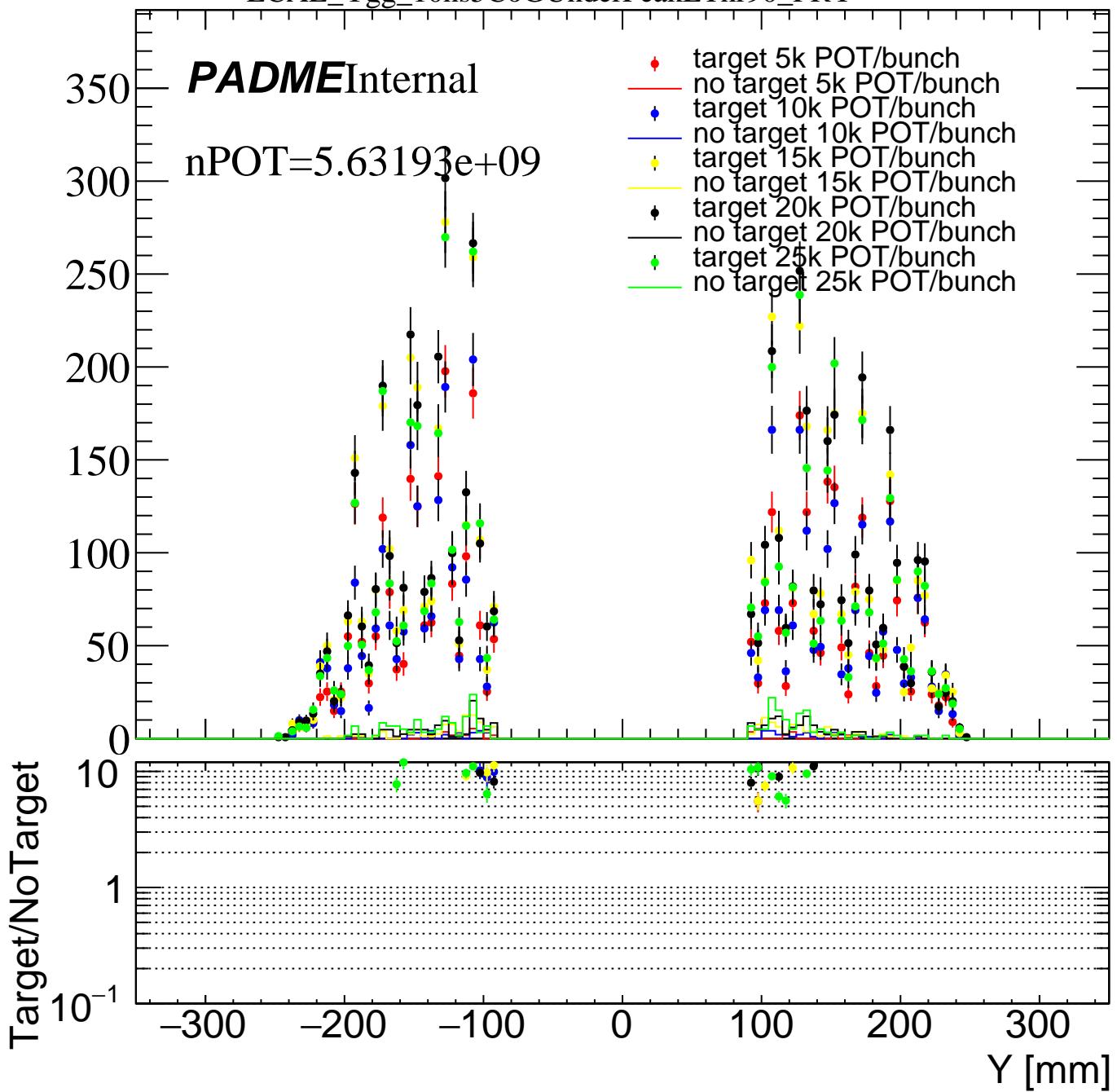


ECAL_Ygg_10ns5CoGUnderPeak

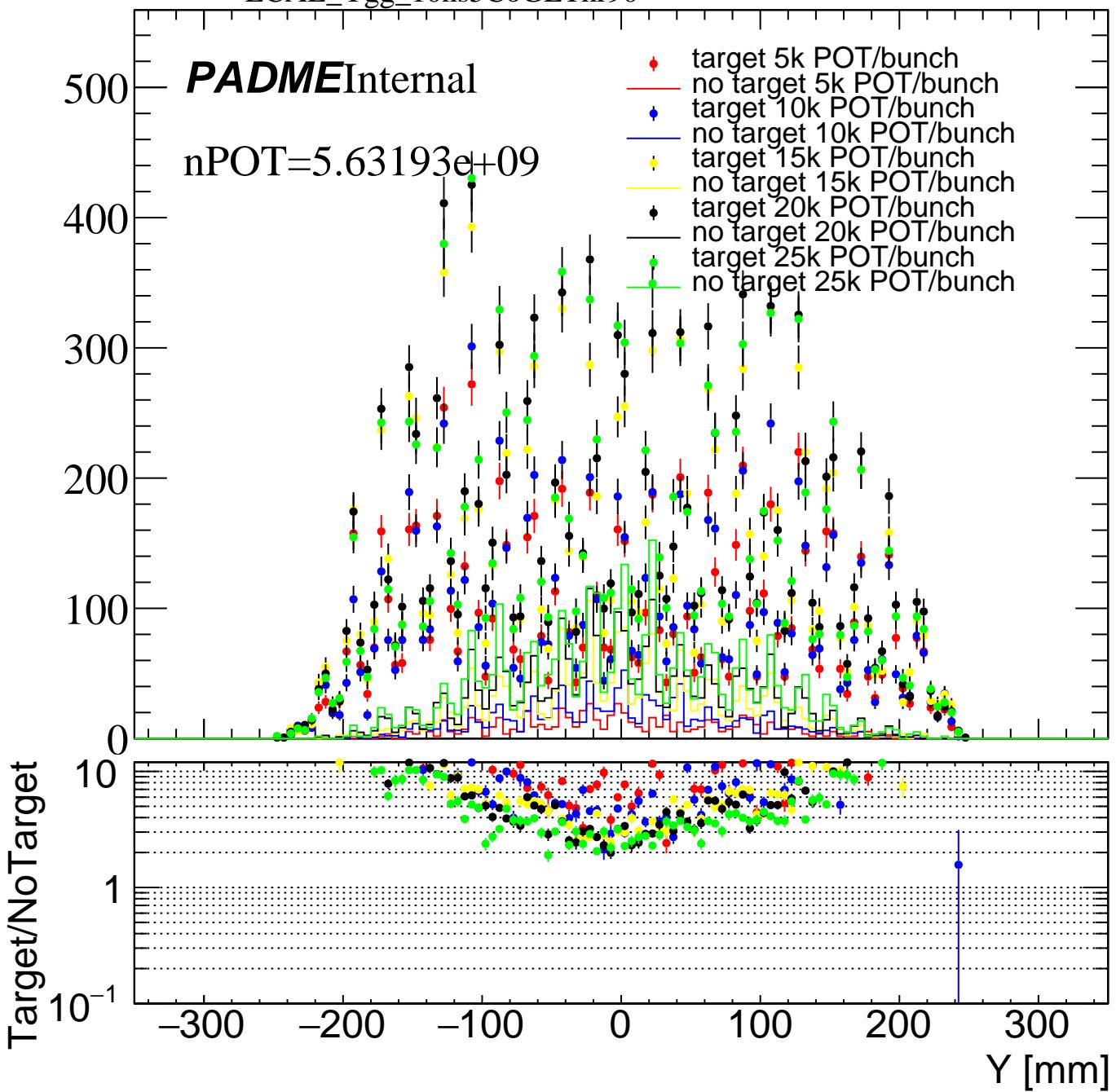


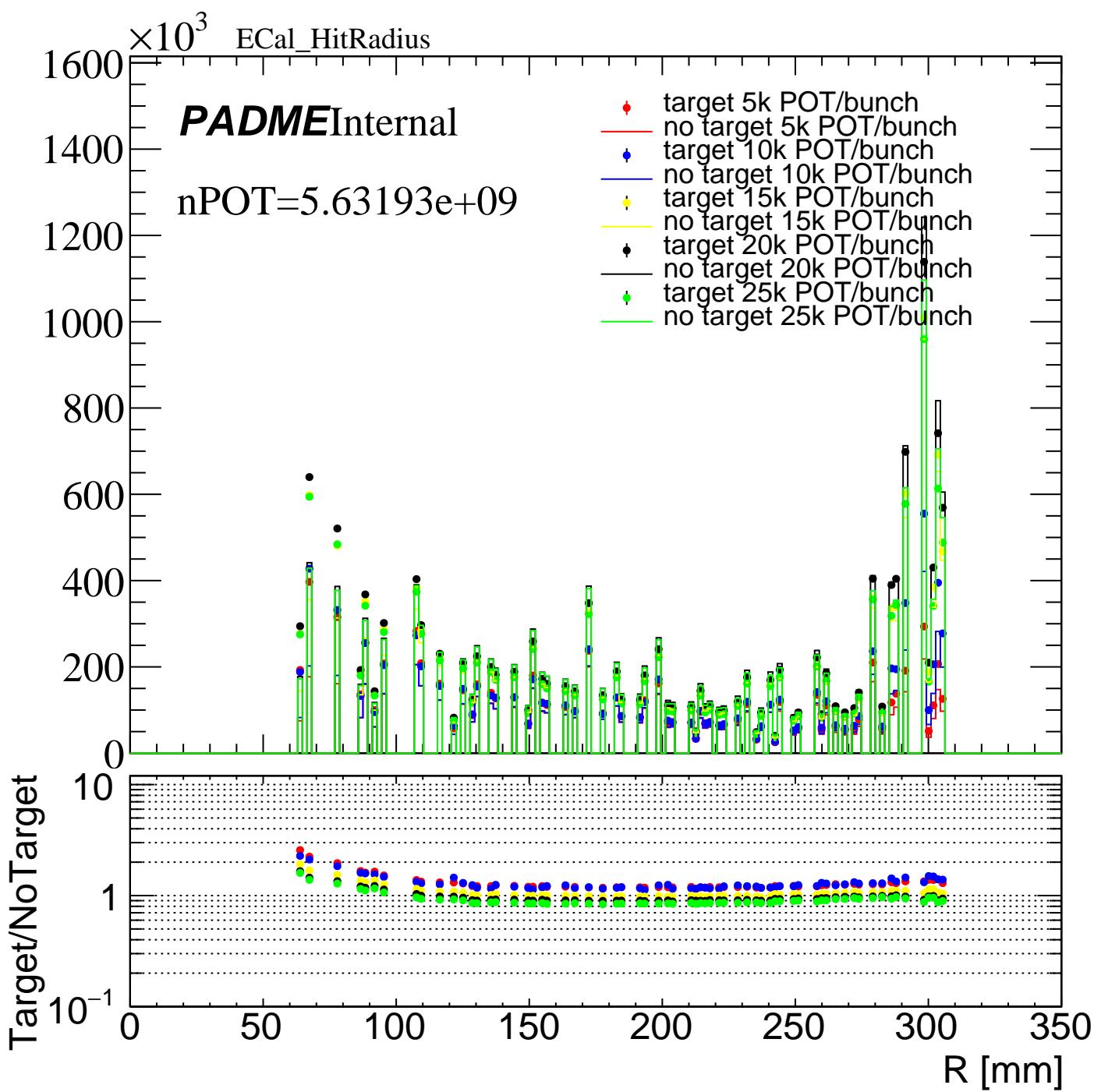


ECAL_Ygg_10ns5CoGUnderPeakEThr90_FRY



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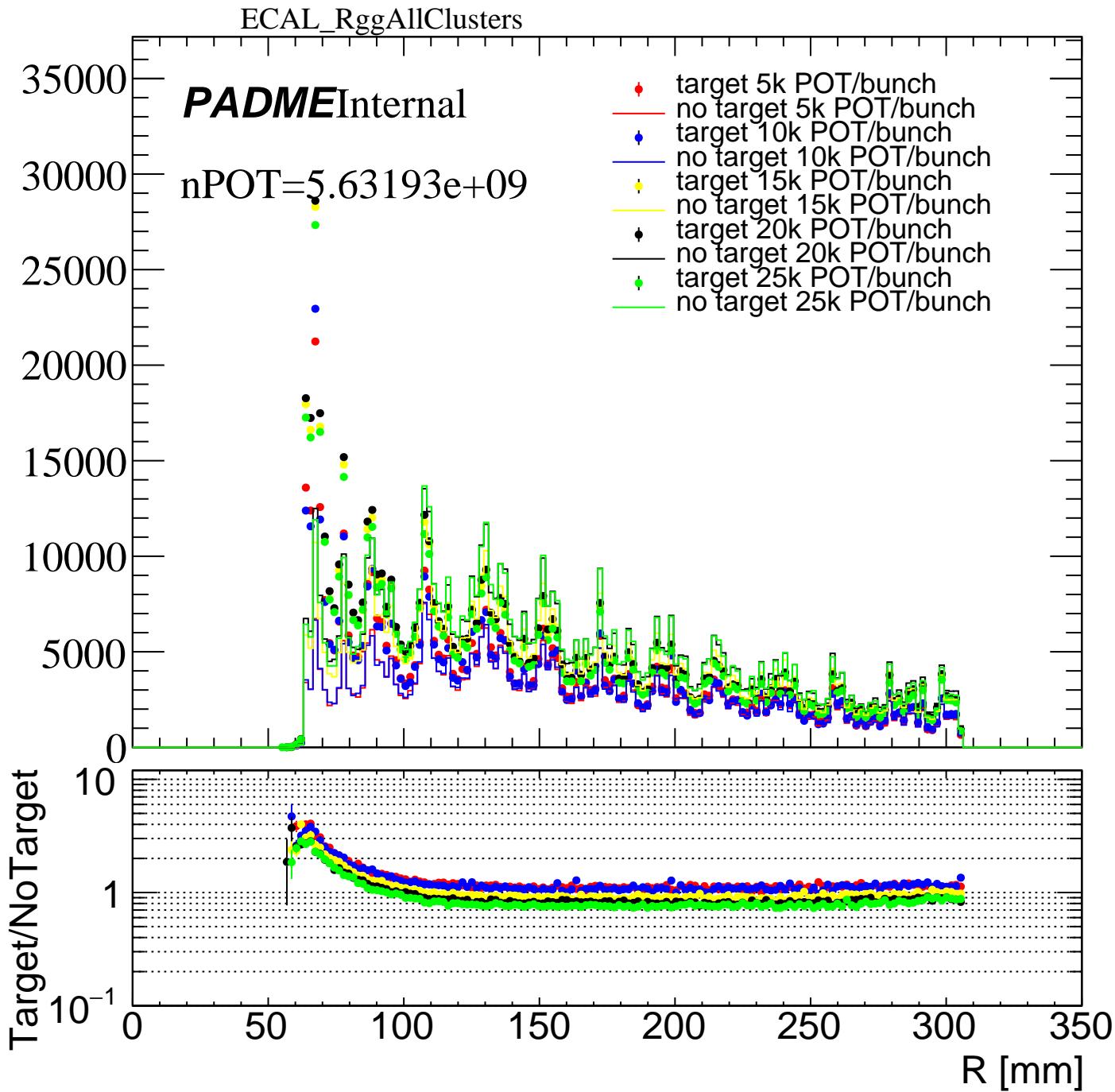


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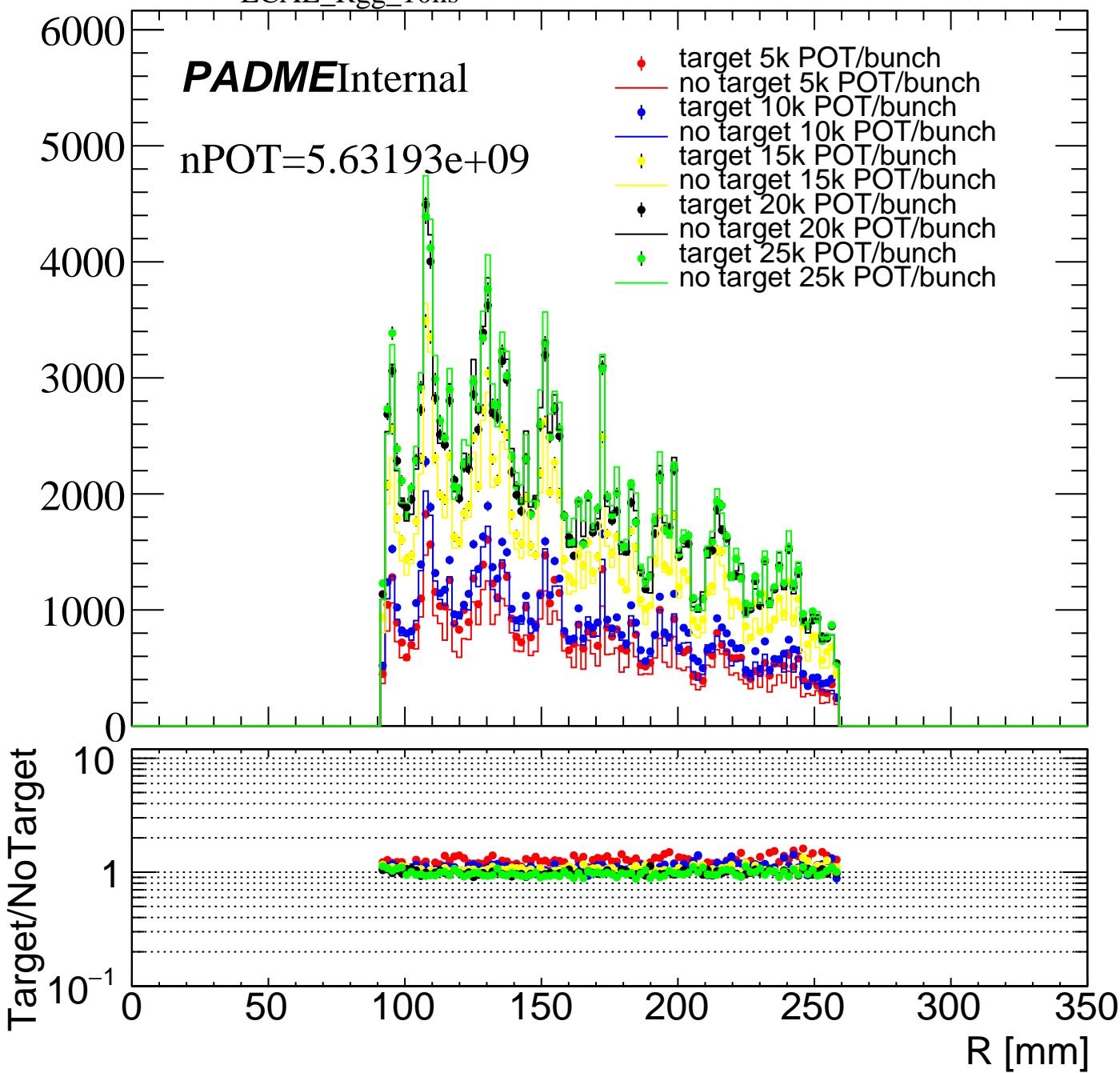
PADME Internal

$n\text{POT} = 5.63193 \times 10^9$

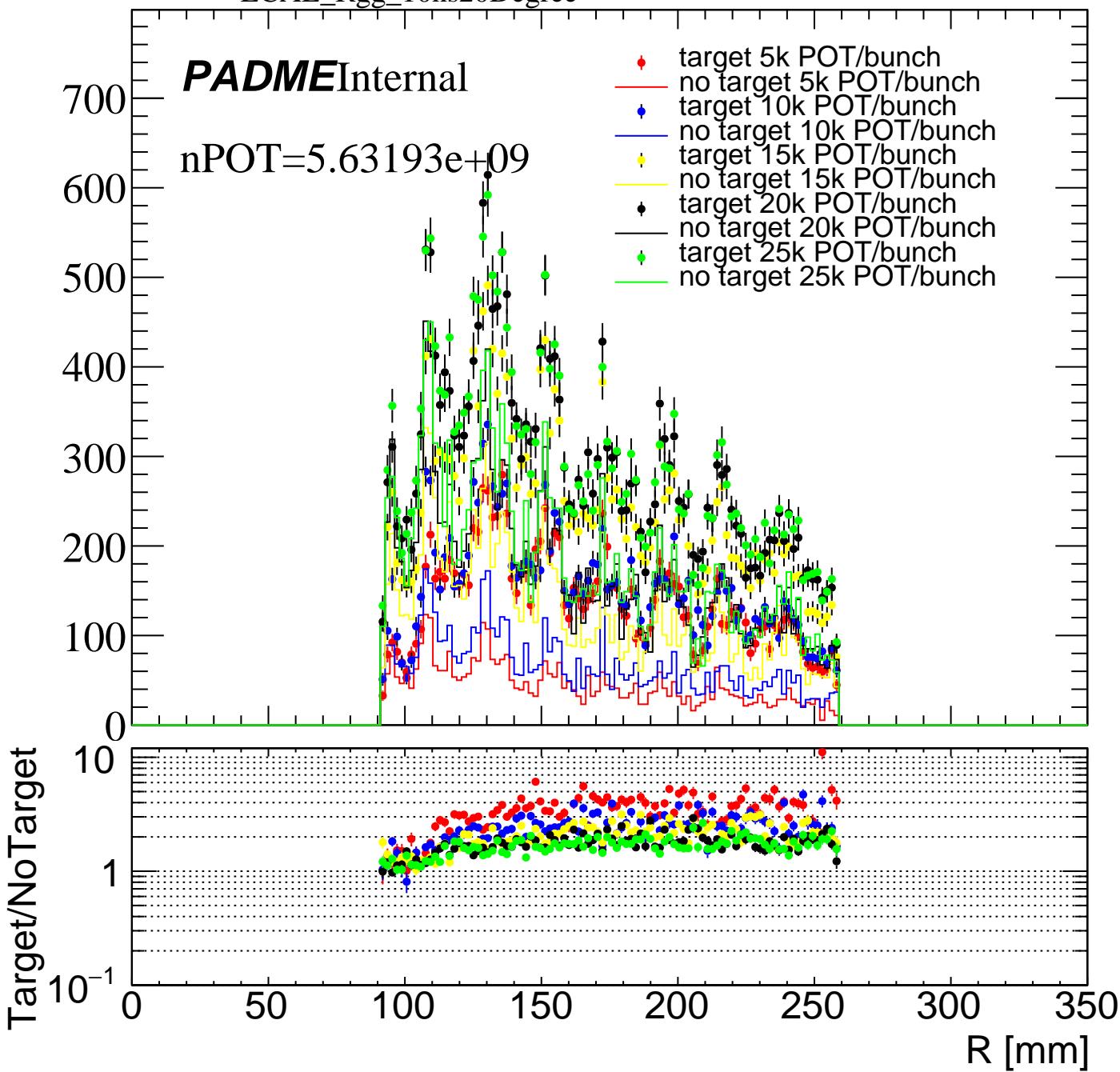
- target 5k POT/bunch
- no target 5k POT/bunch
- target 10k POT/bunch
- no target 10k POT/bunch
- target 15k POT/bunch
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- no target 20k POT/bunch
- target 25k POT/bunch
- no target 25k POT/bunch



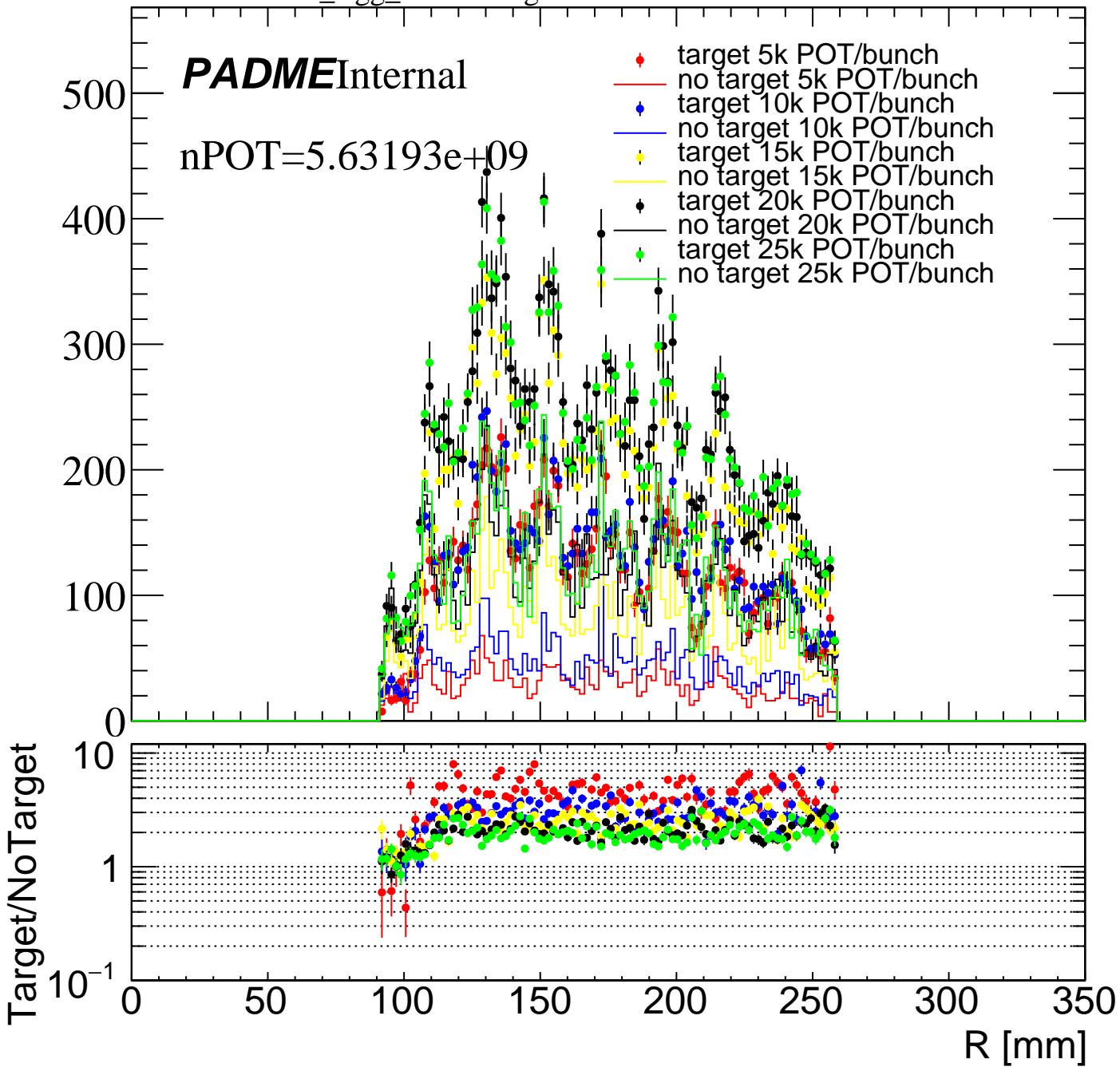
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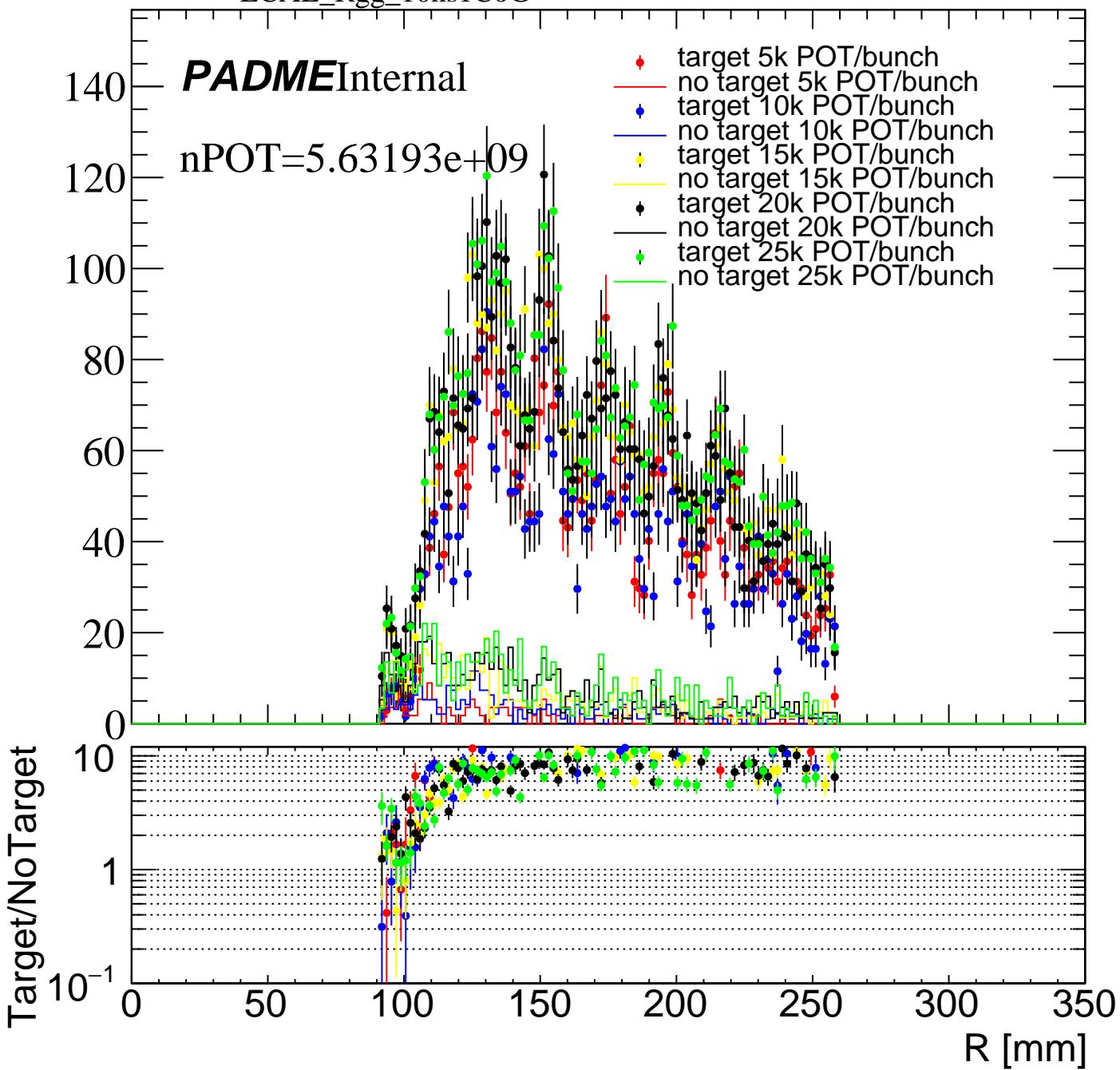
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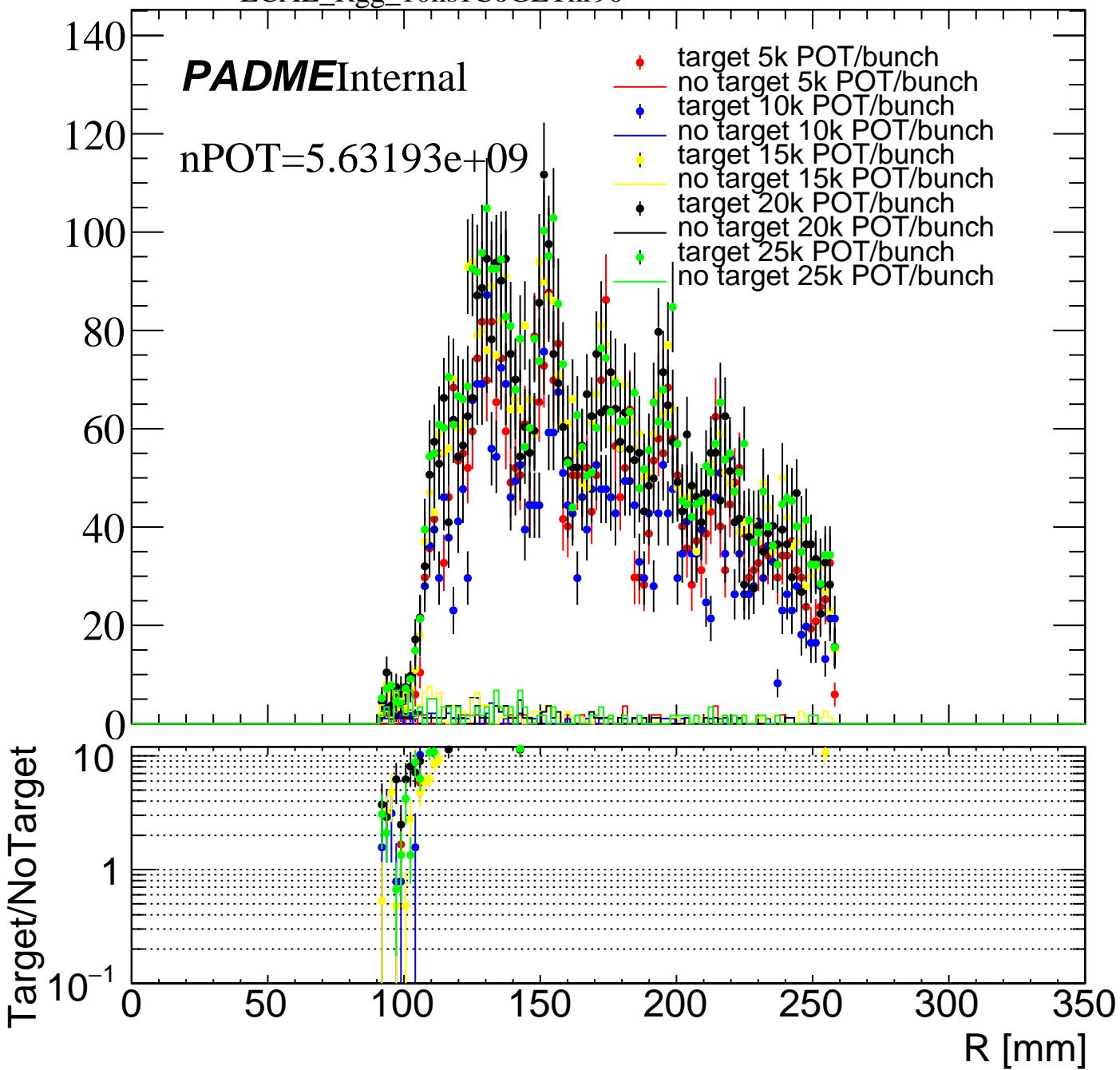
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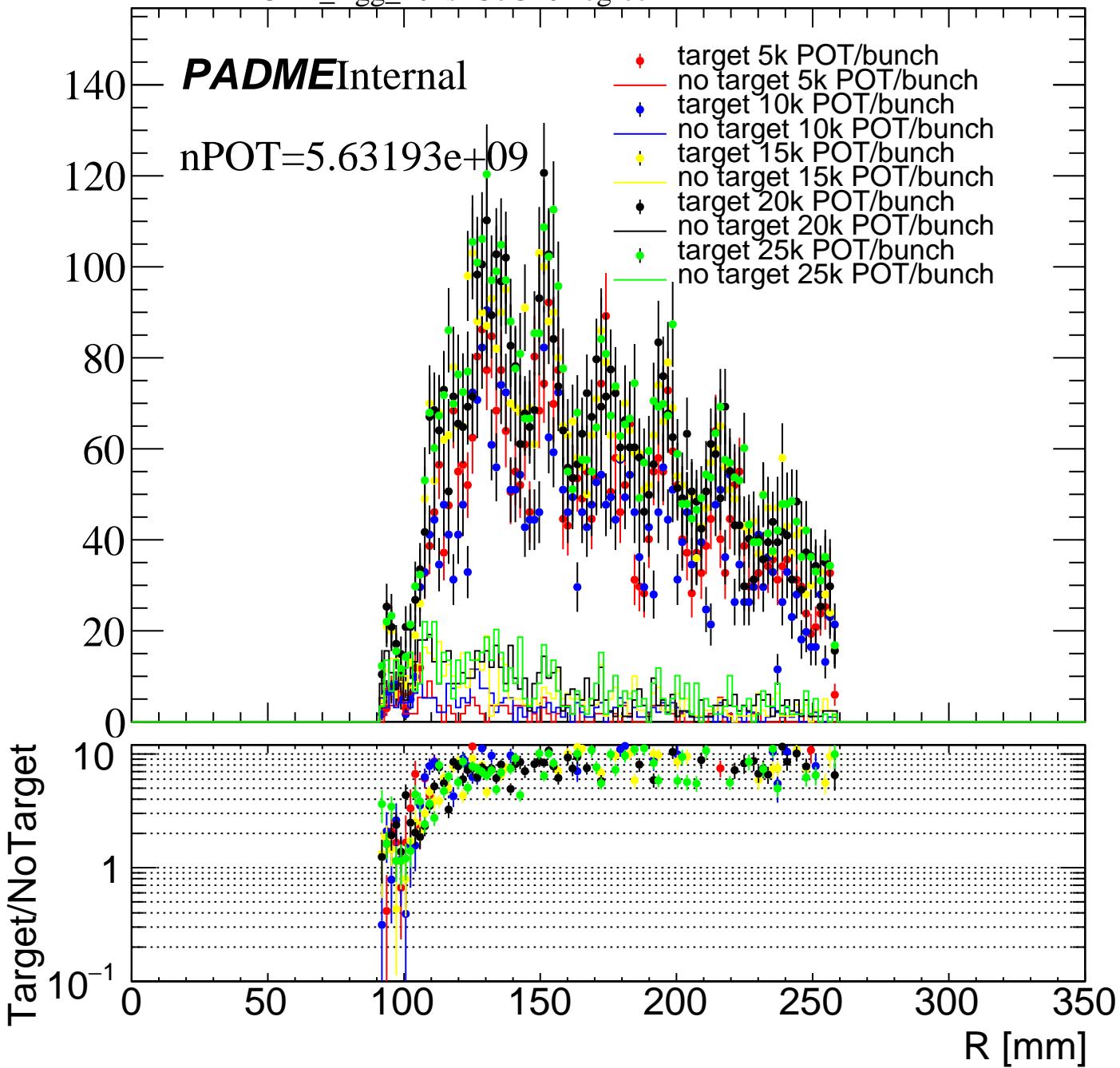
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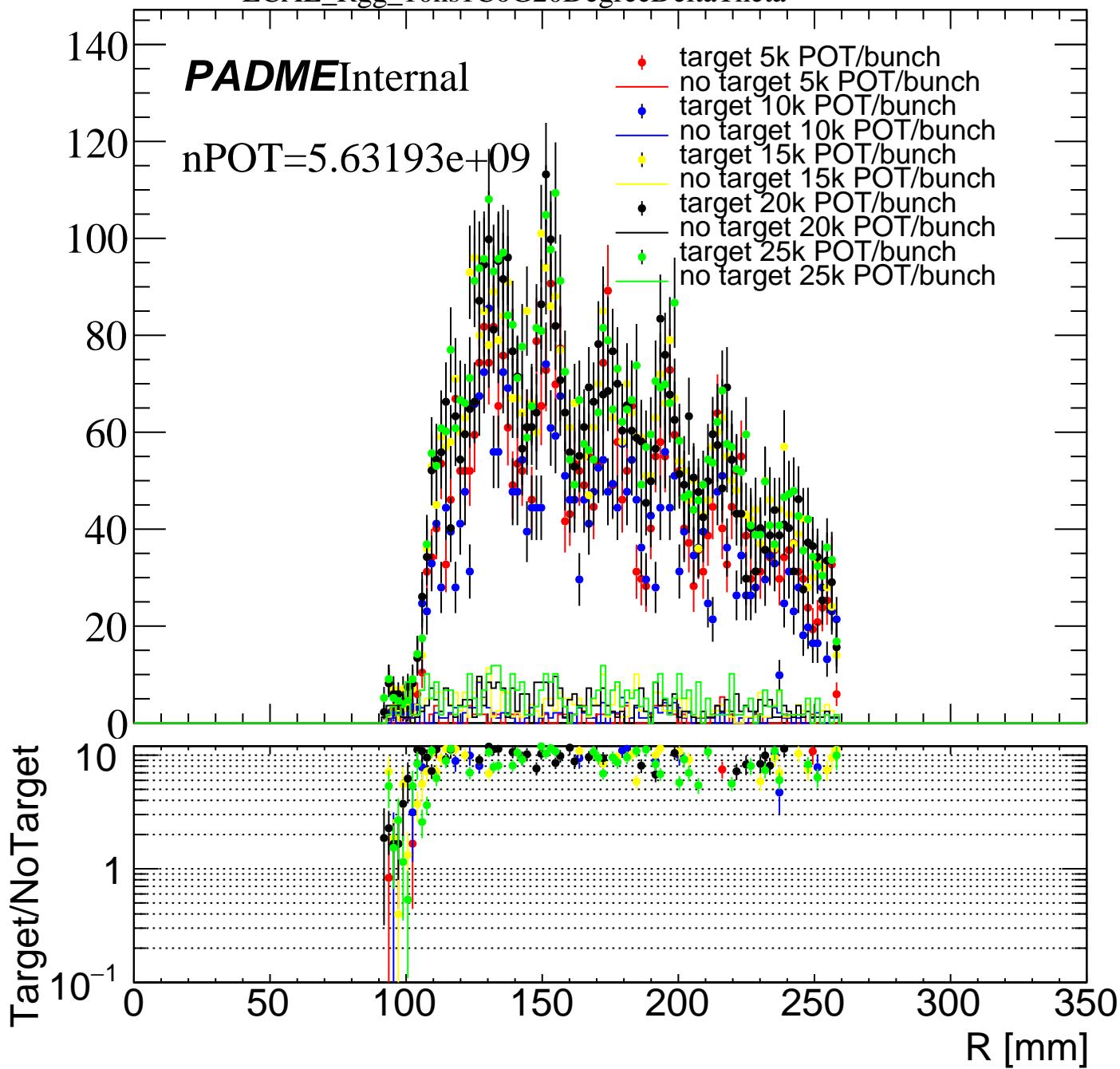
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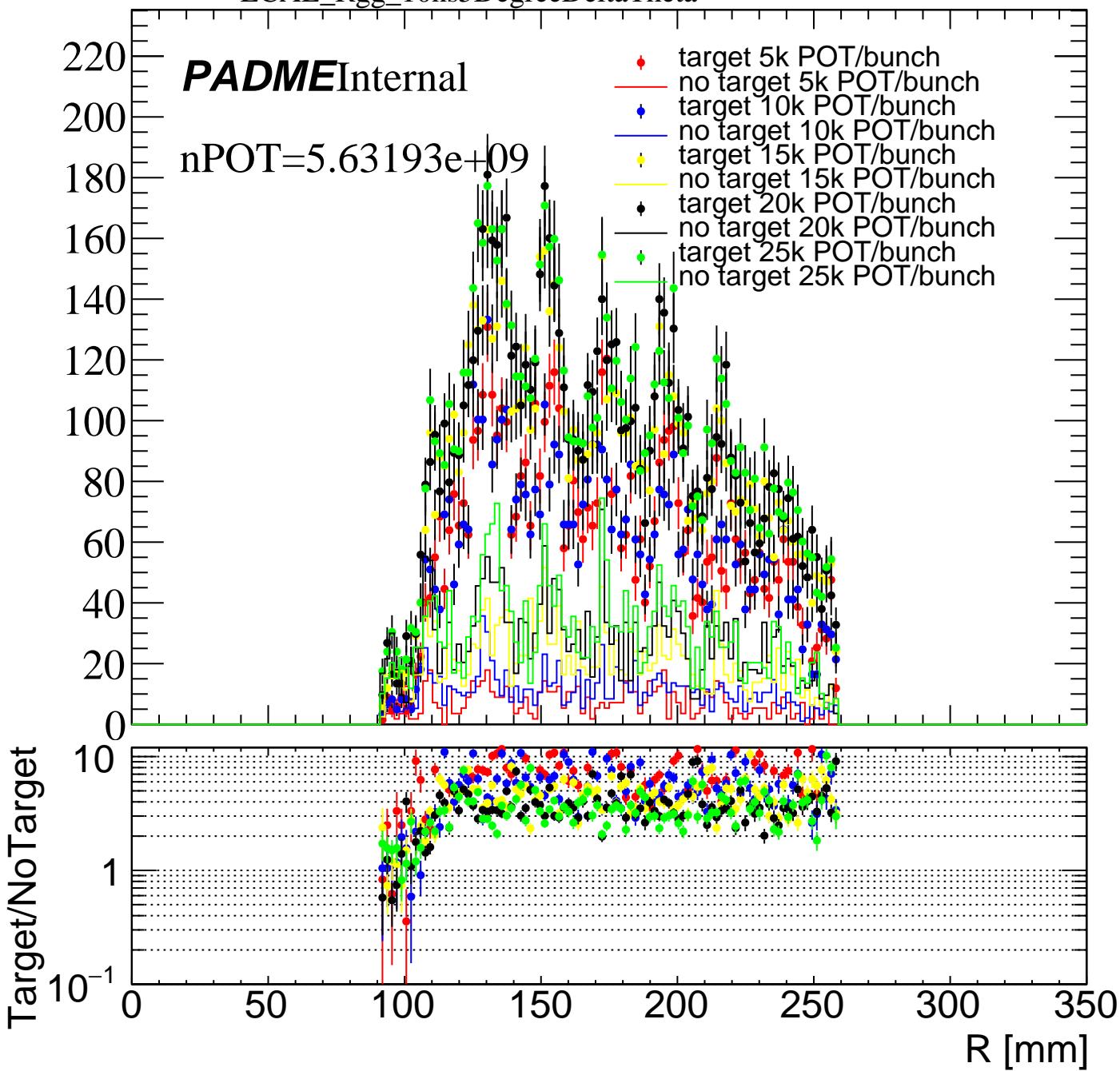
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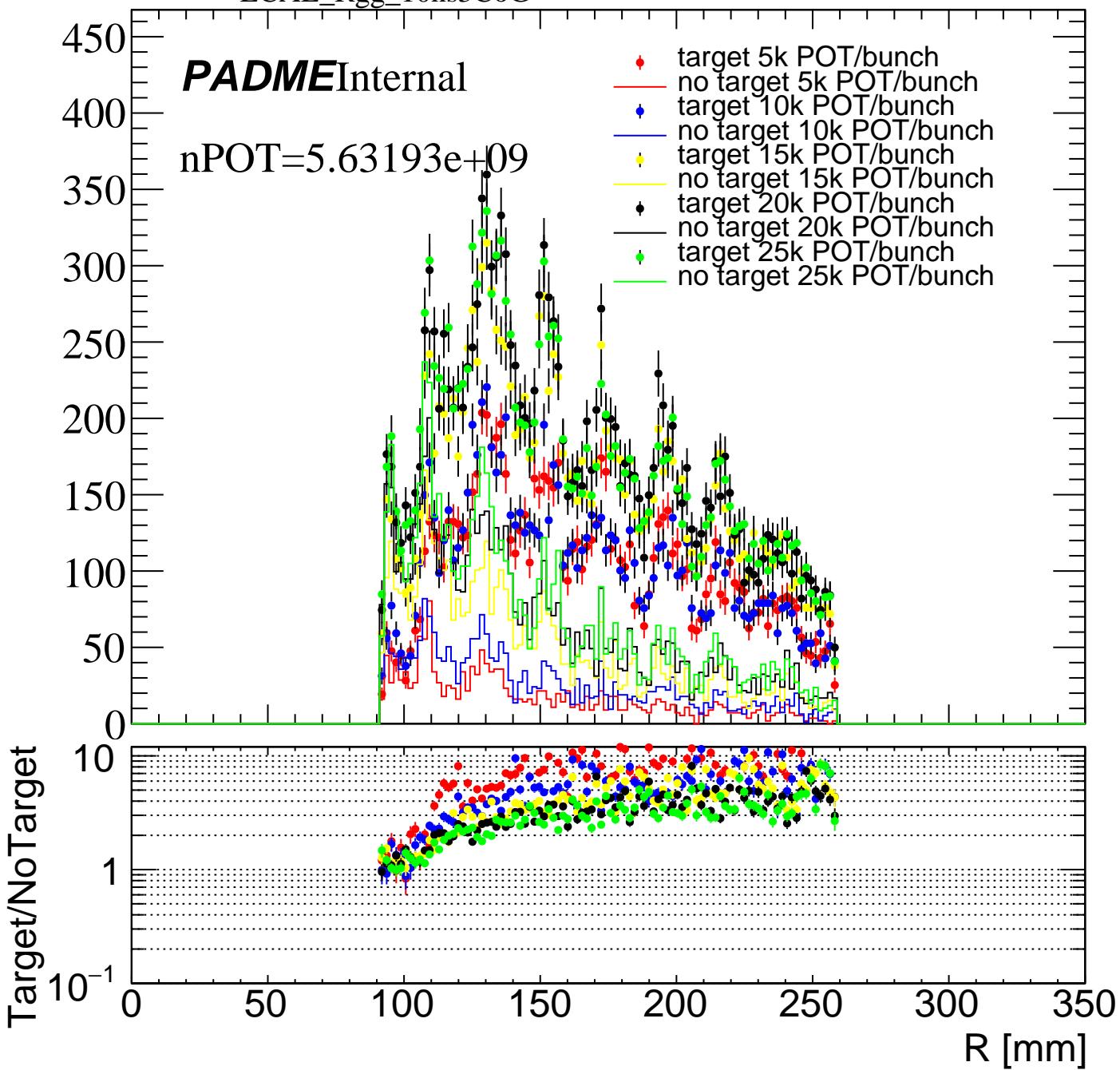
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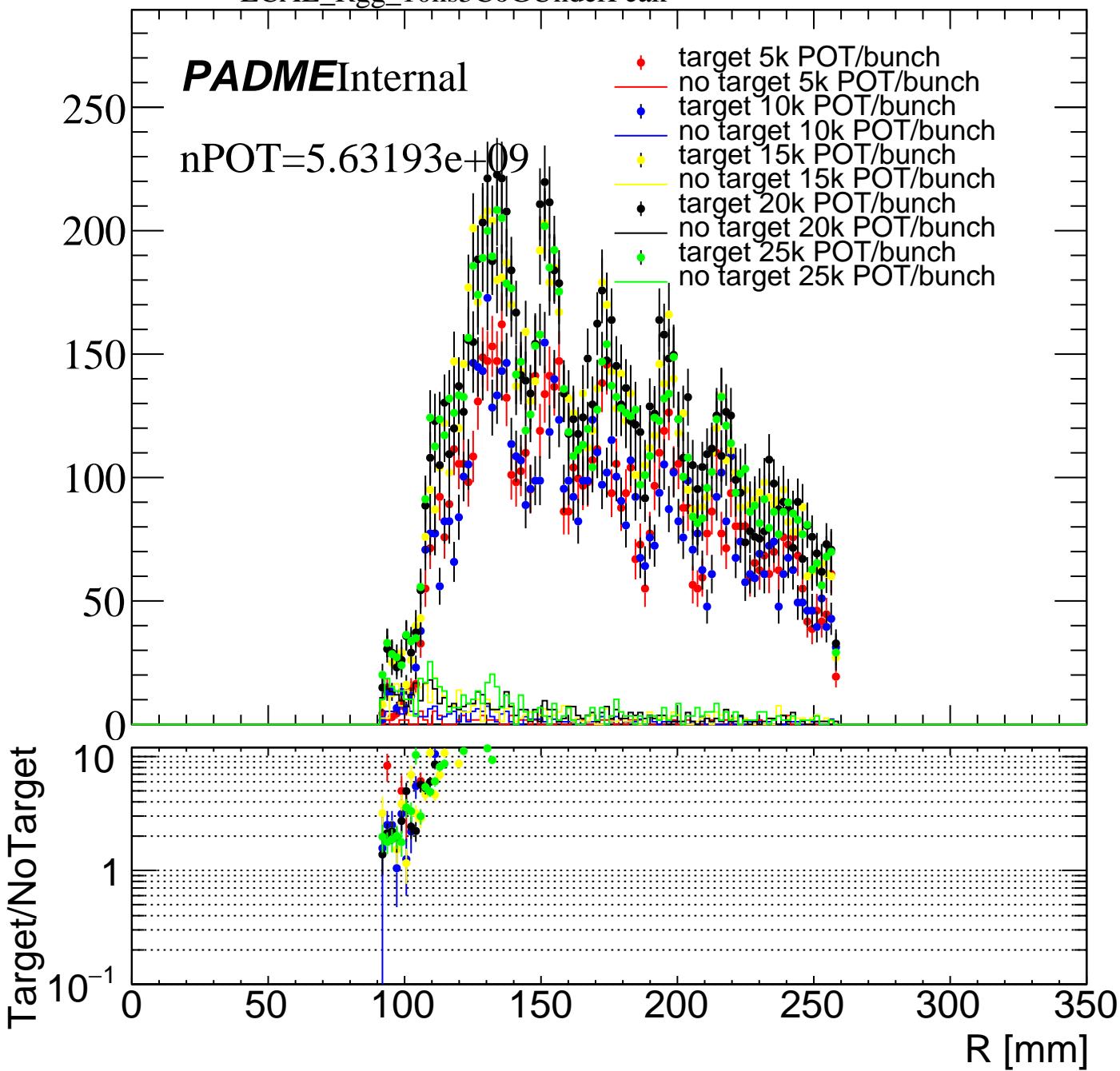
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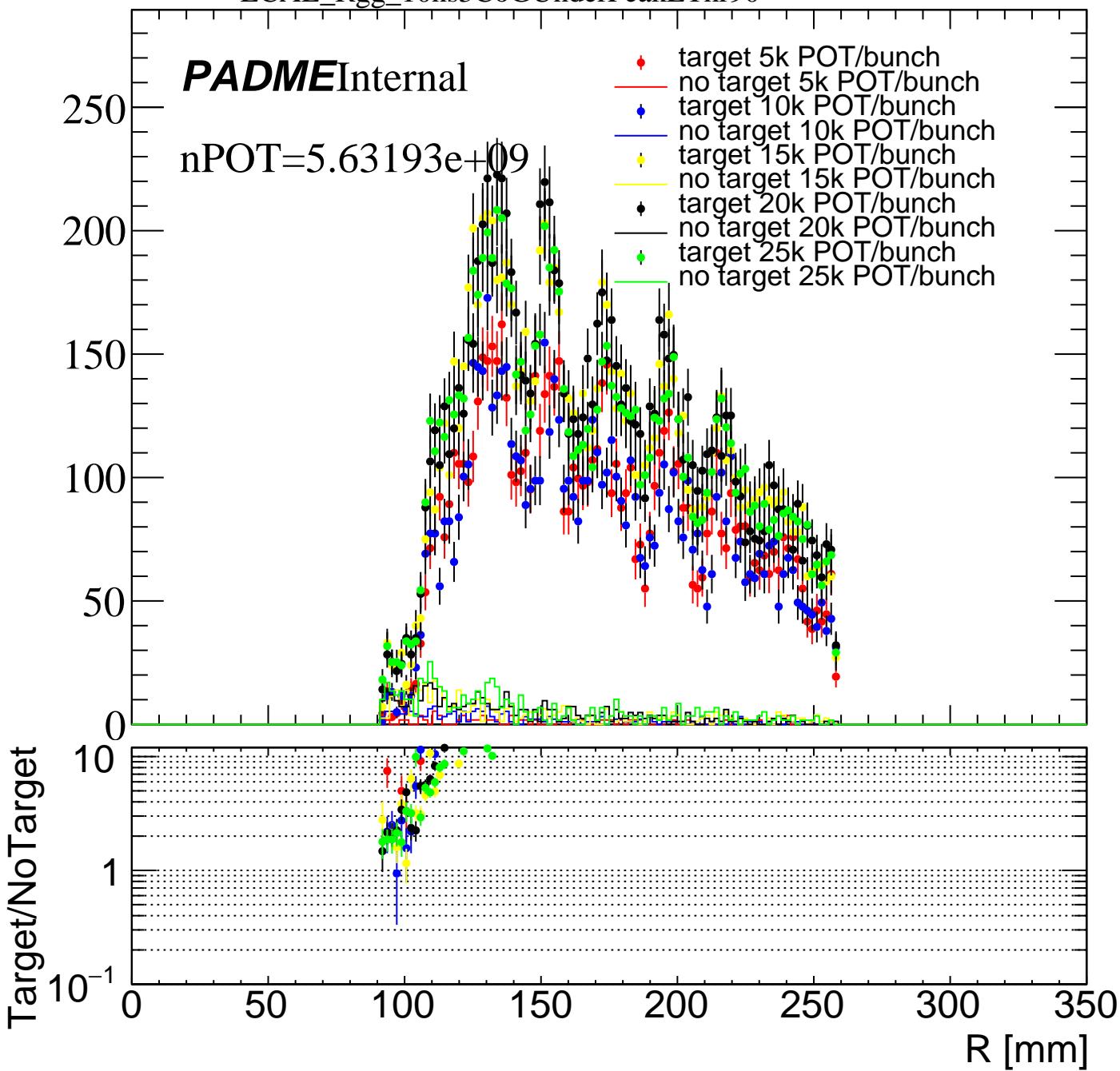
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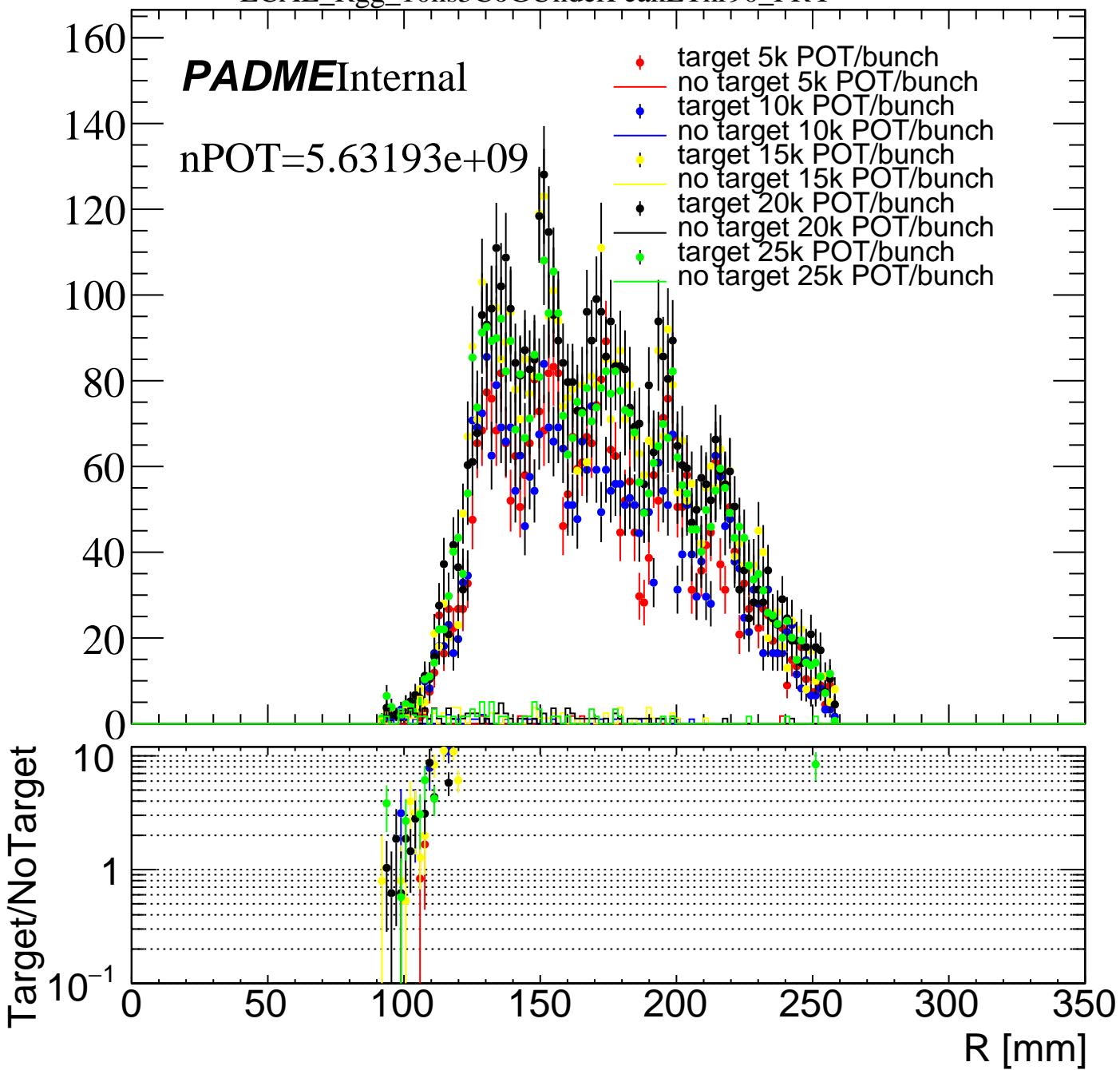
ECAL_Rgg_10ns3CoGUnderPeak



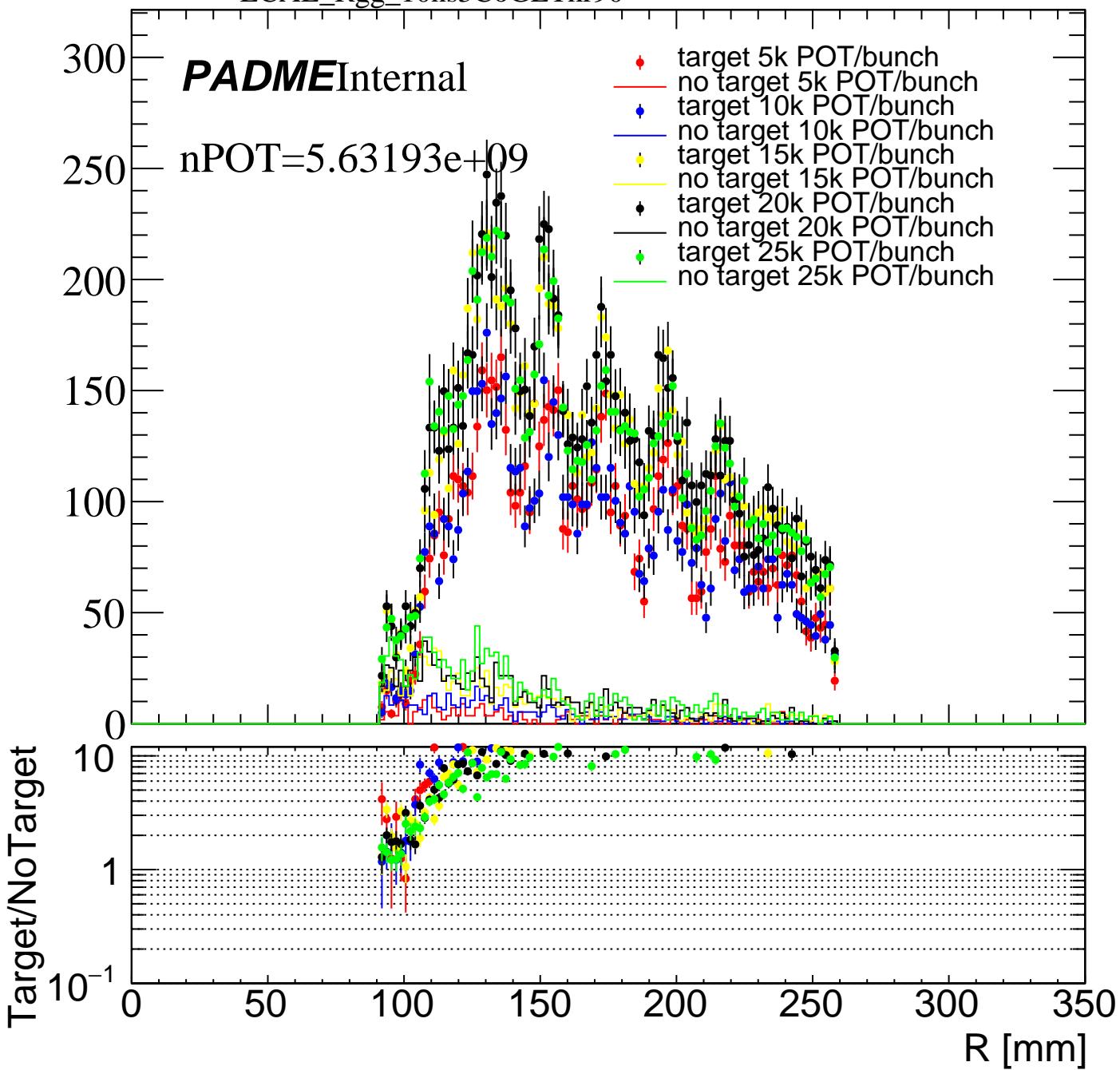
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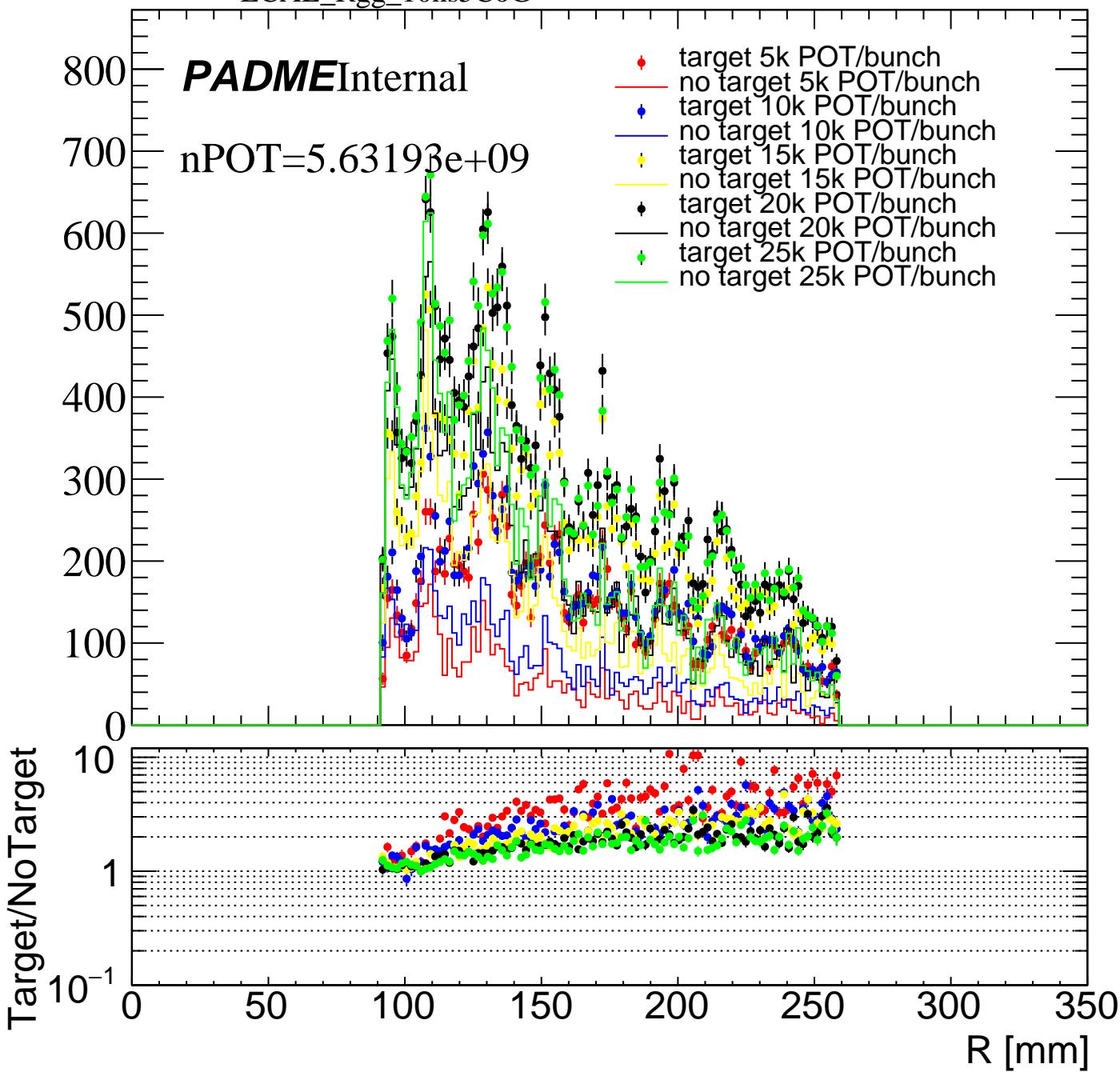
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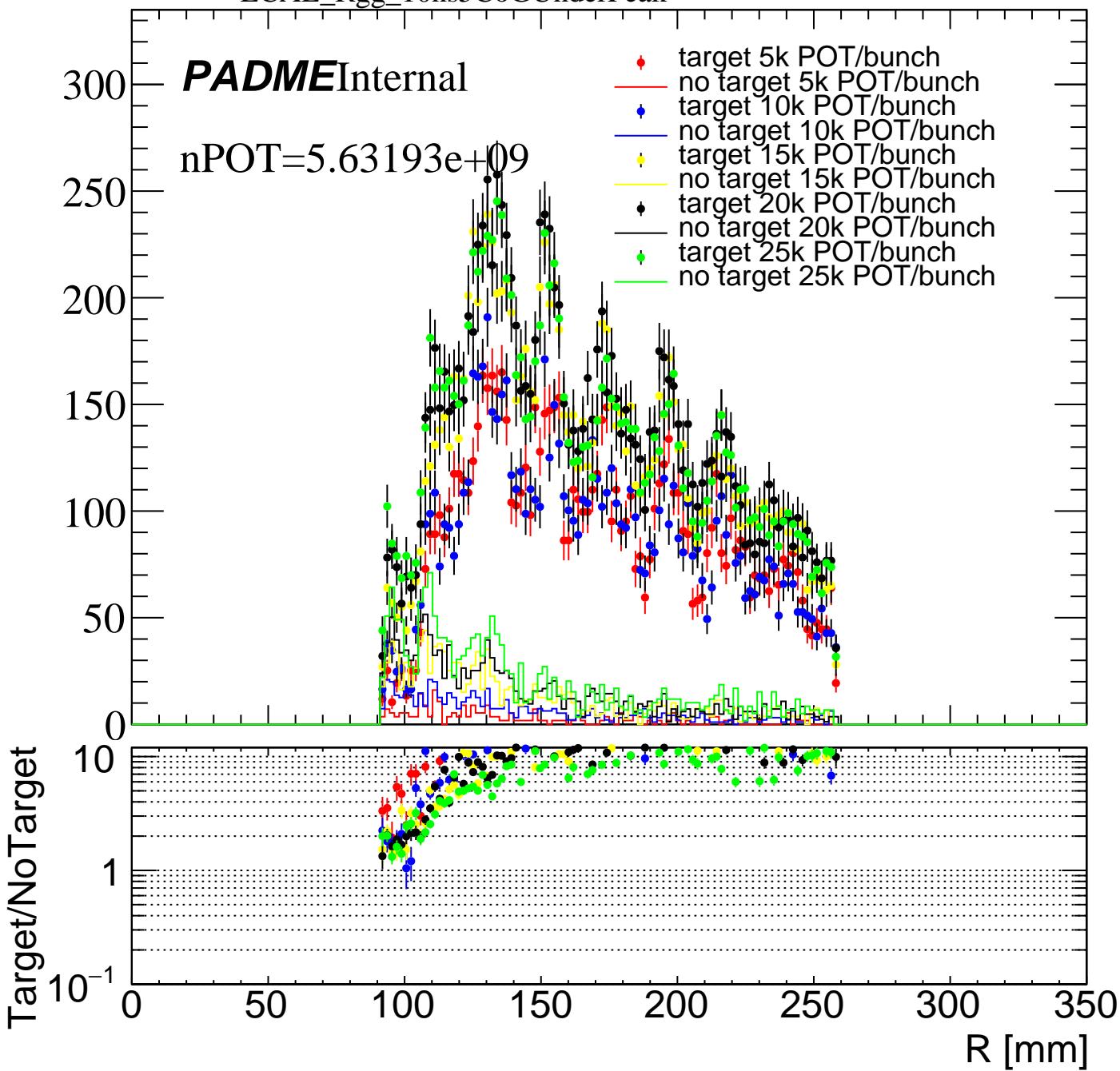
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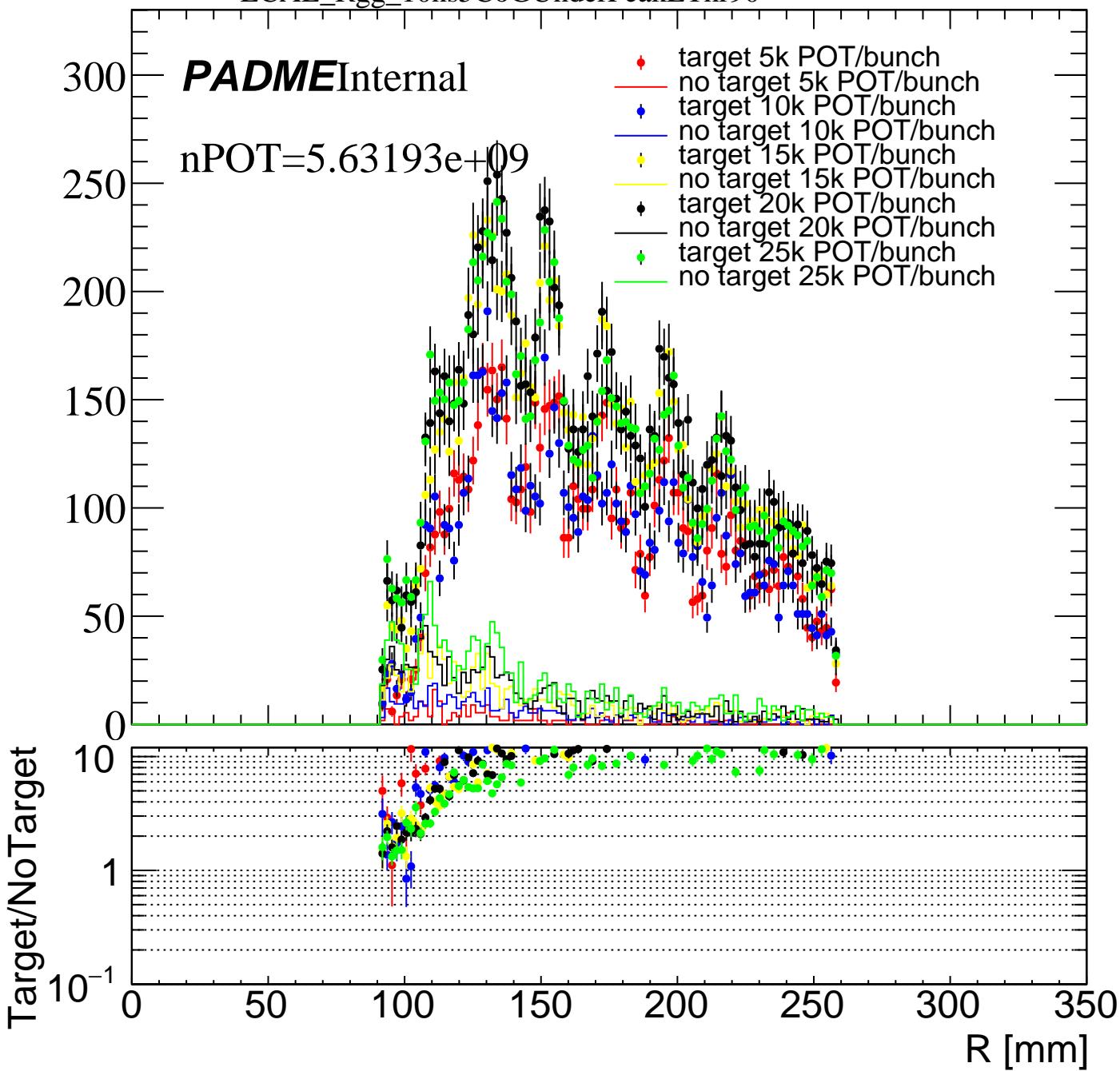
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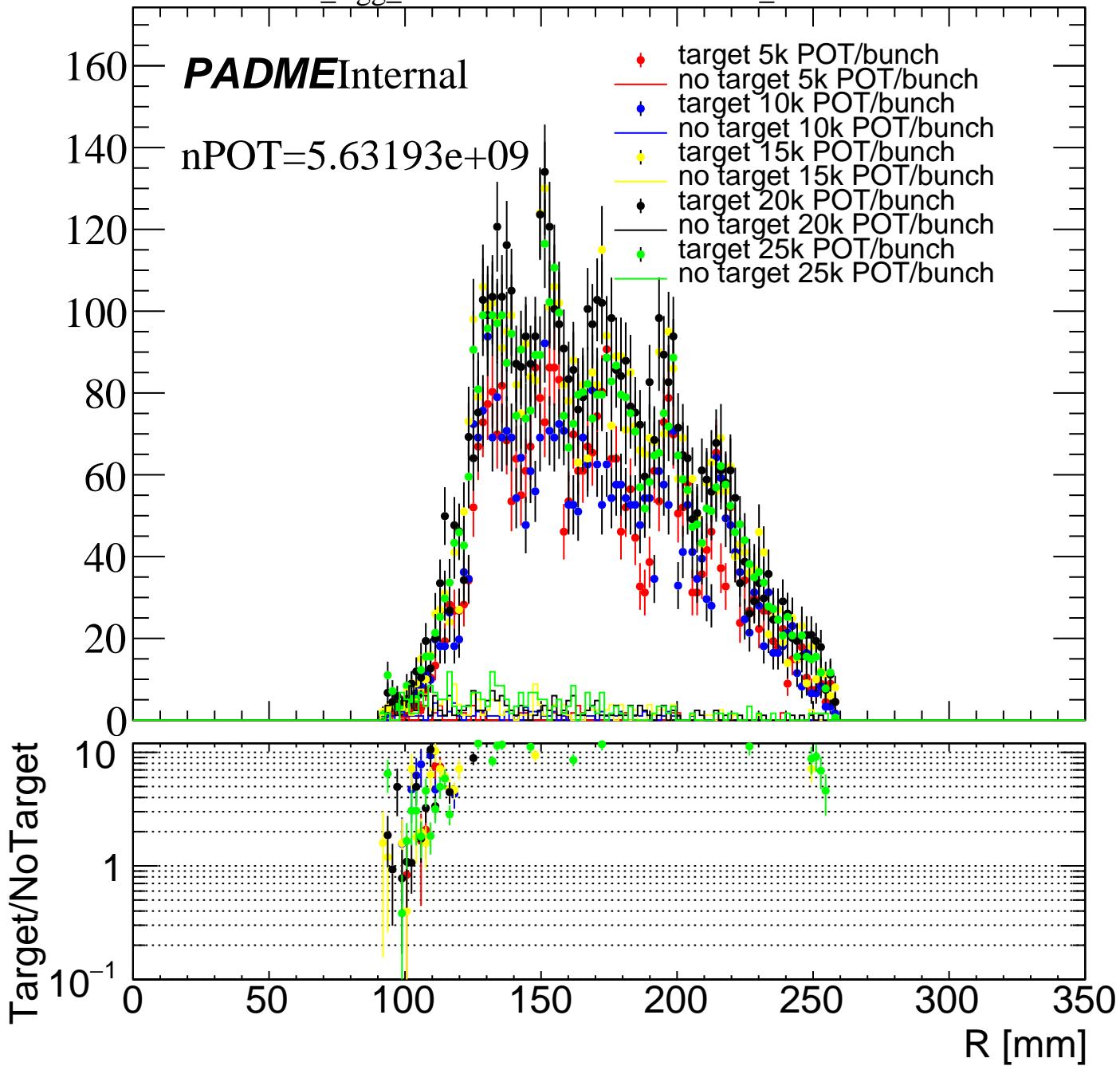
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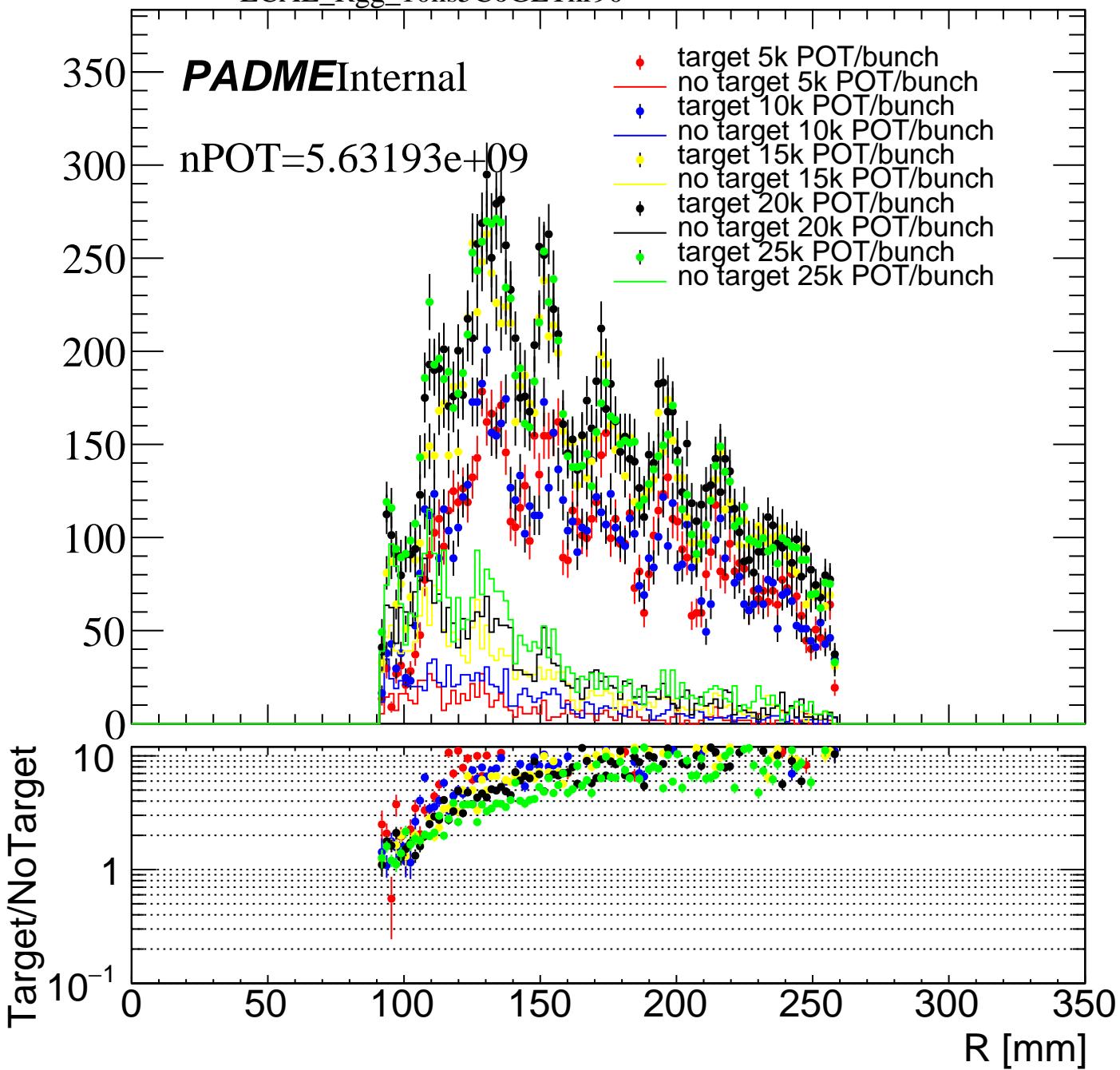
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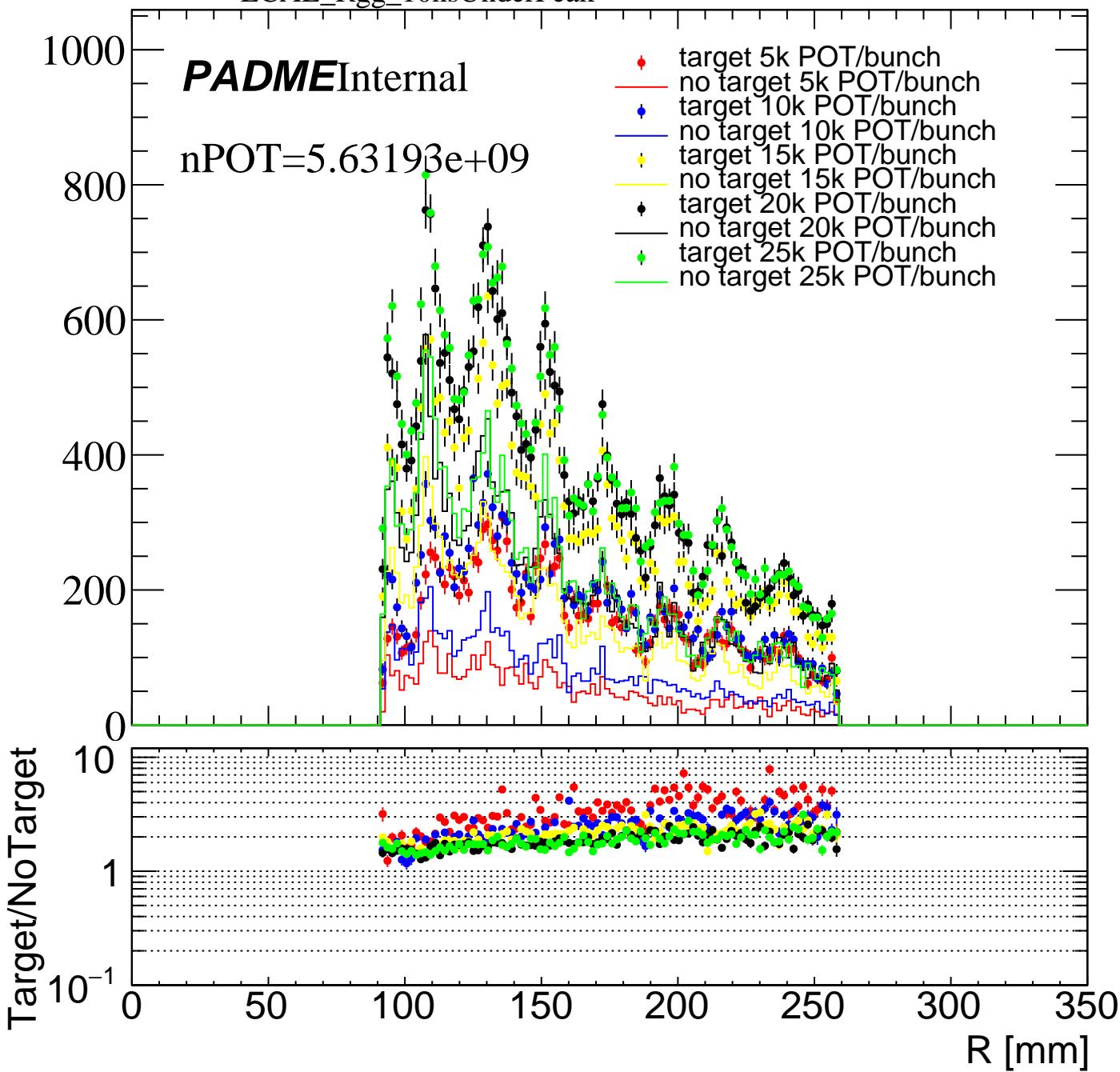
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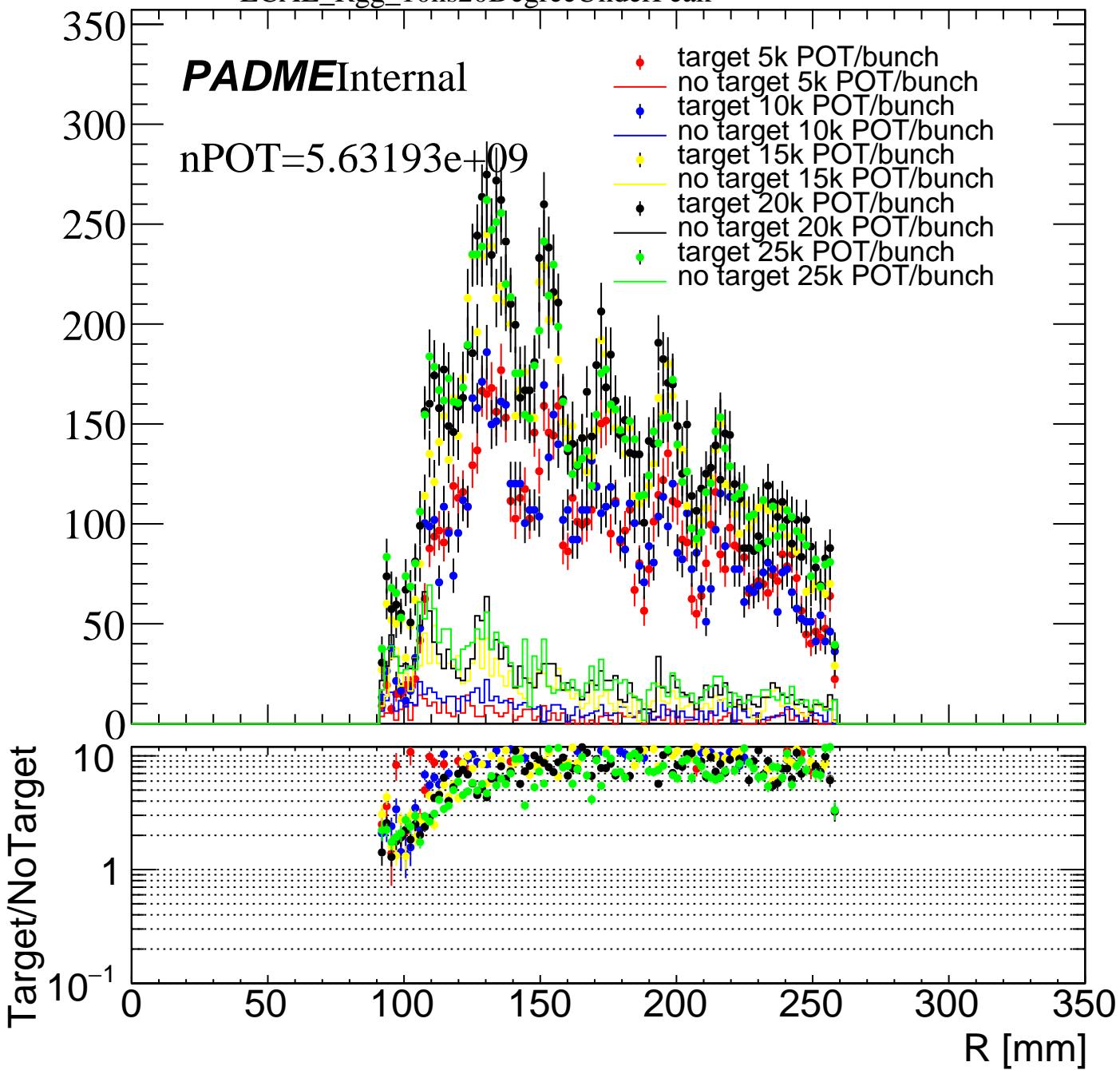
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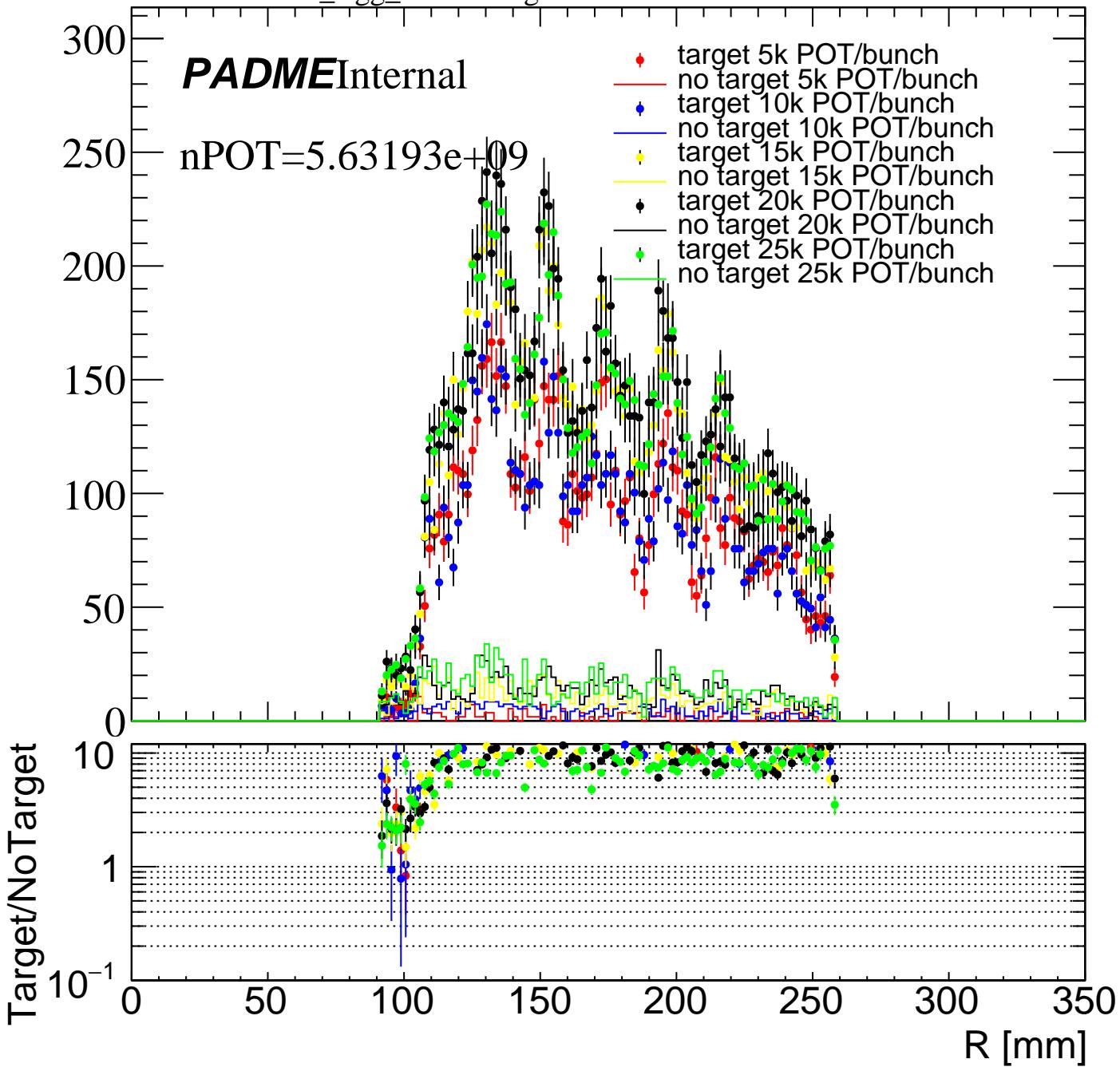
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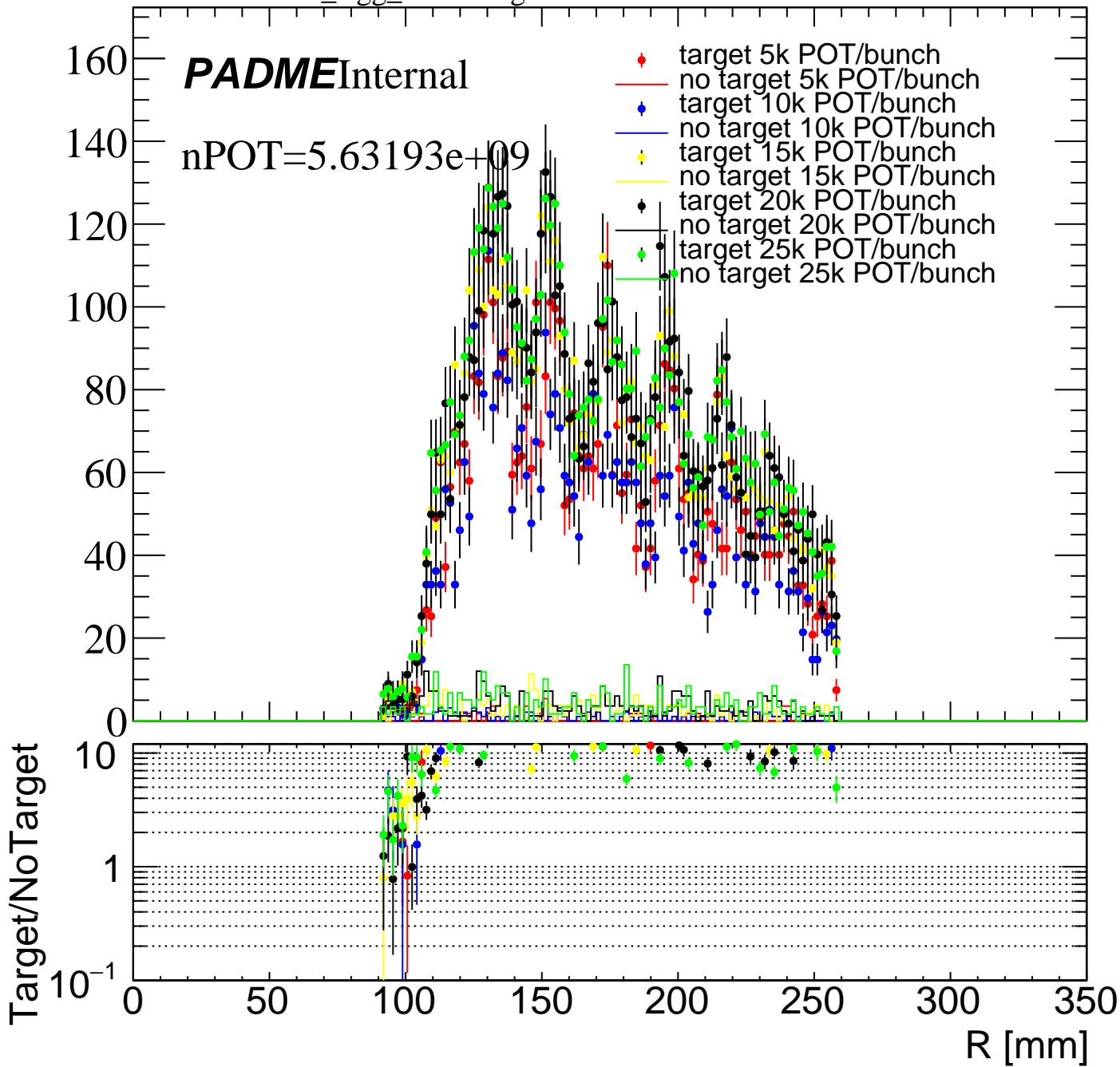
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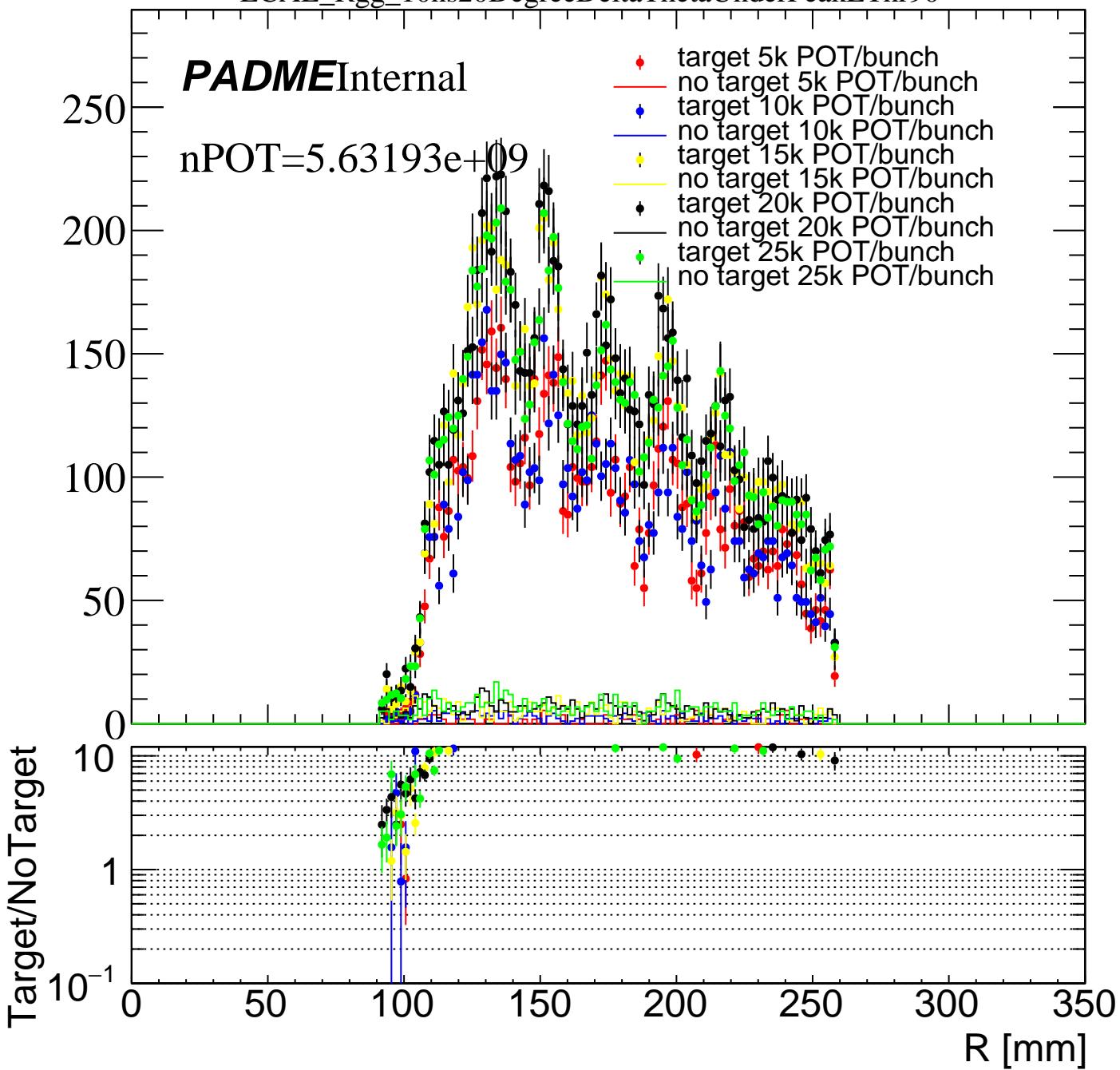
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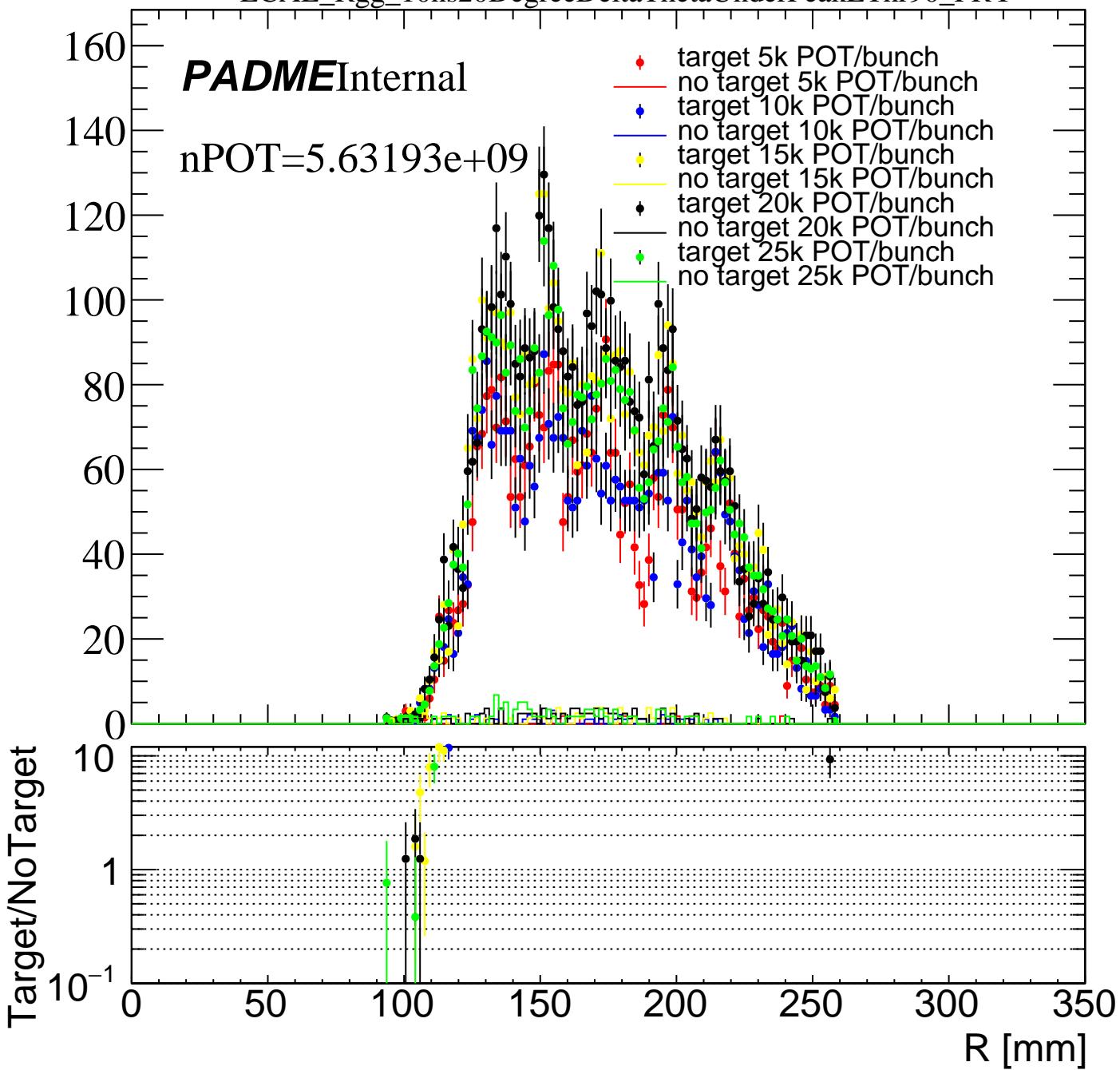
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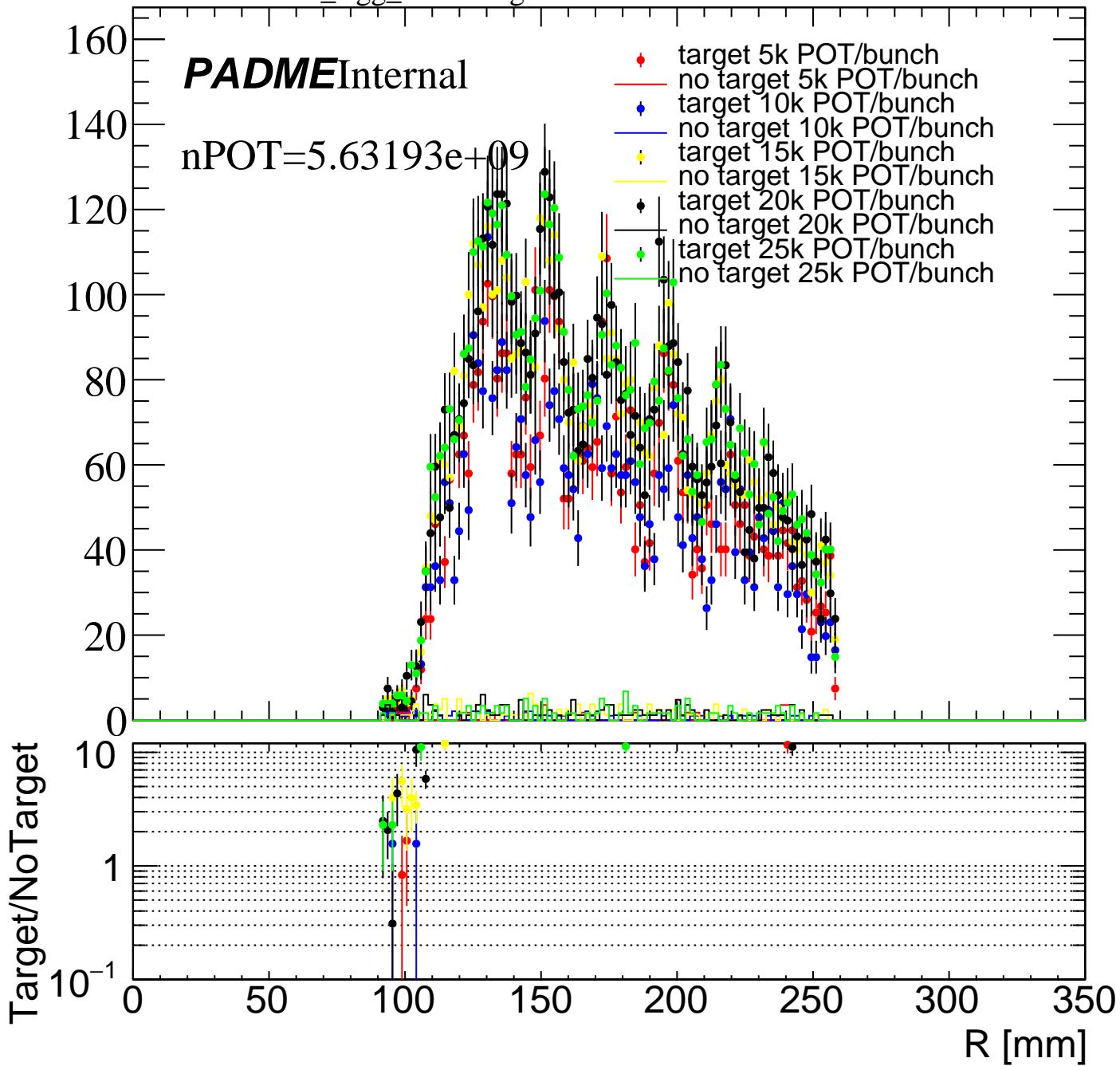
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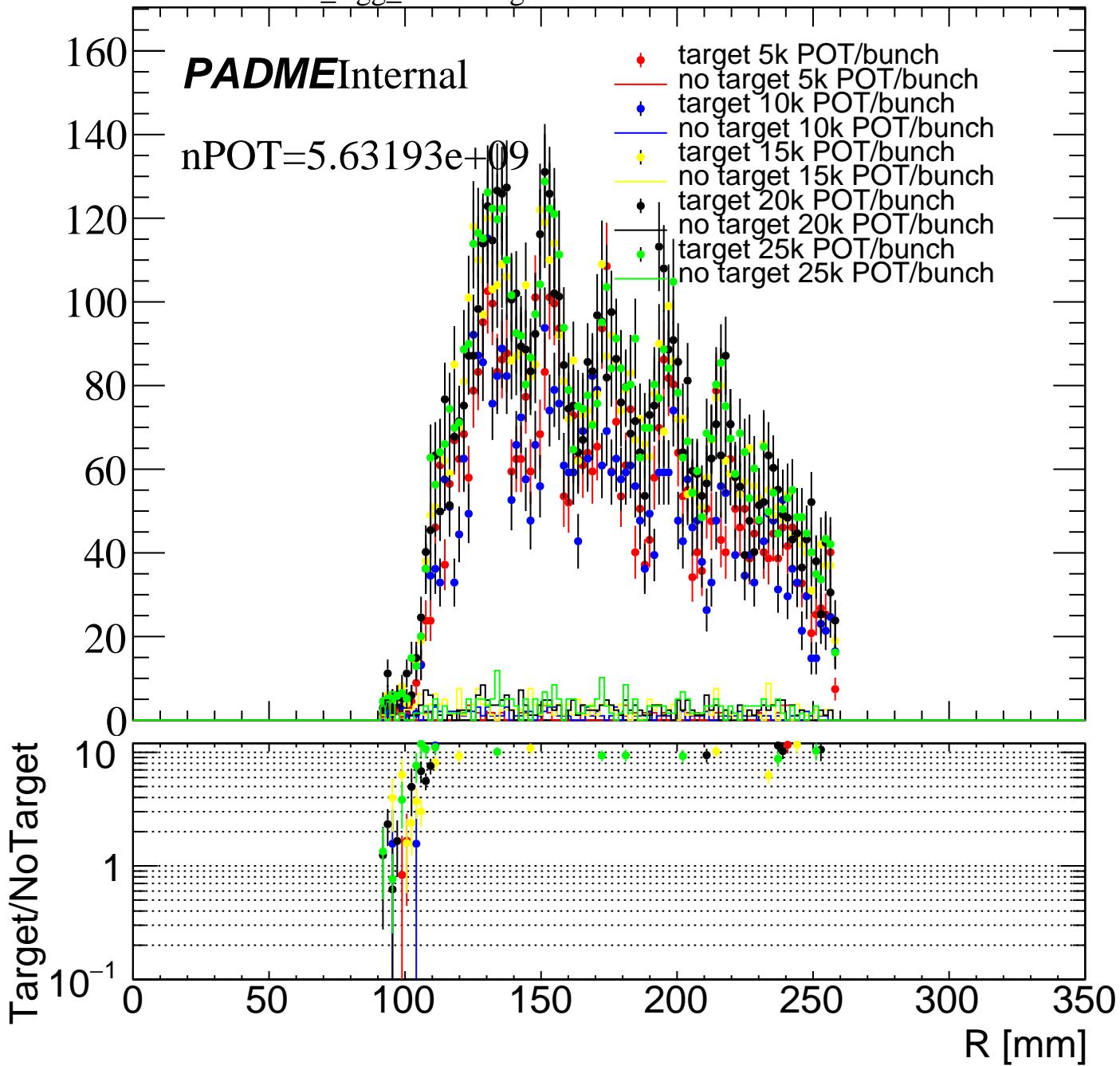
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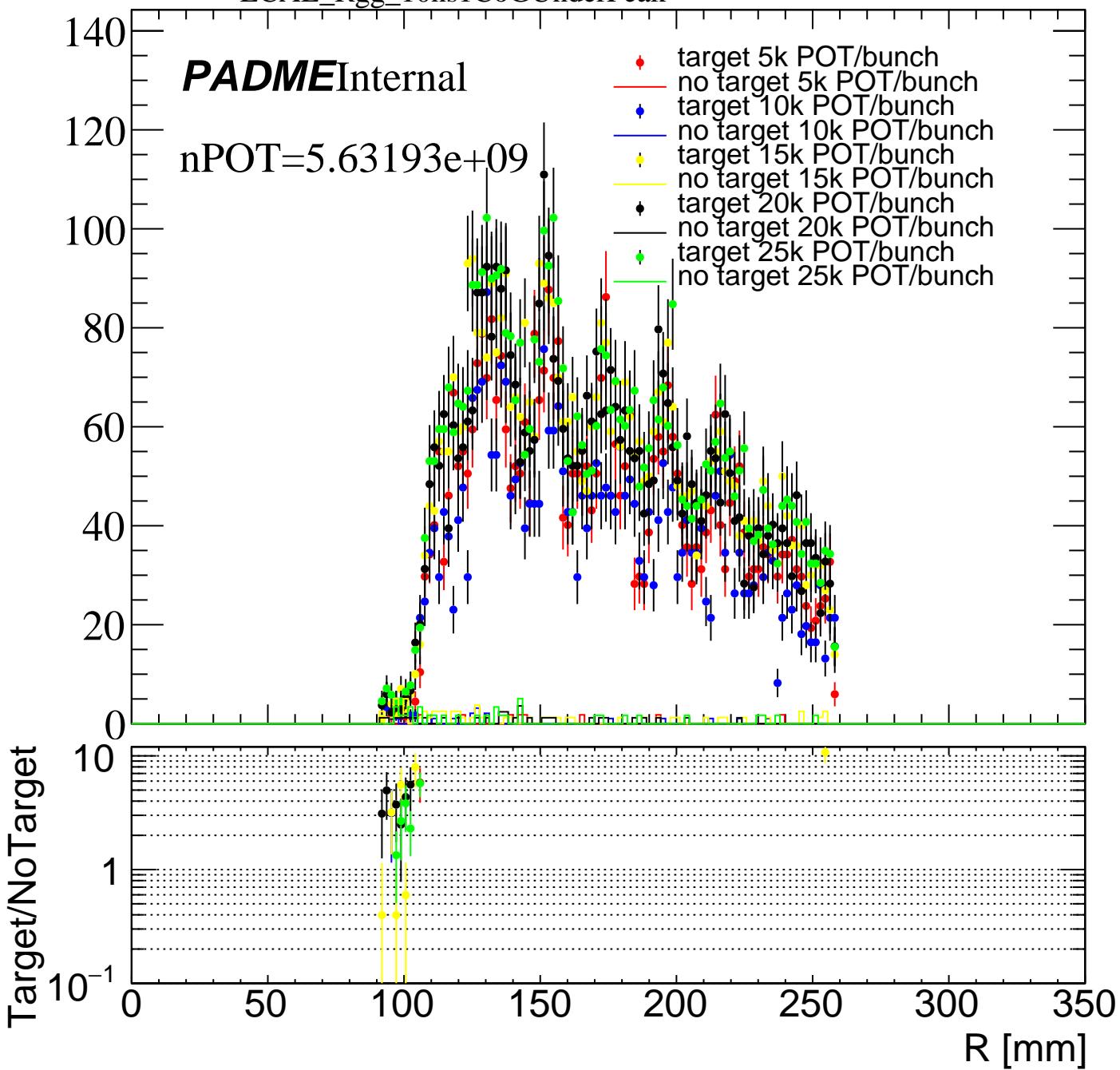
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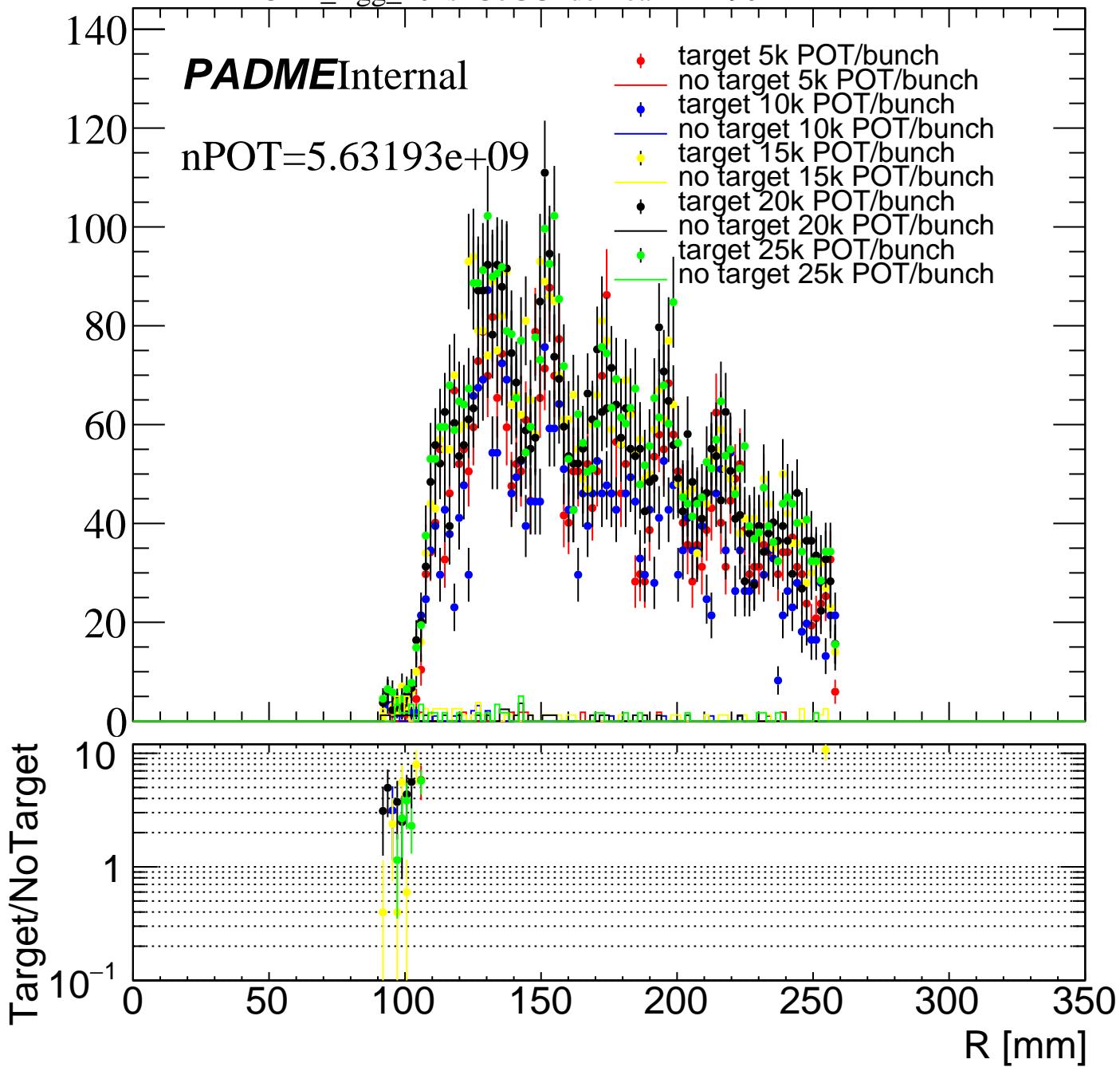
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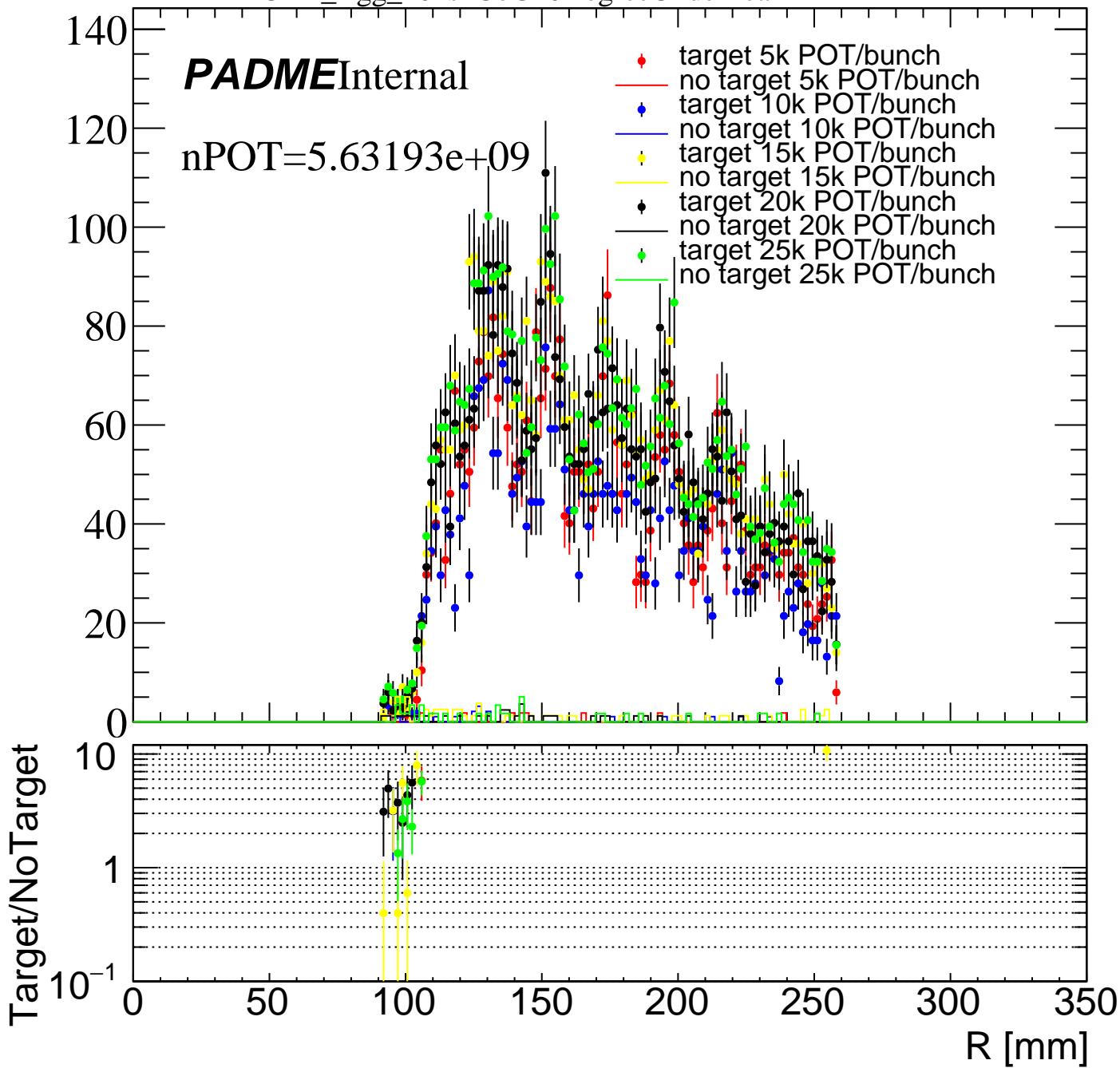
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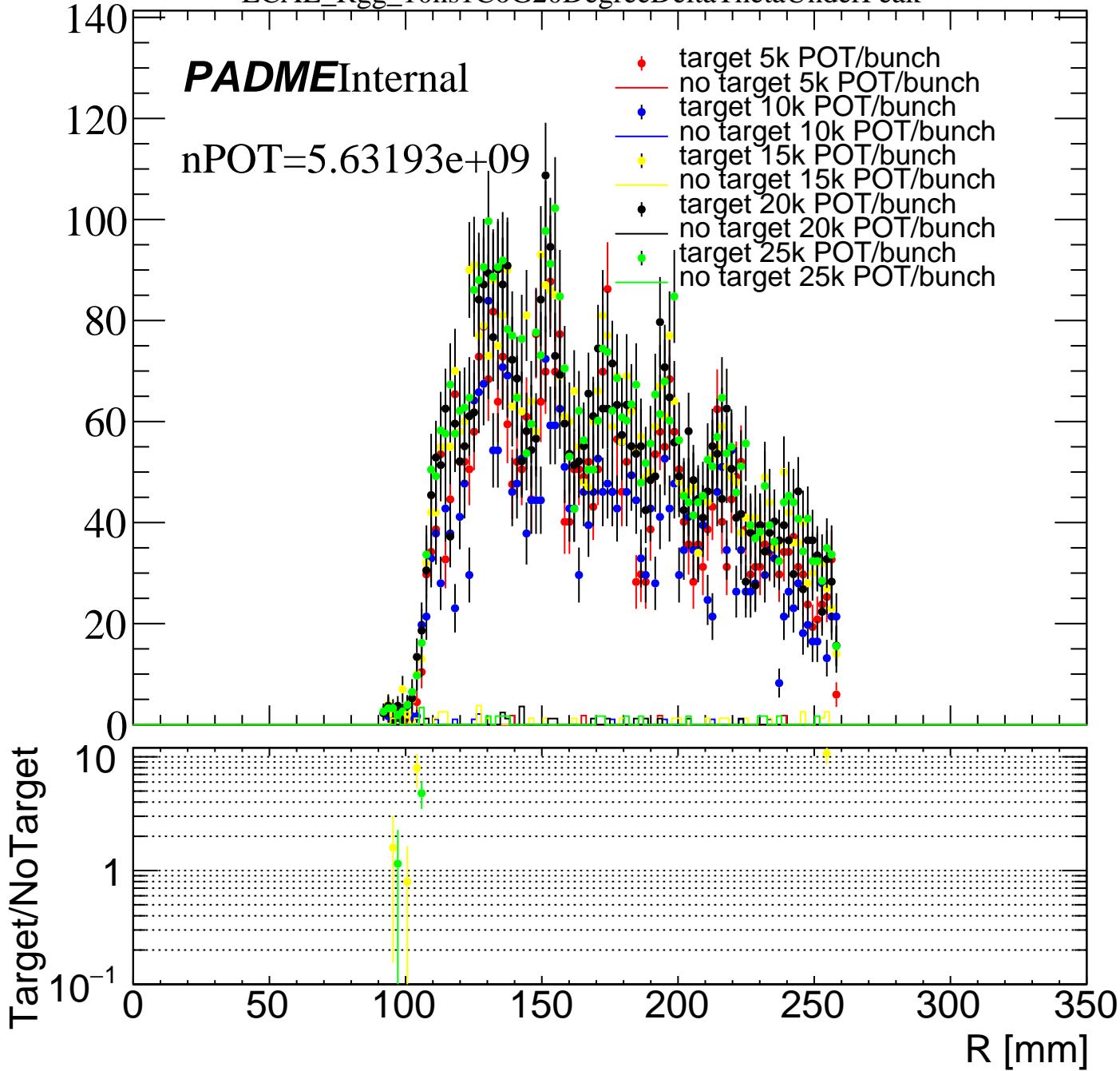
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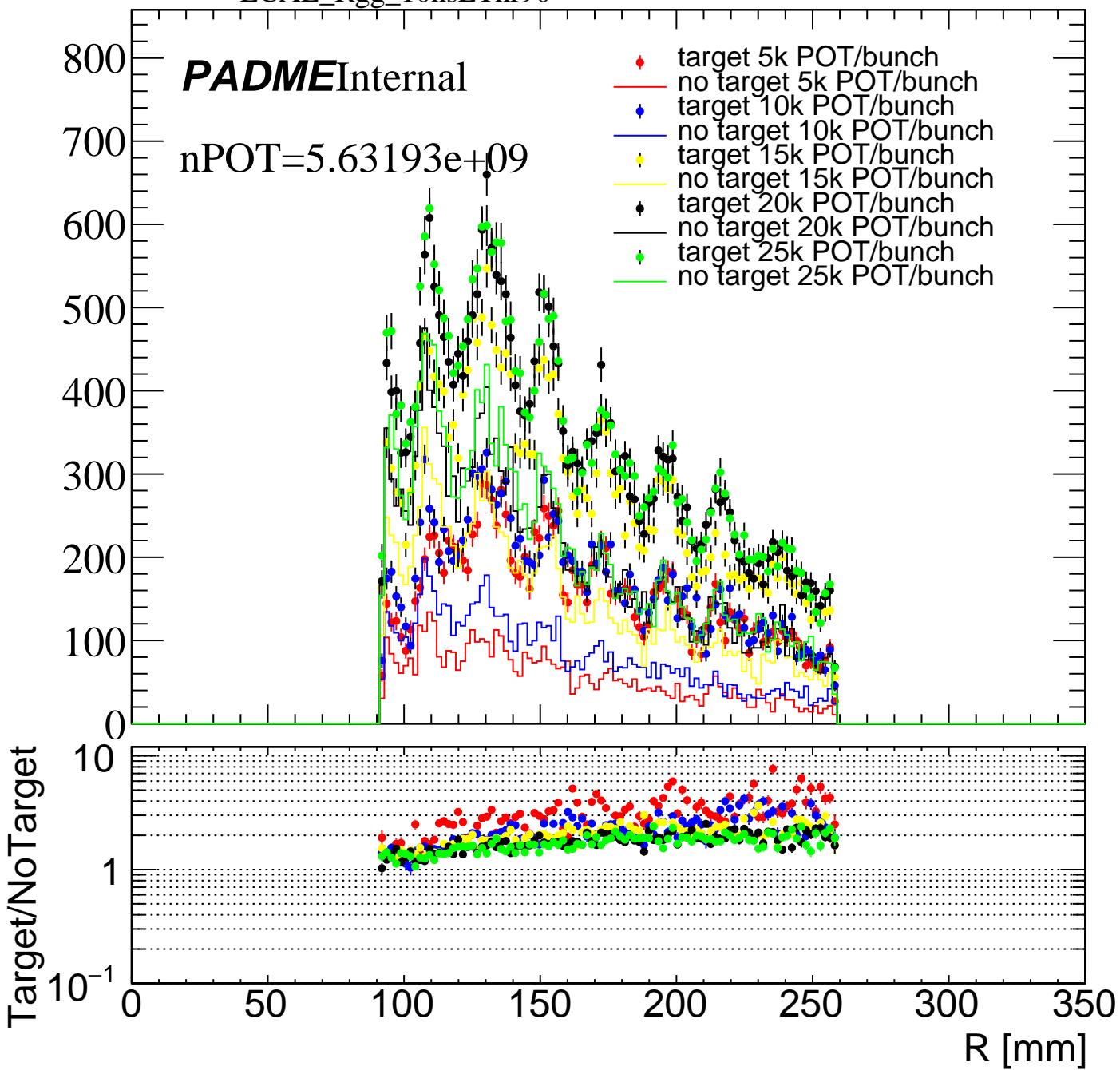
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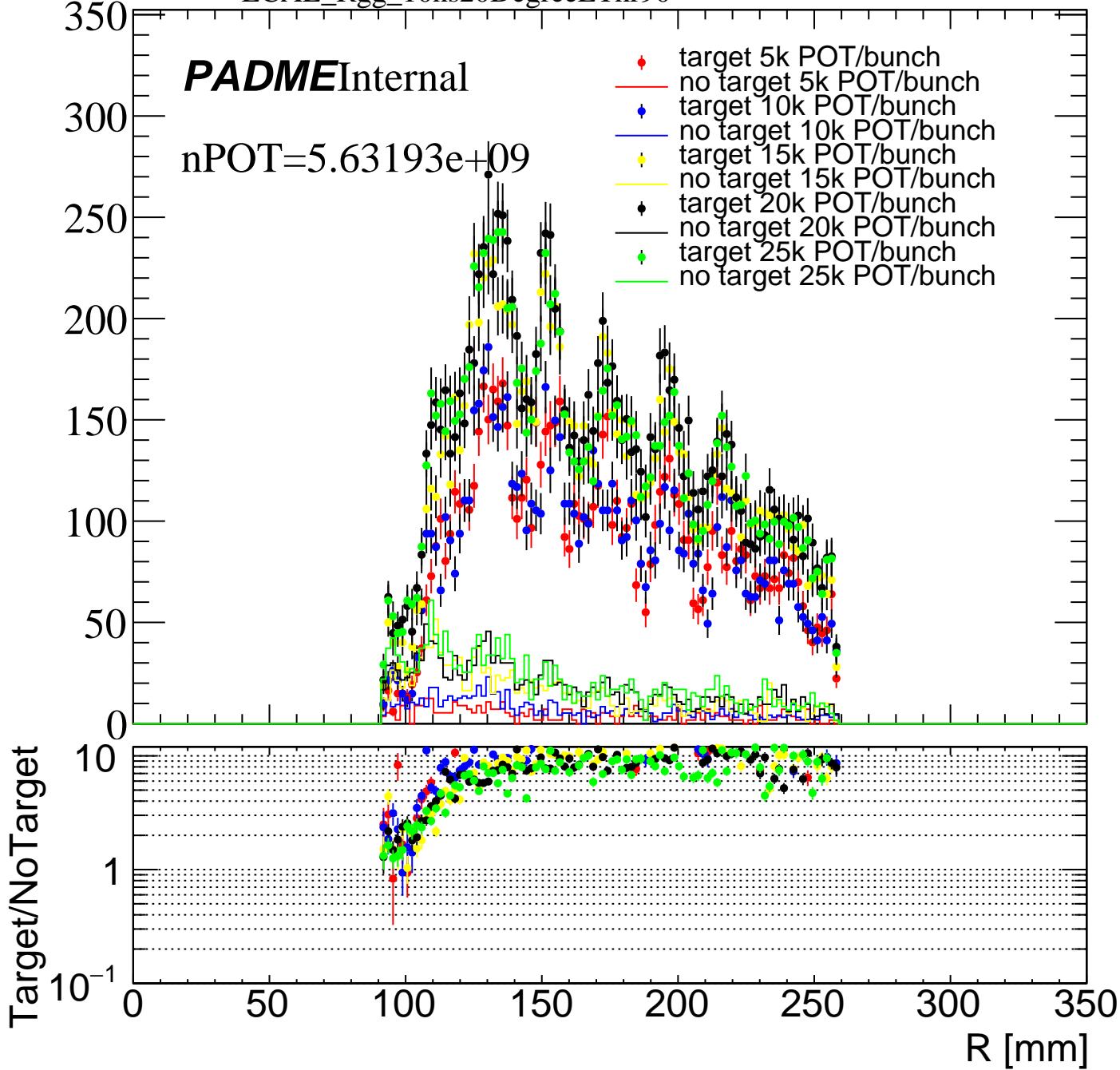
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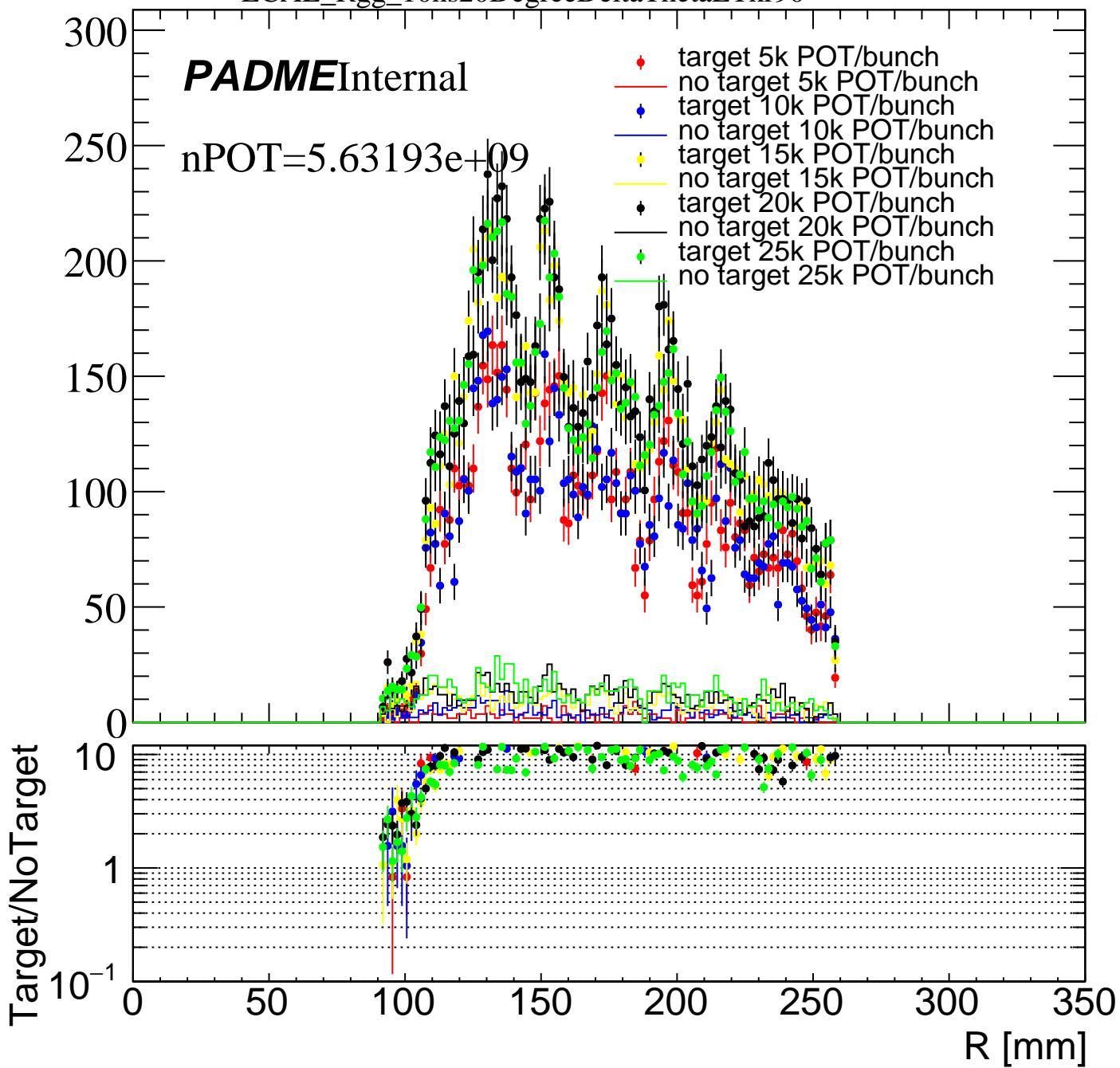
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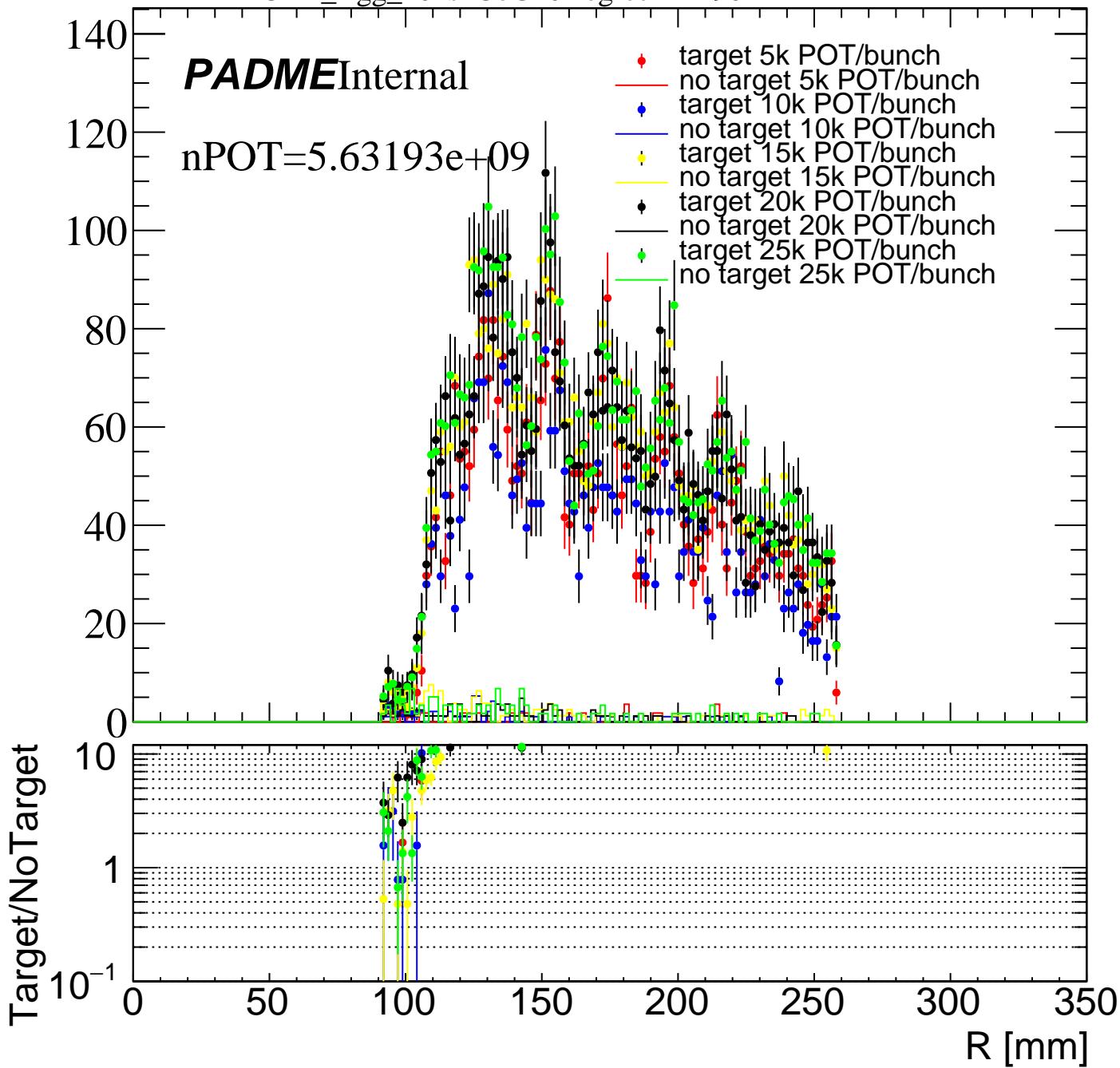
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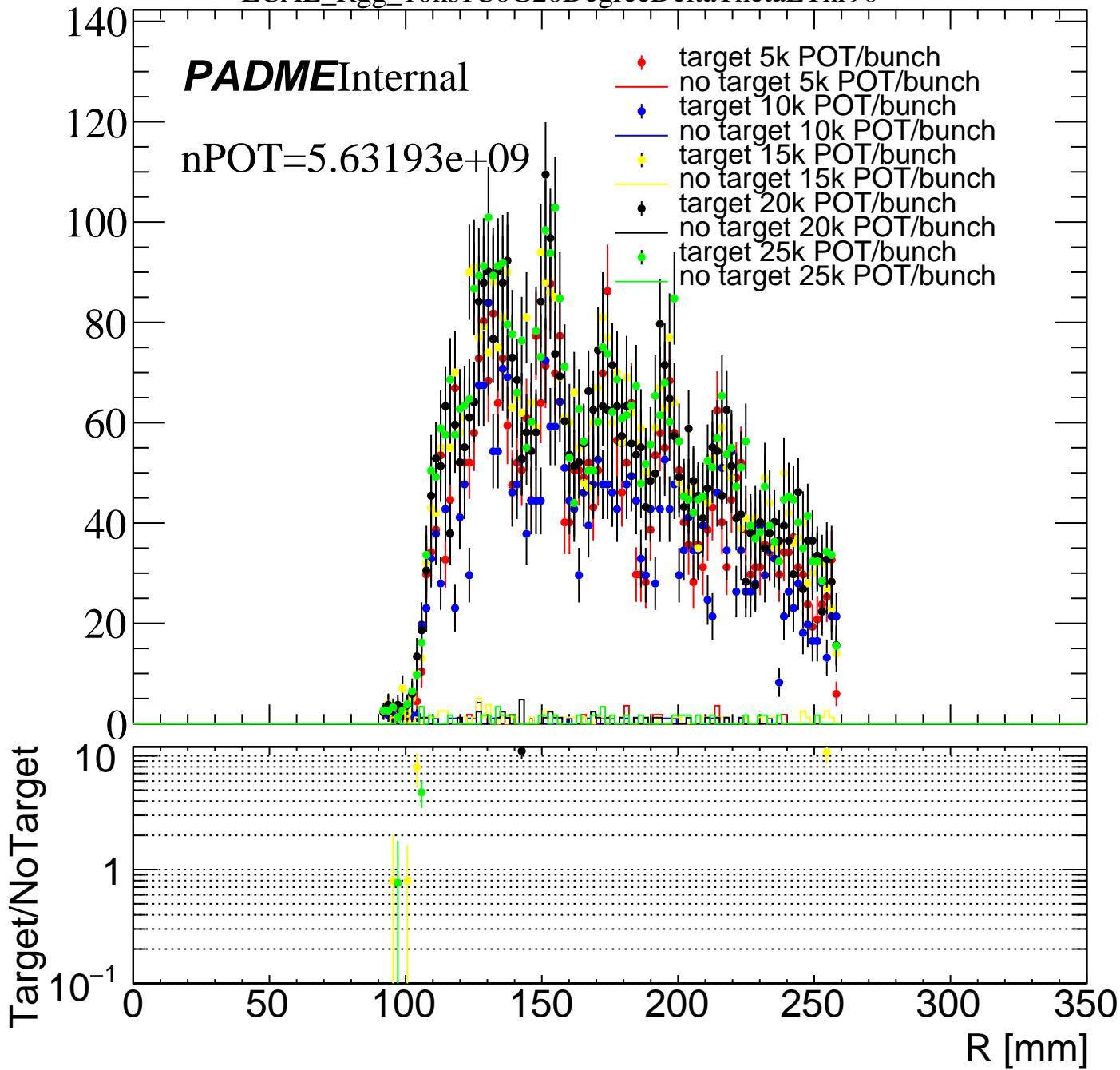
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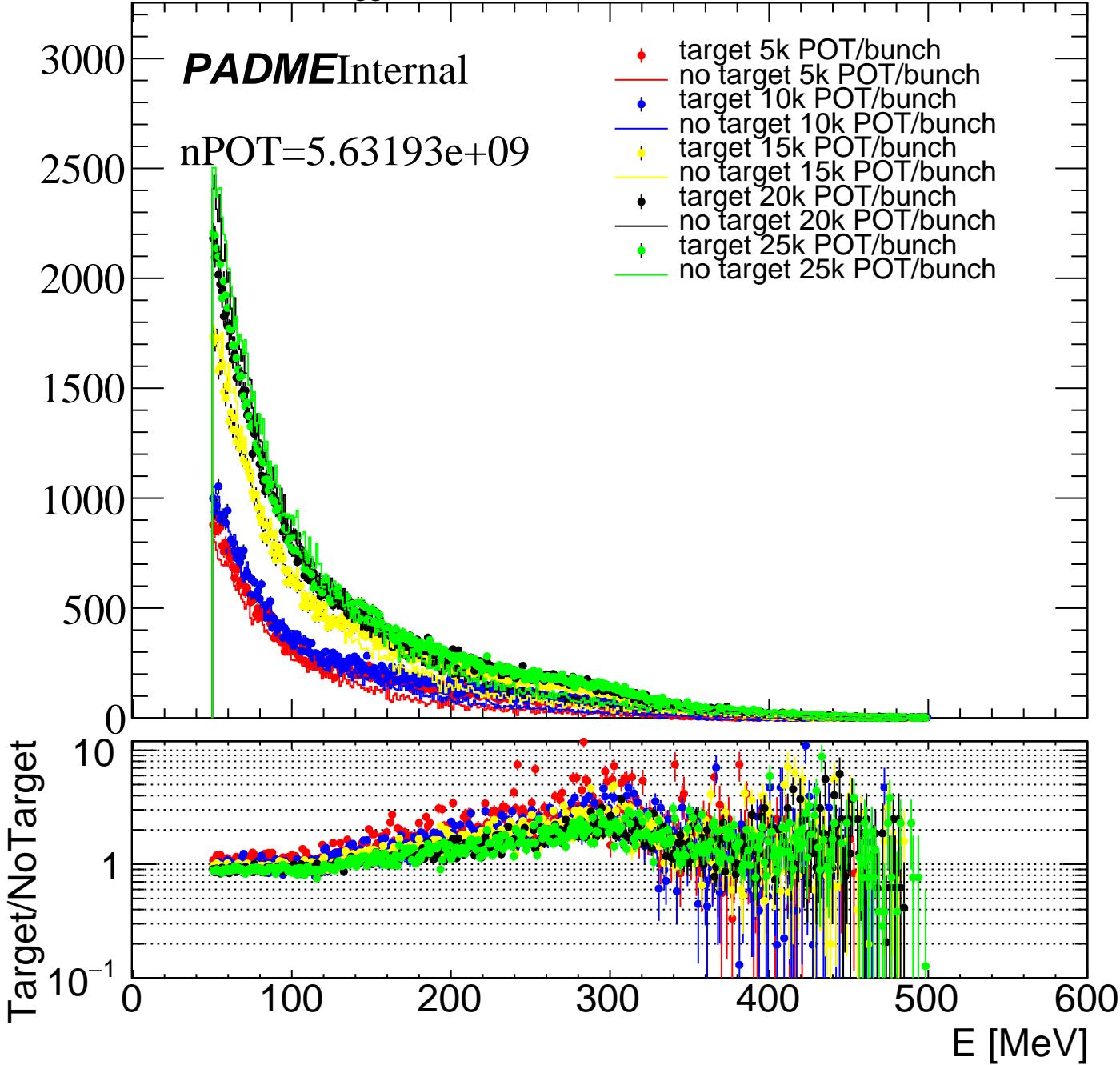
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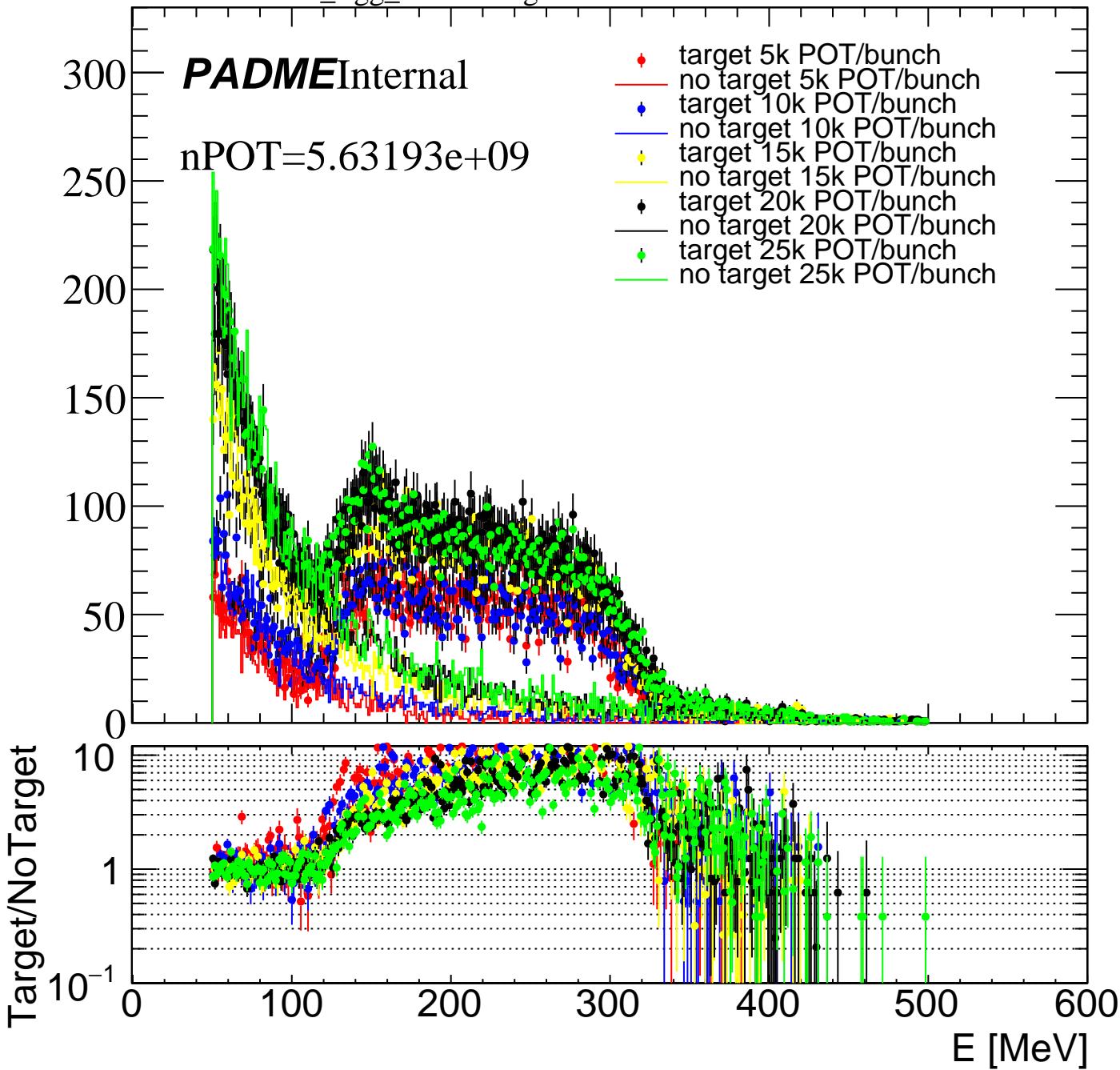
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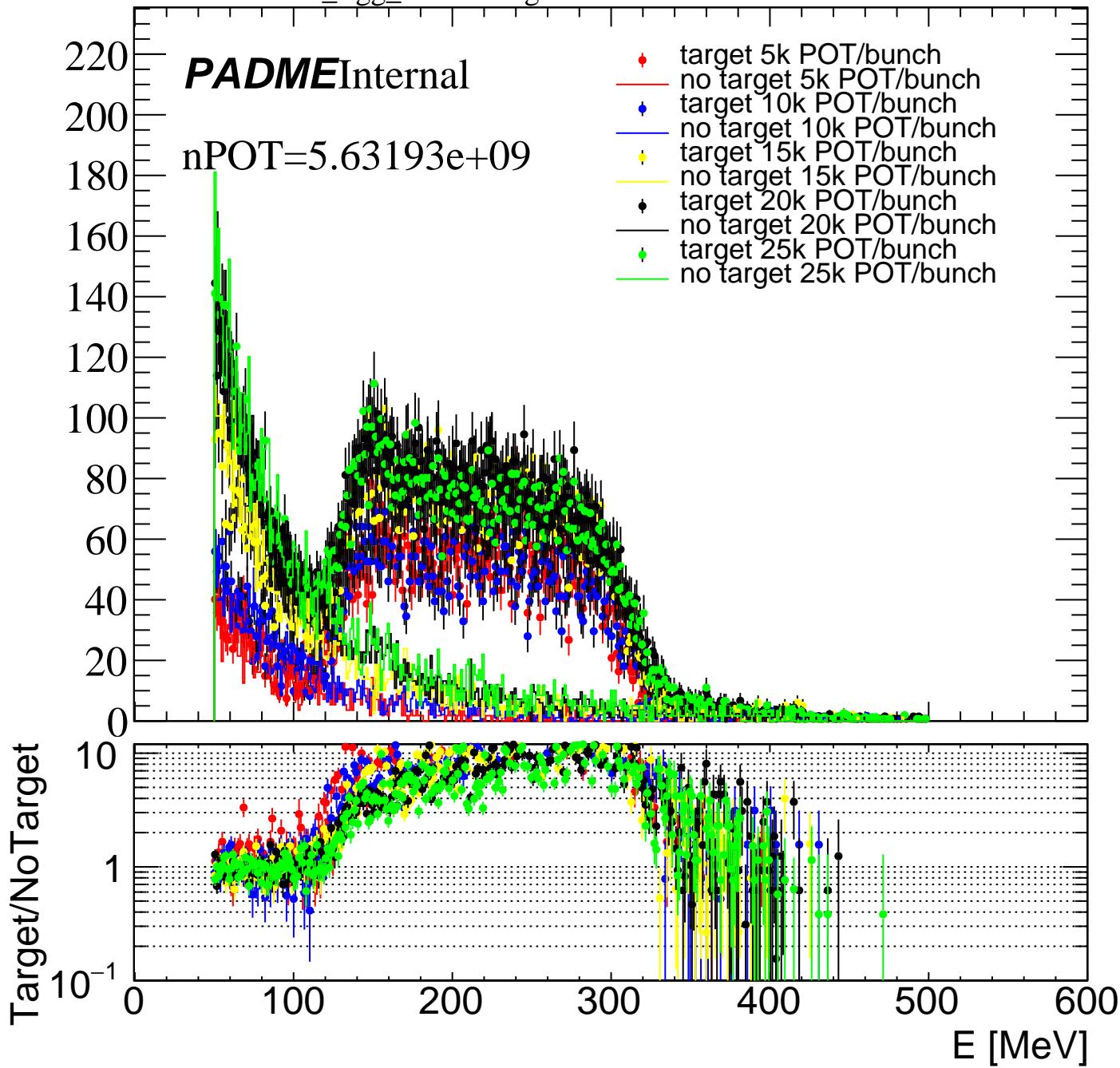
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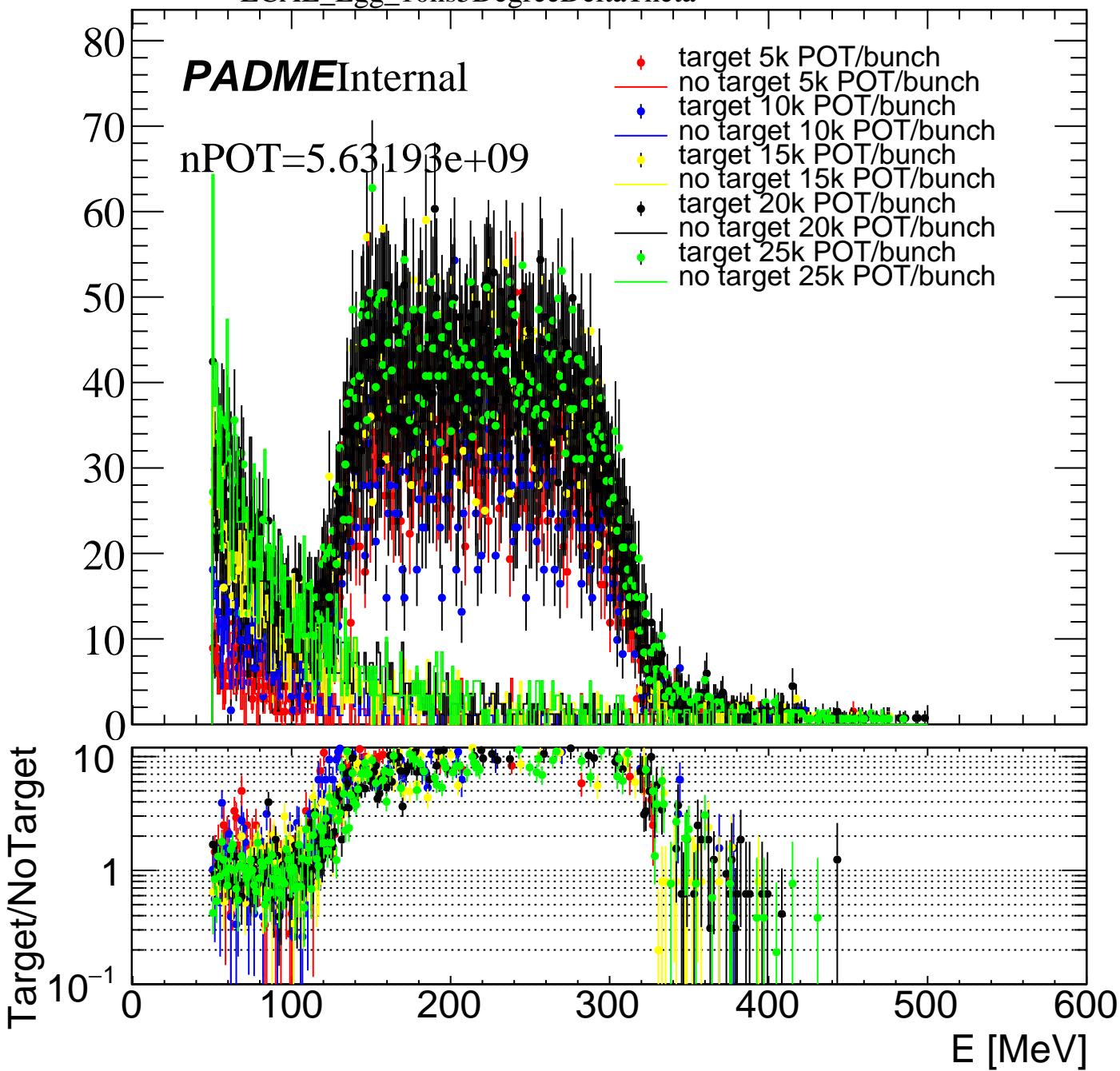
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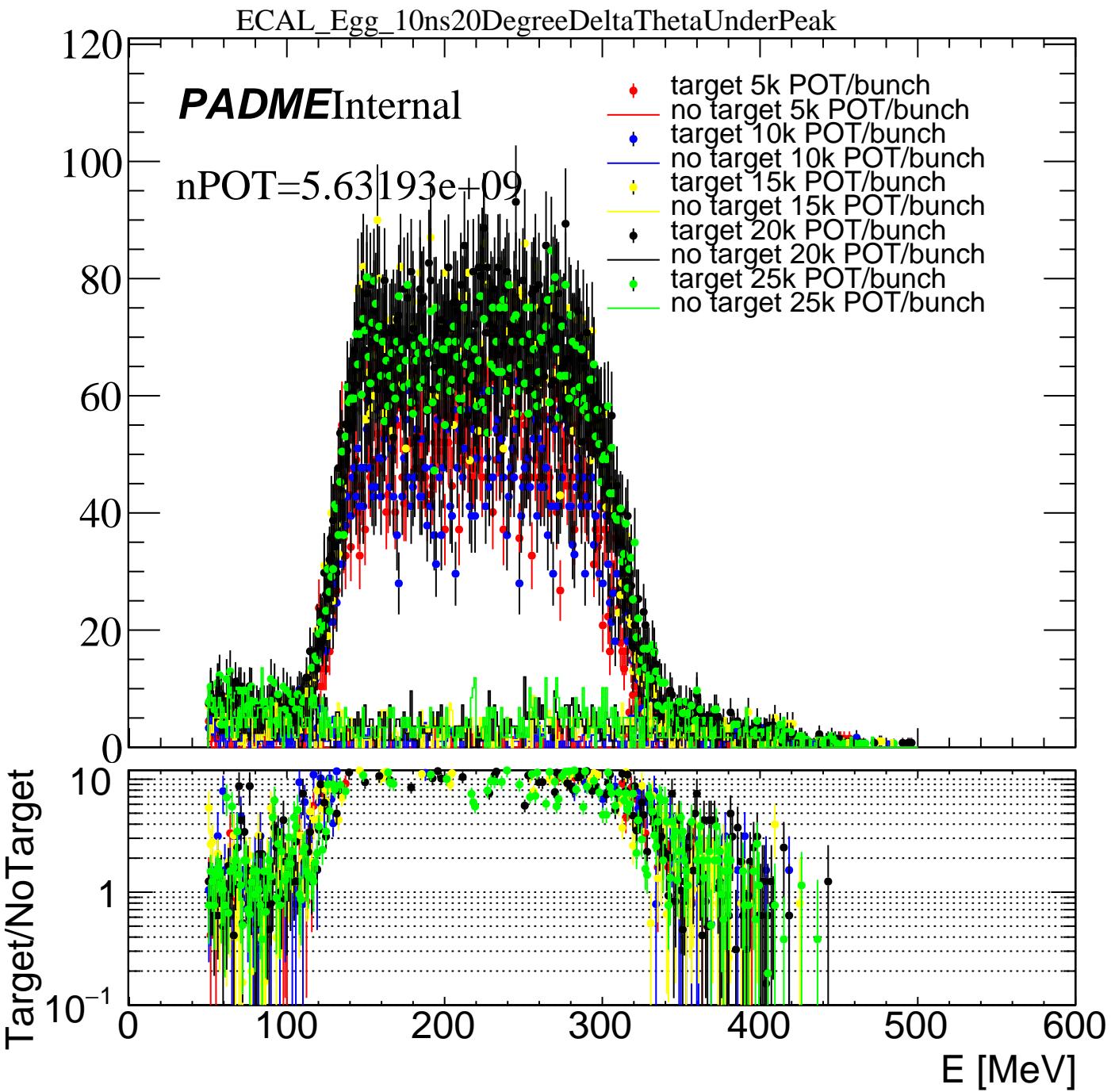


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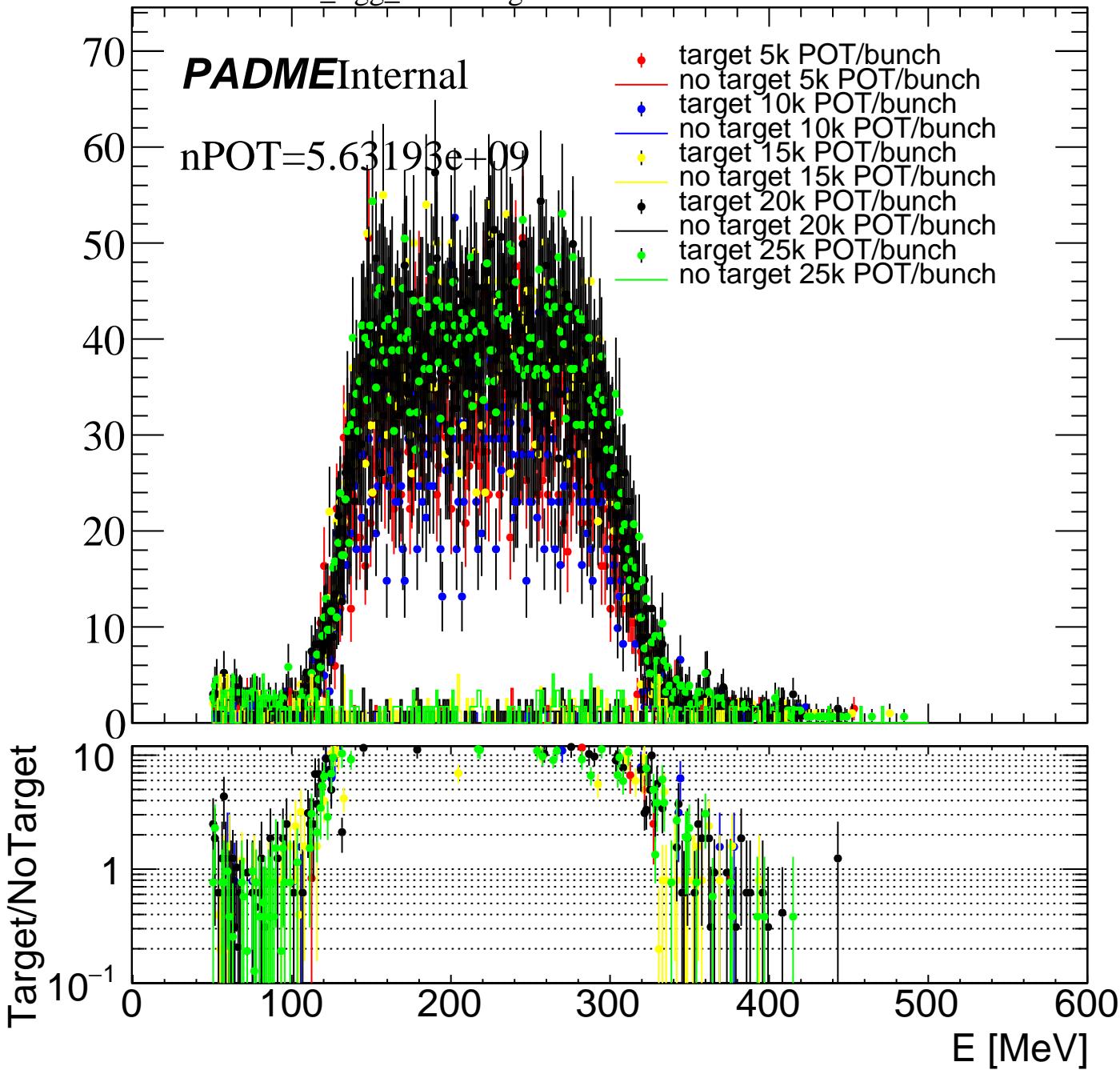


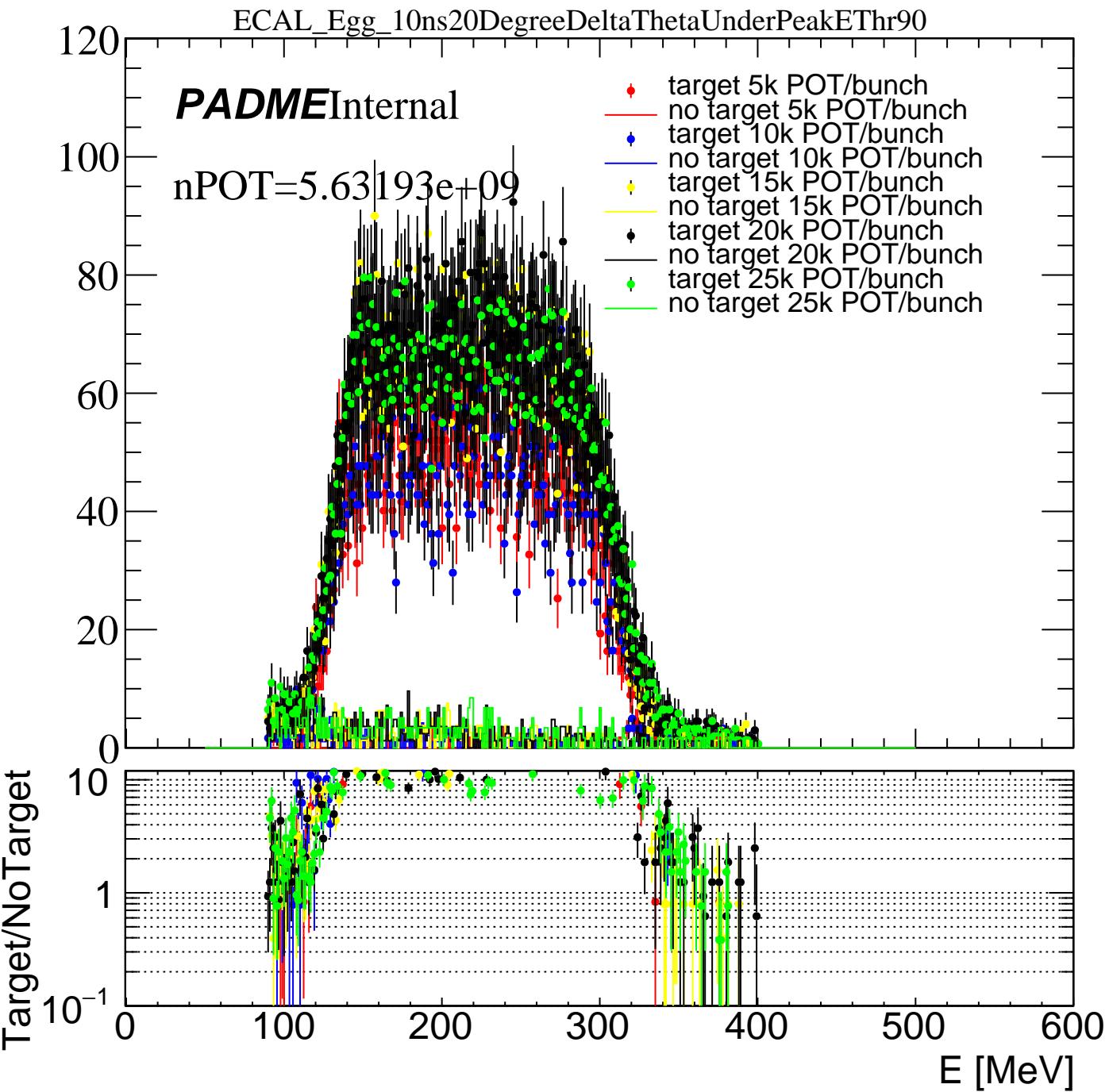
ECAL_Egg_10ns5DegreeDeltaTheta



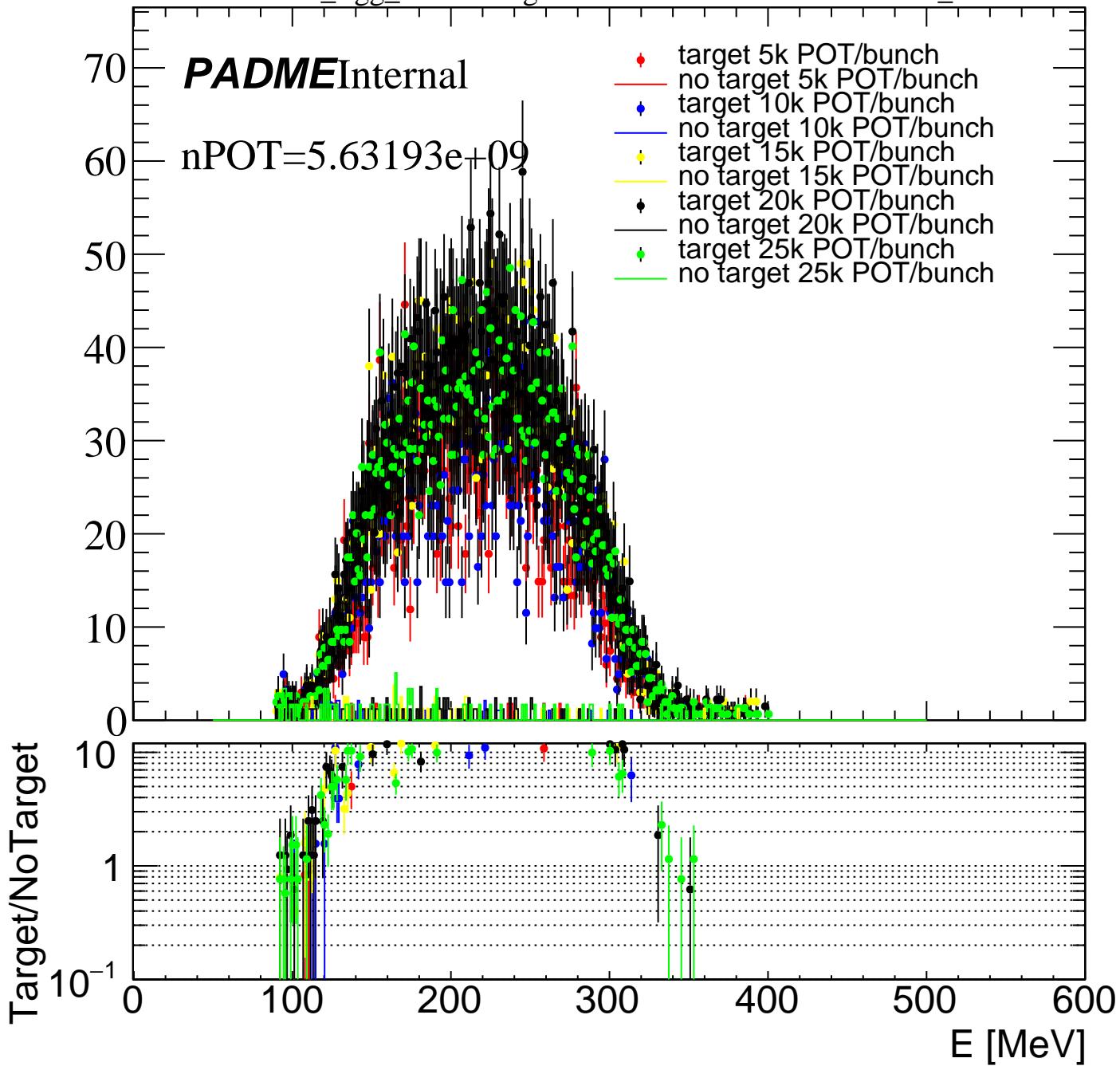


ECAL_Egg_10ns5DegreeDeltaThetaUnderPeak

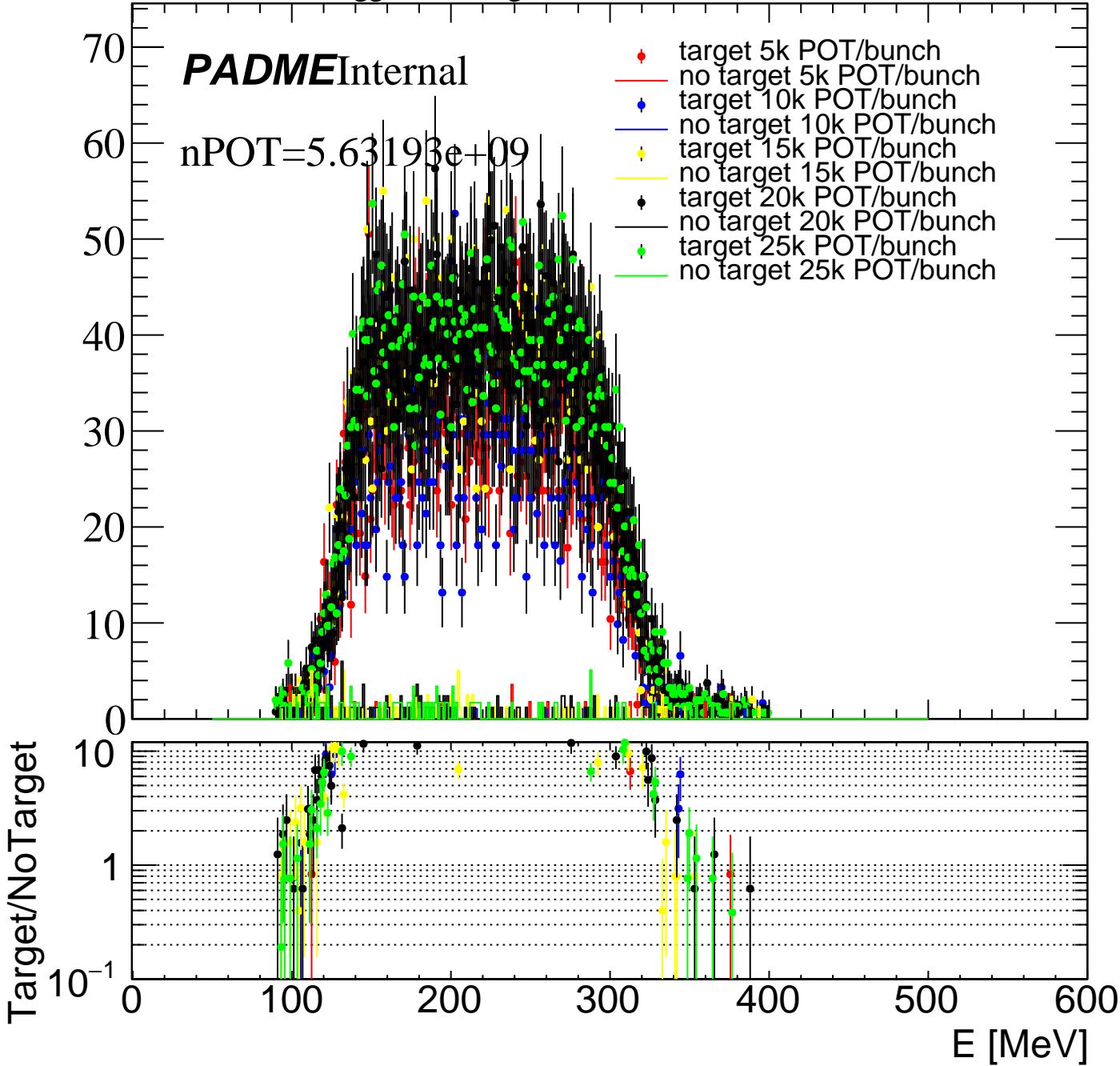




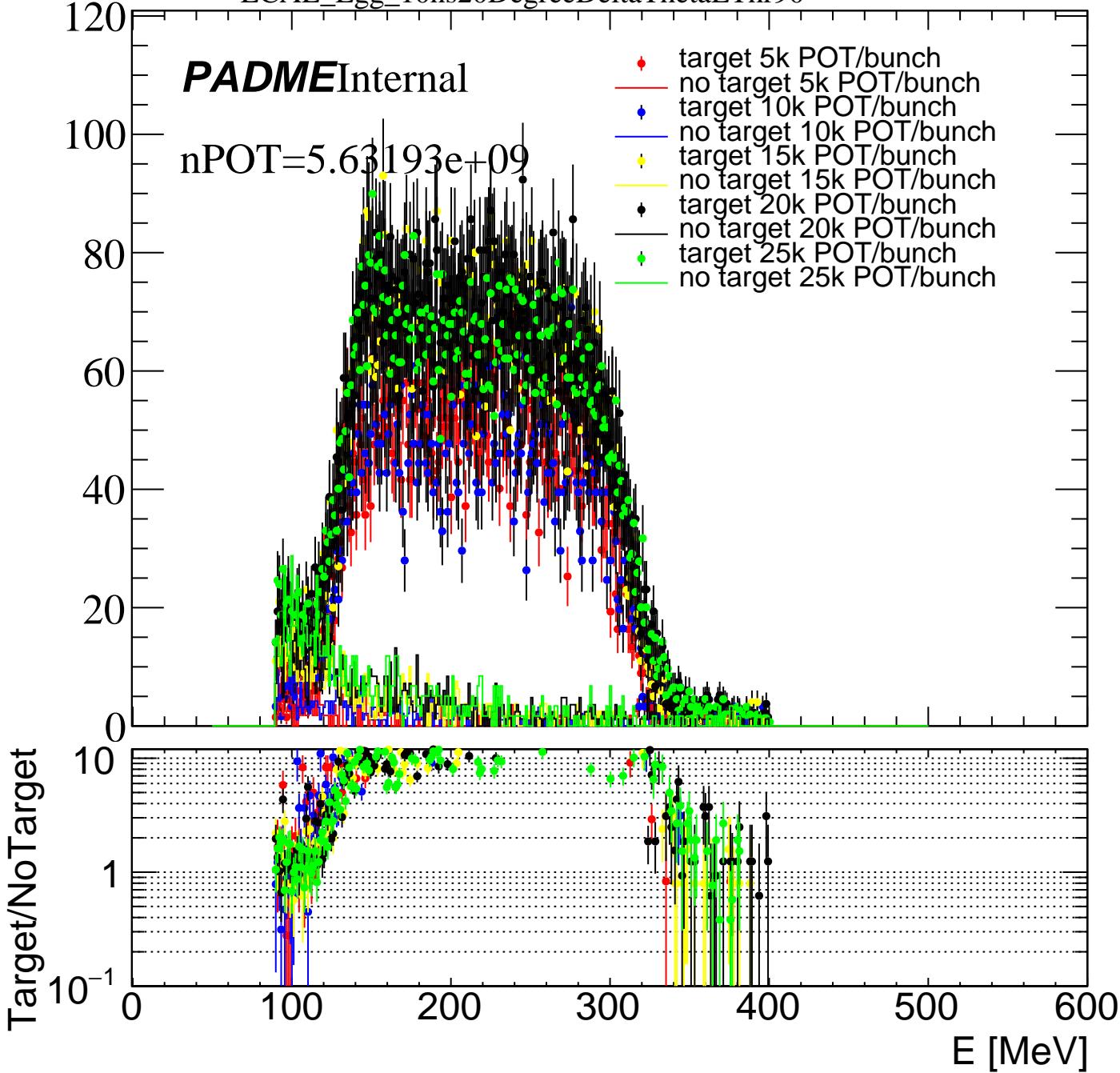
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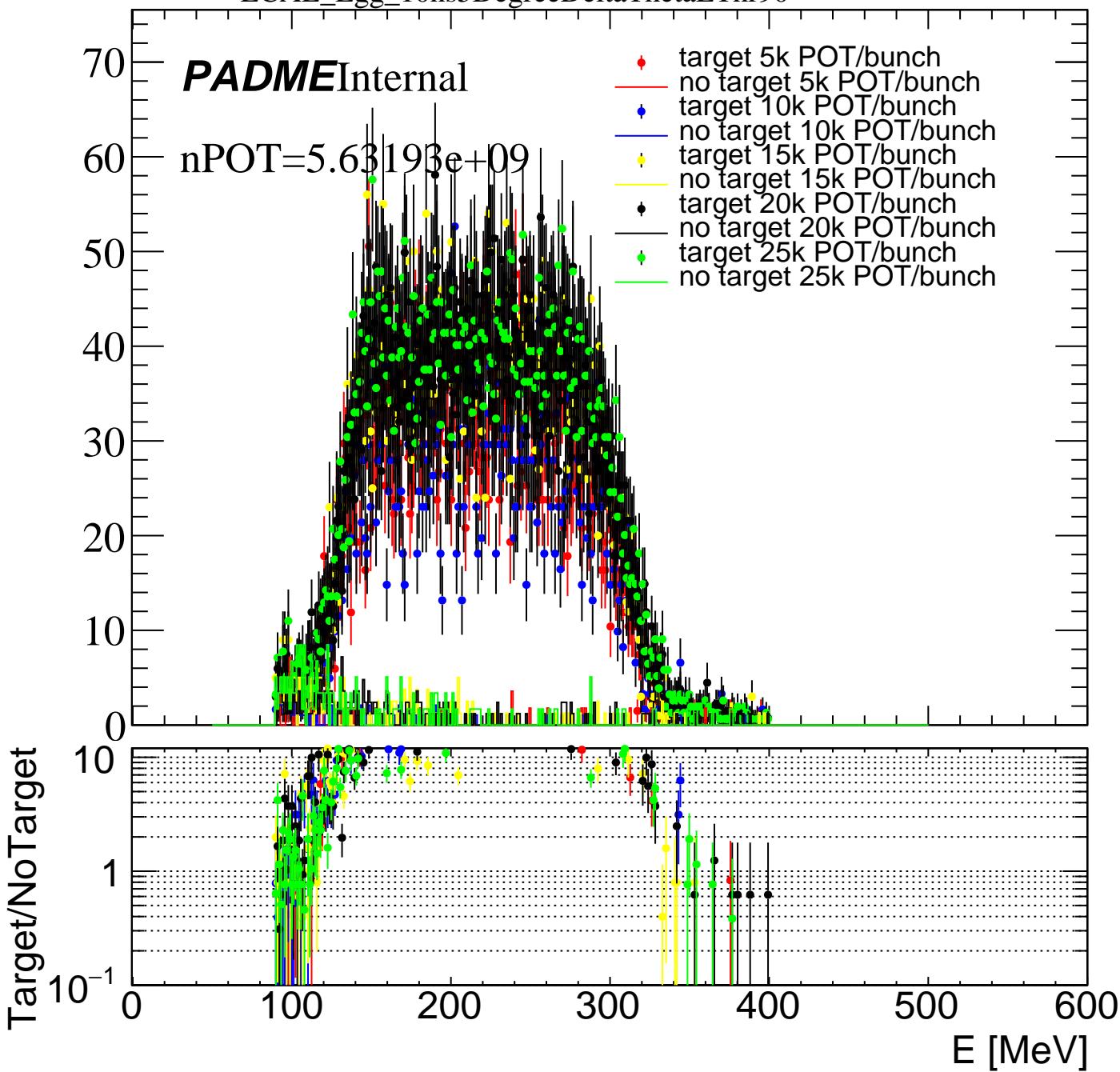
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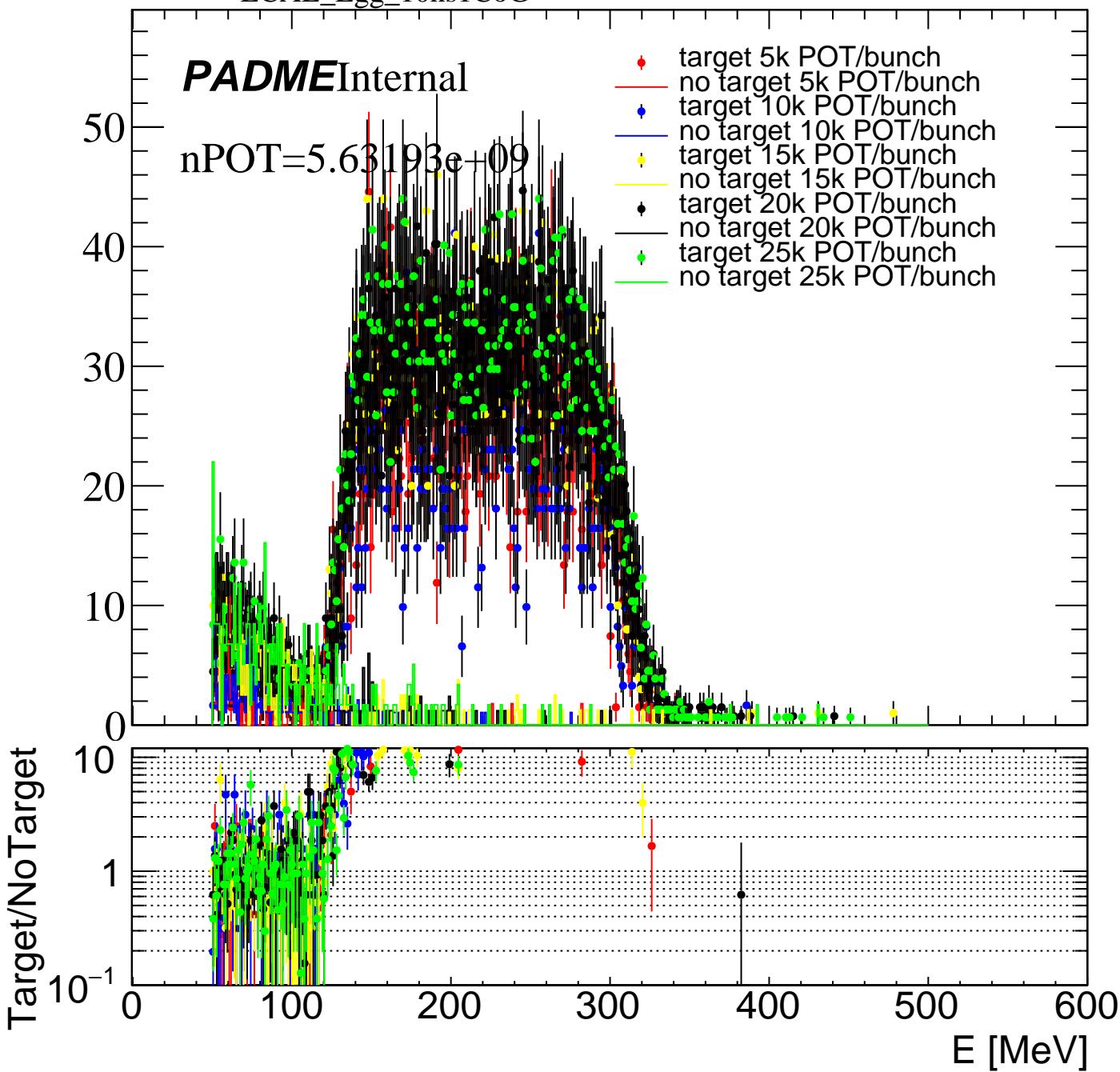
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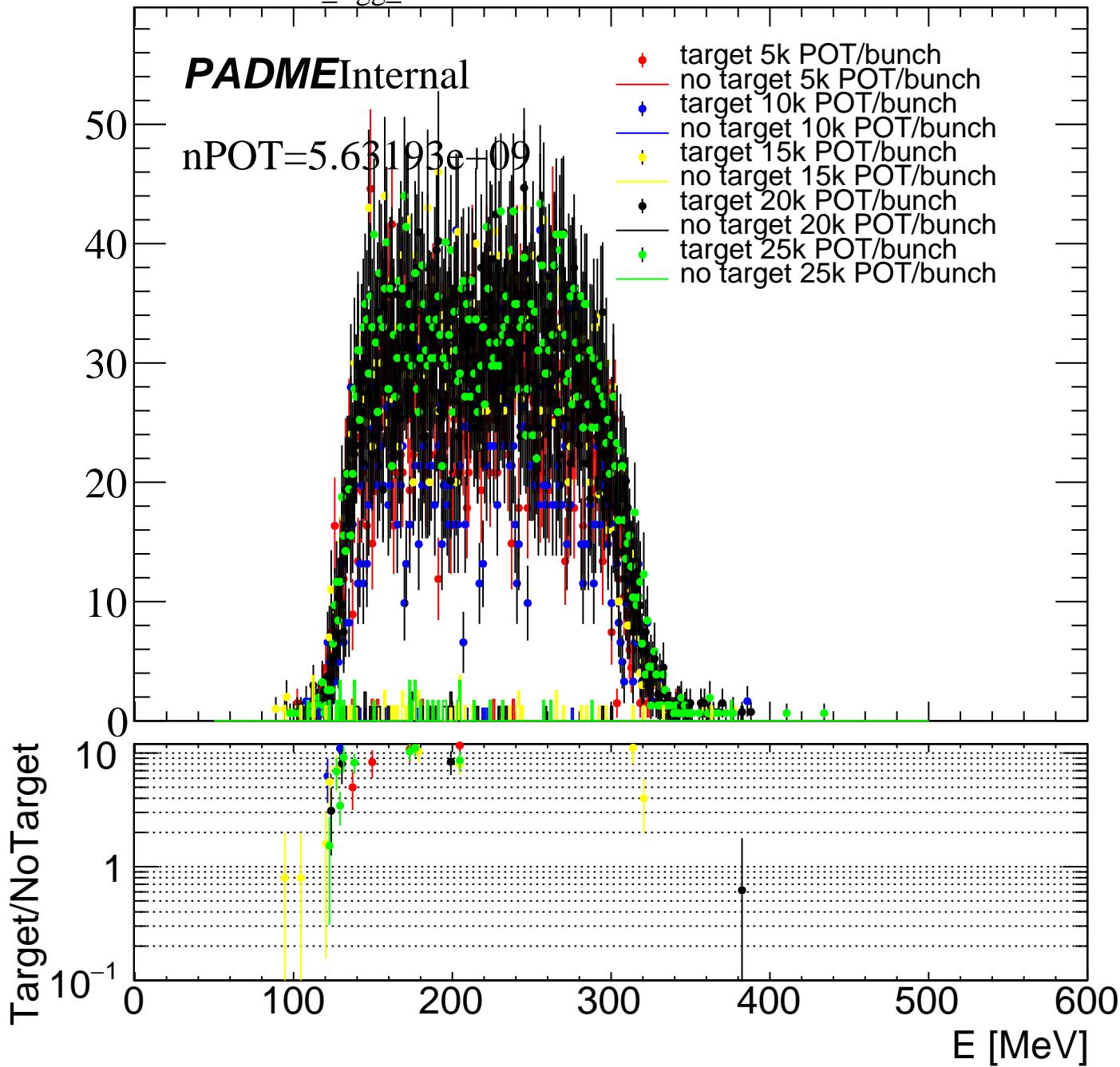
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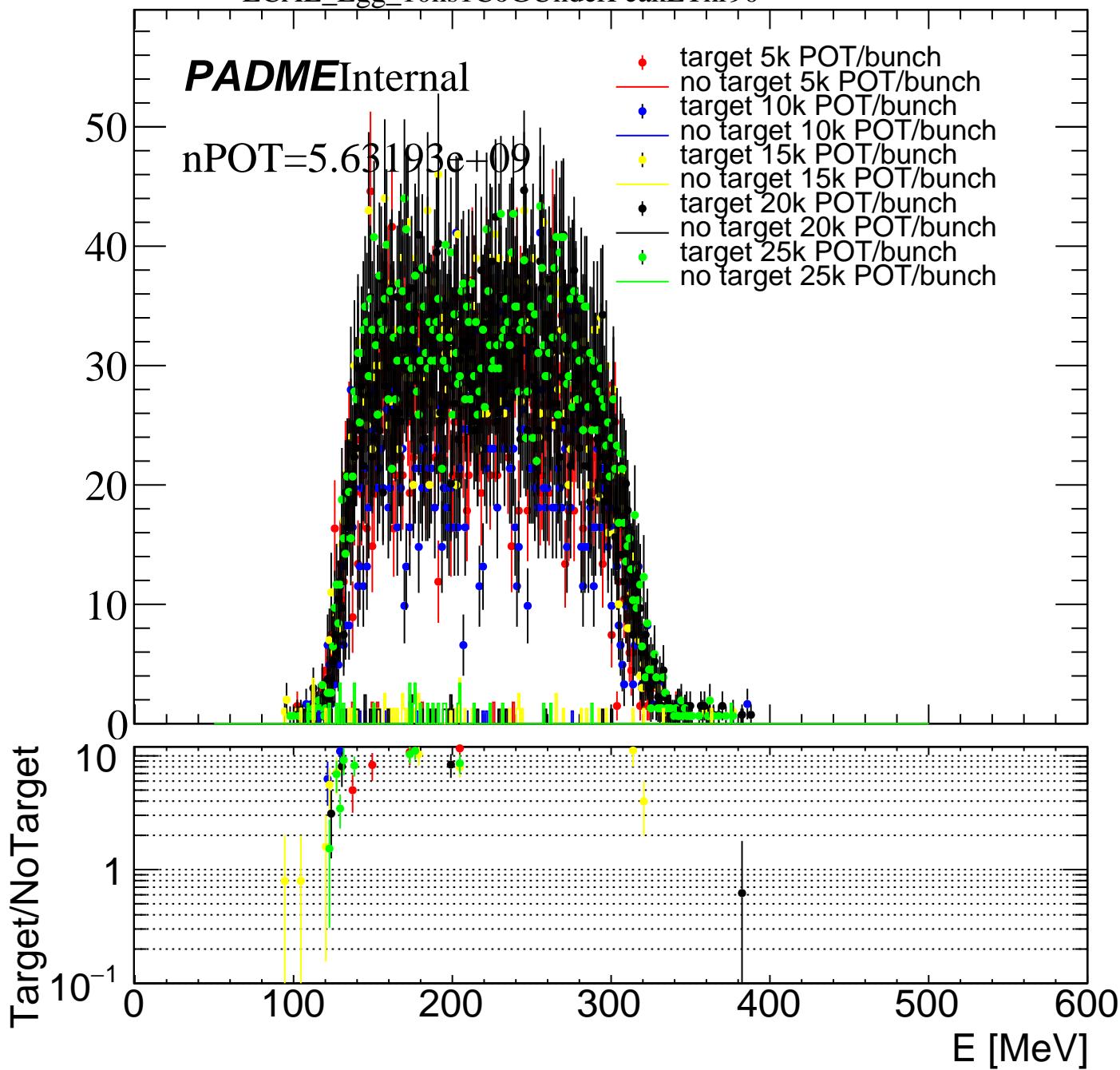
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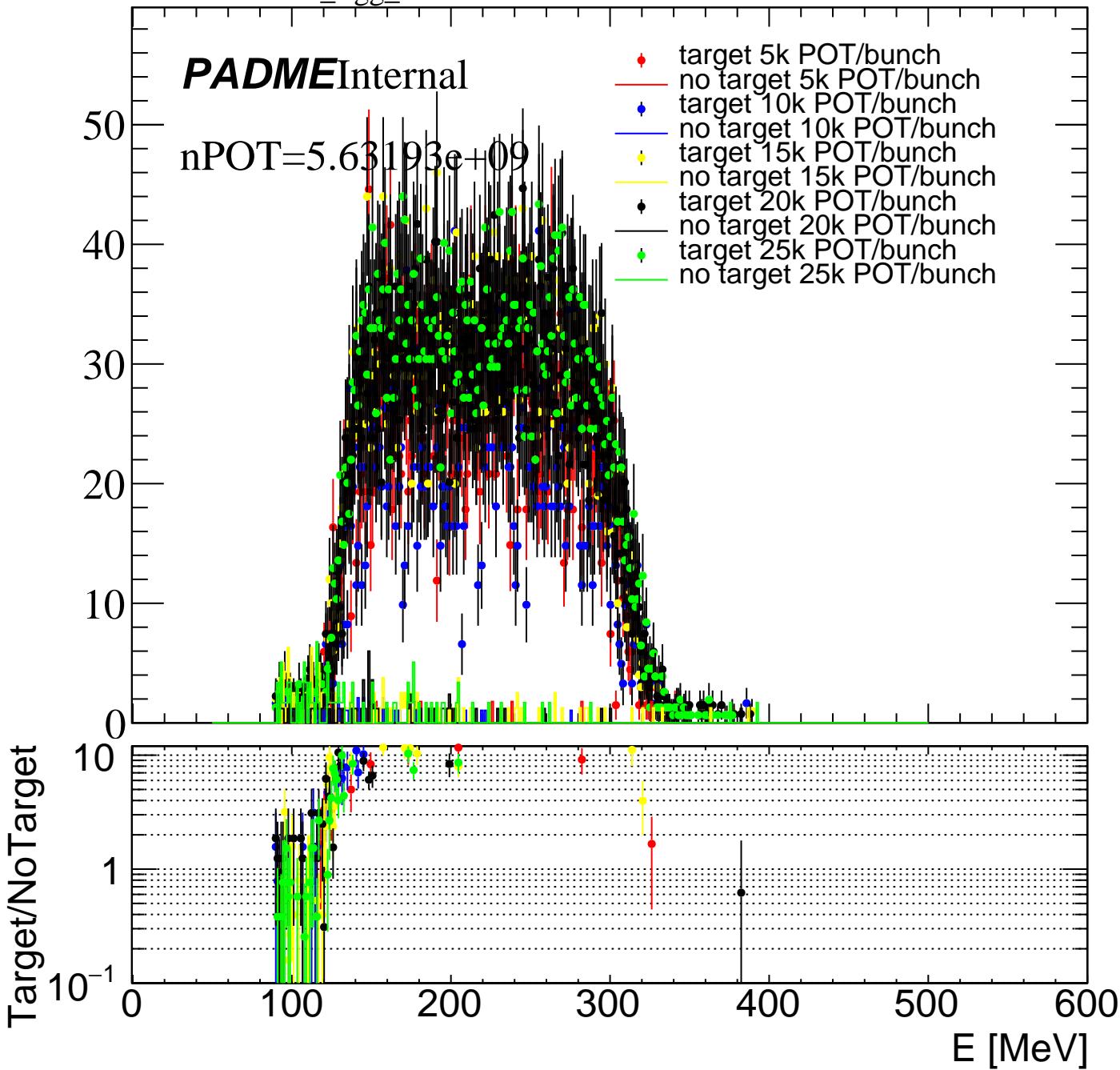
ECAL_Egg_10ns1CoGUnderPeak



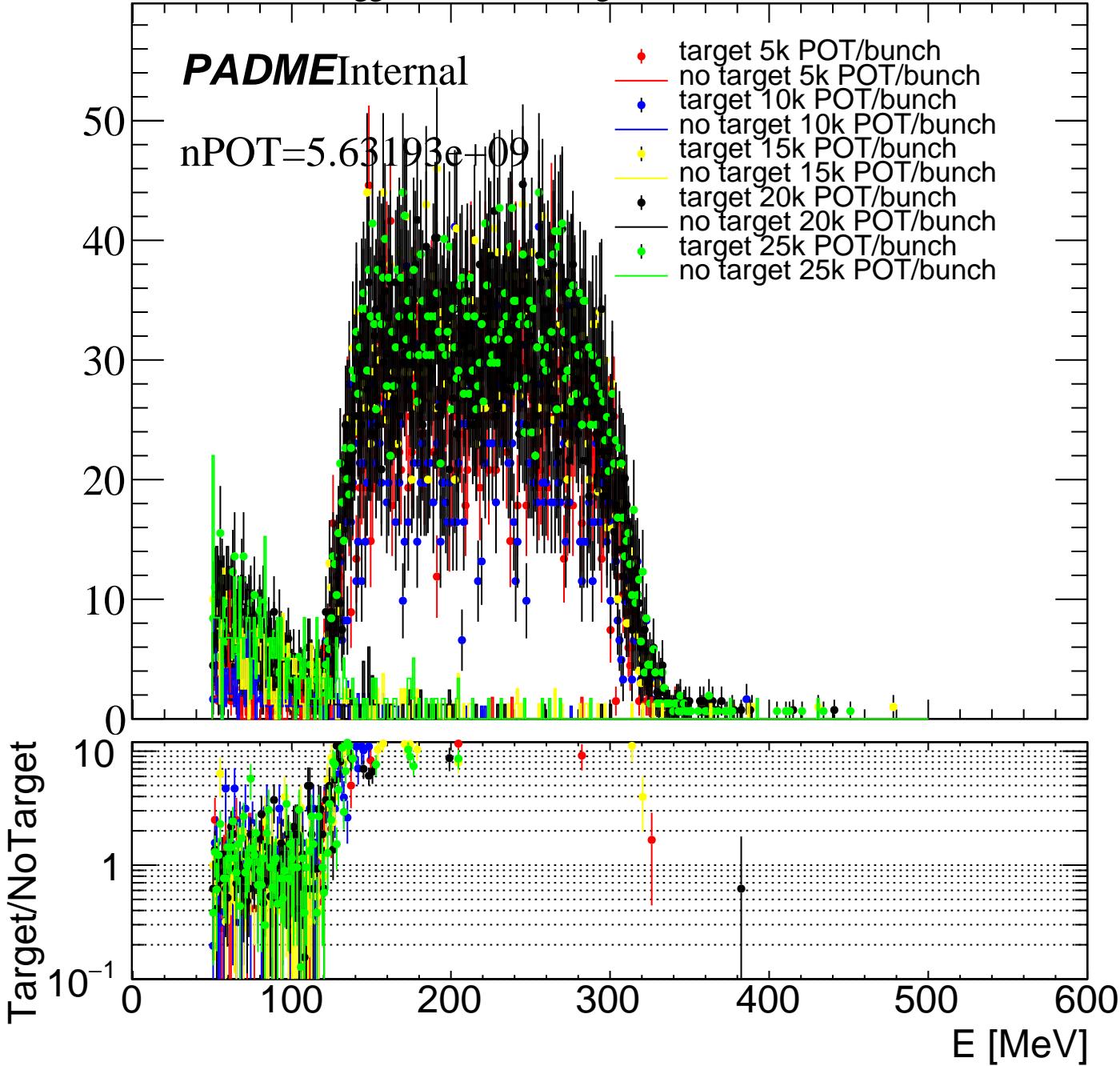
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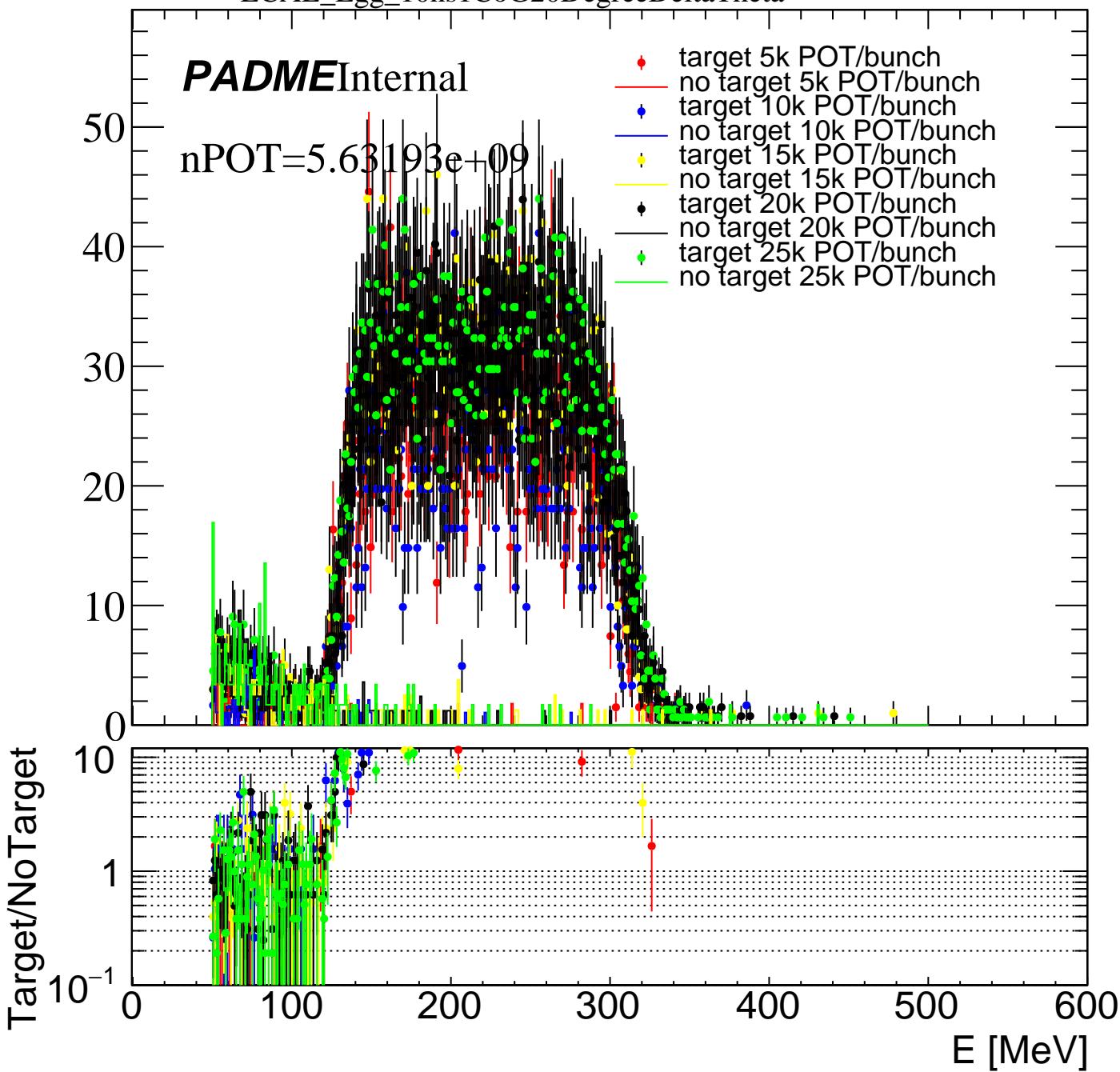
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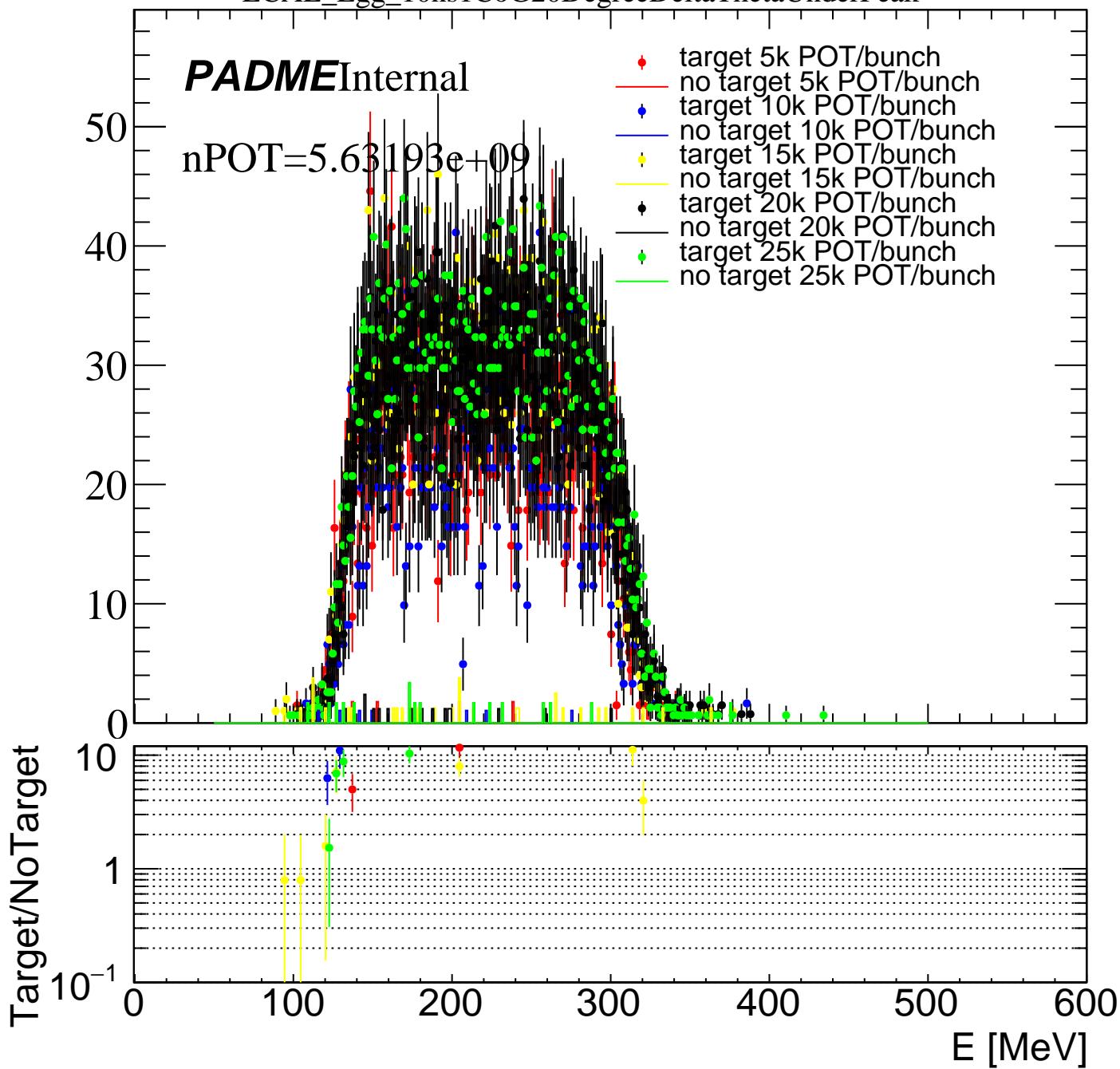
ECAL_Egg_10ns1CoG20Degree



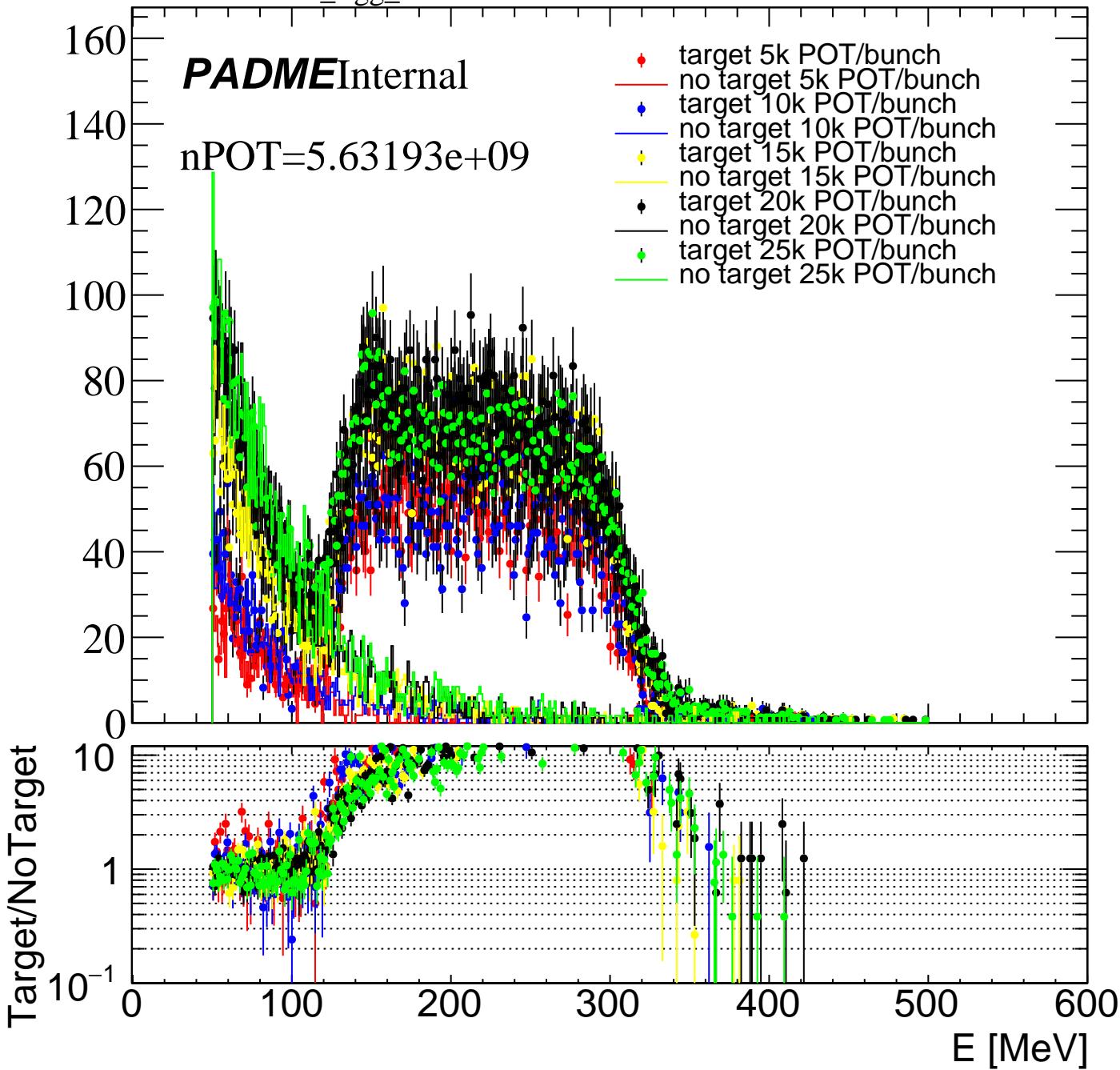
ECAL_Egg_10ns1CoG20DegreeDeltaTheta



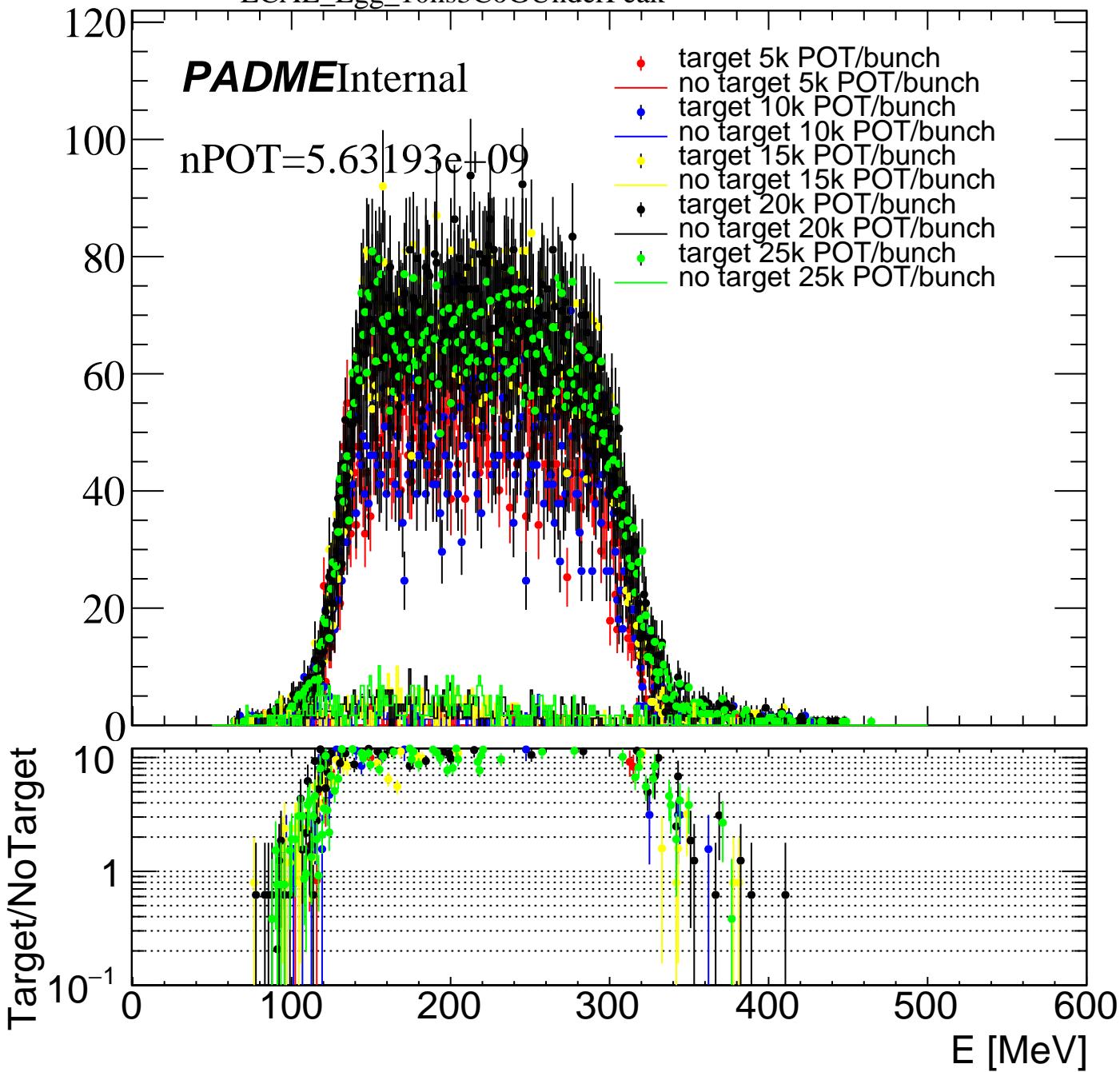
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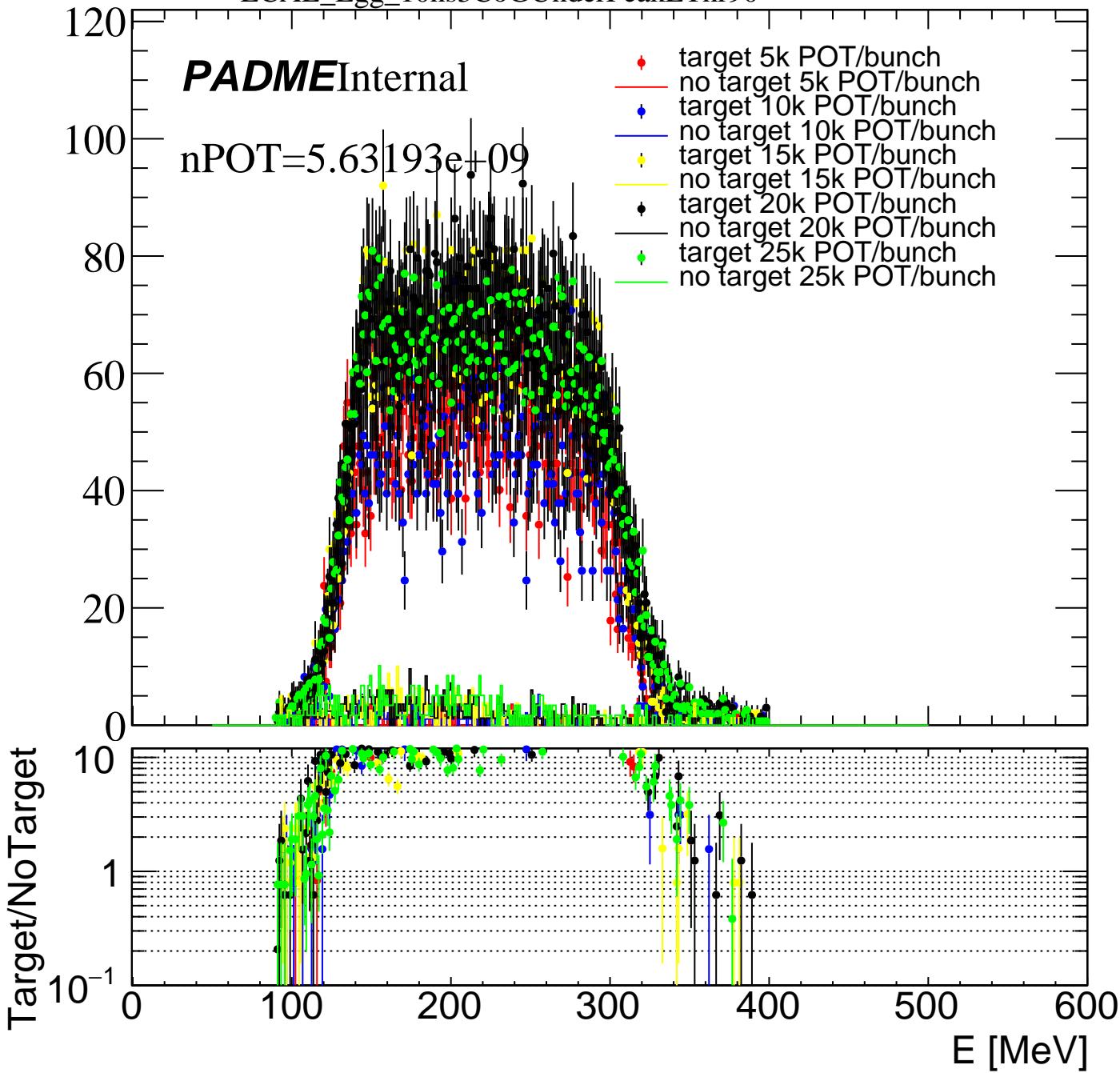
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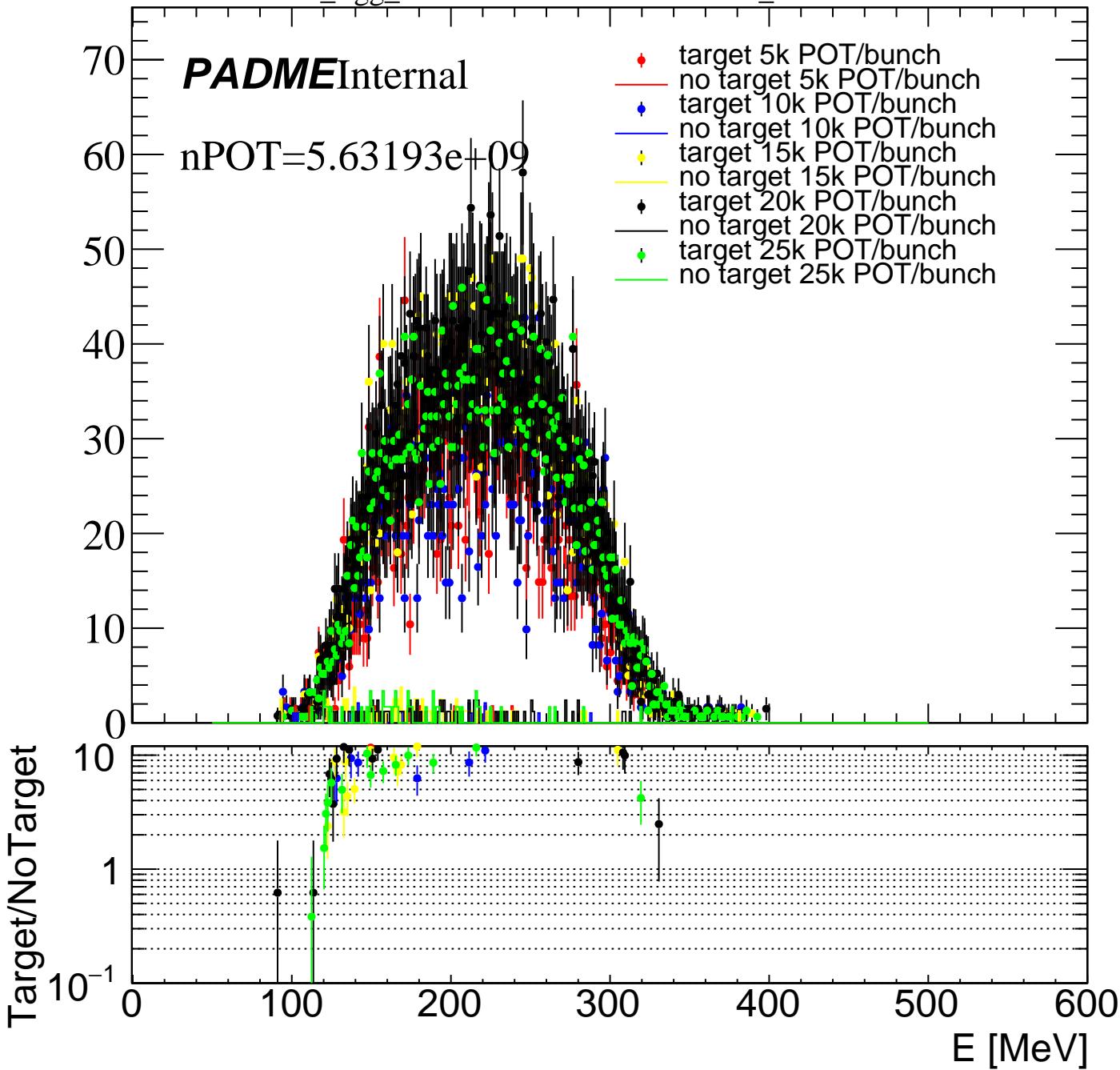
ECAL_Egg_10ns3CoGUnderPeak



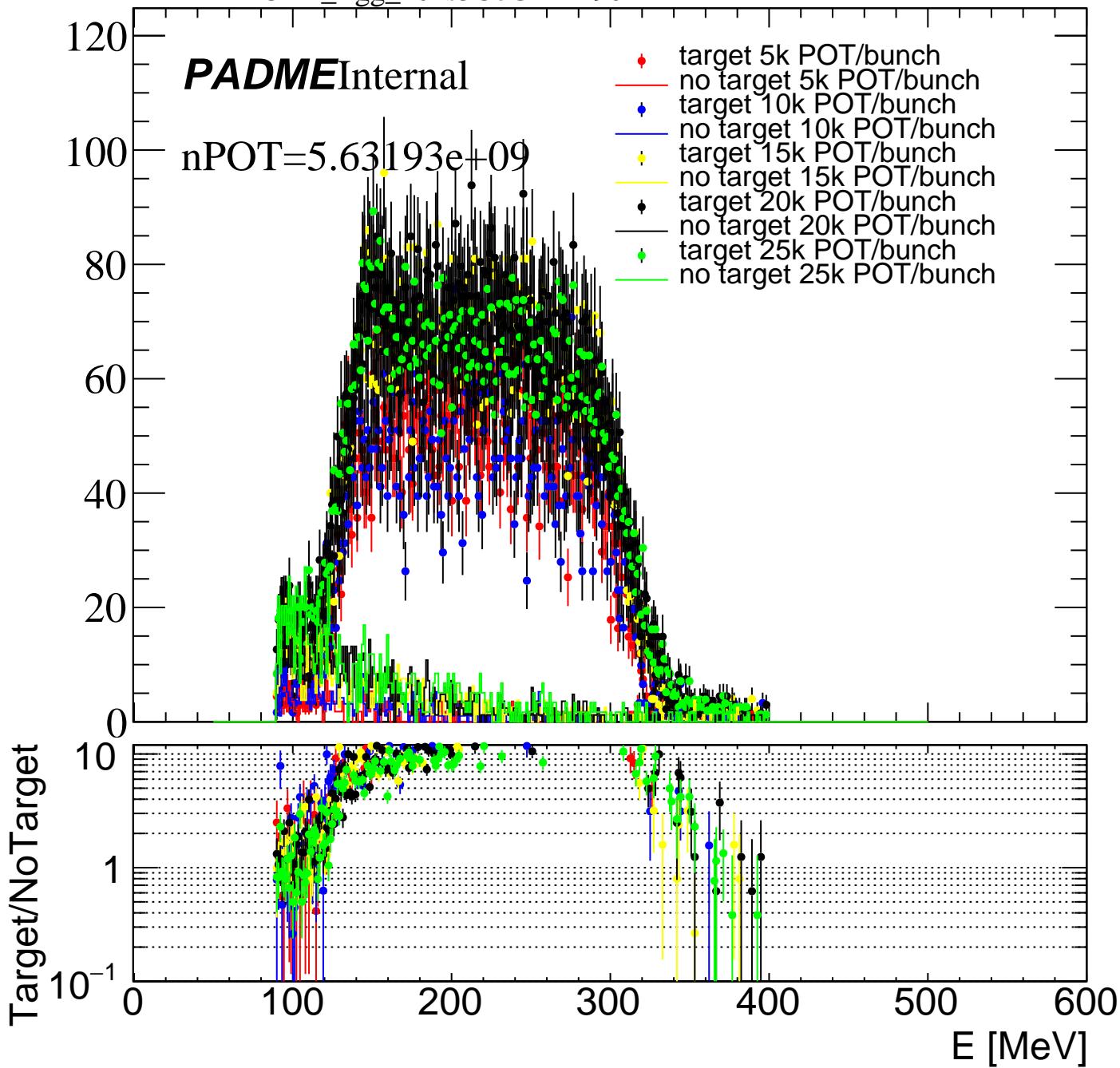
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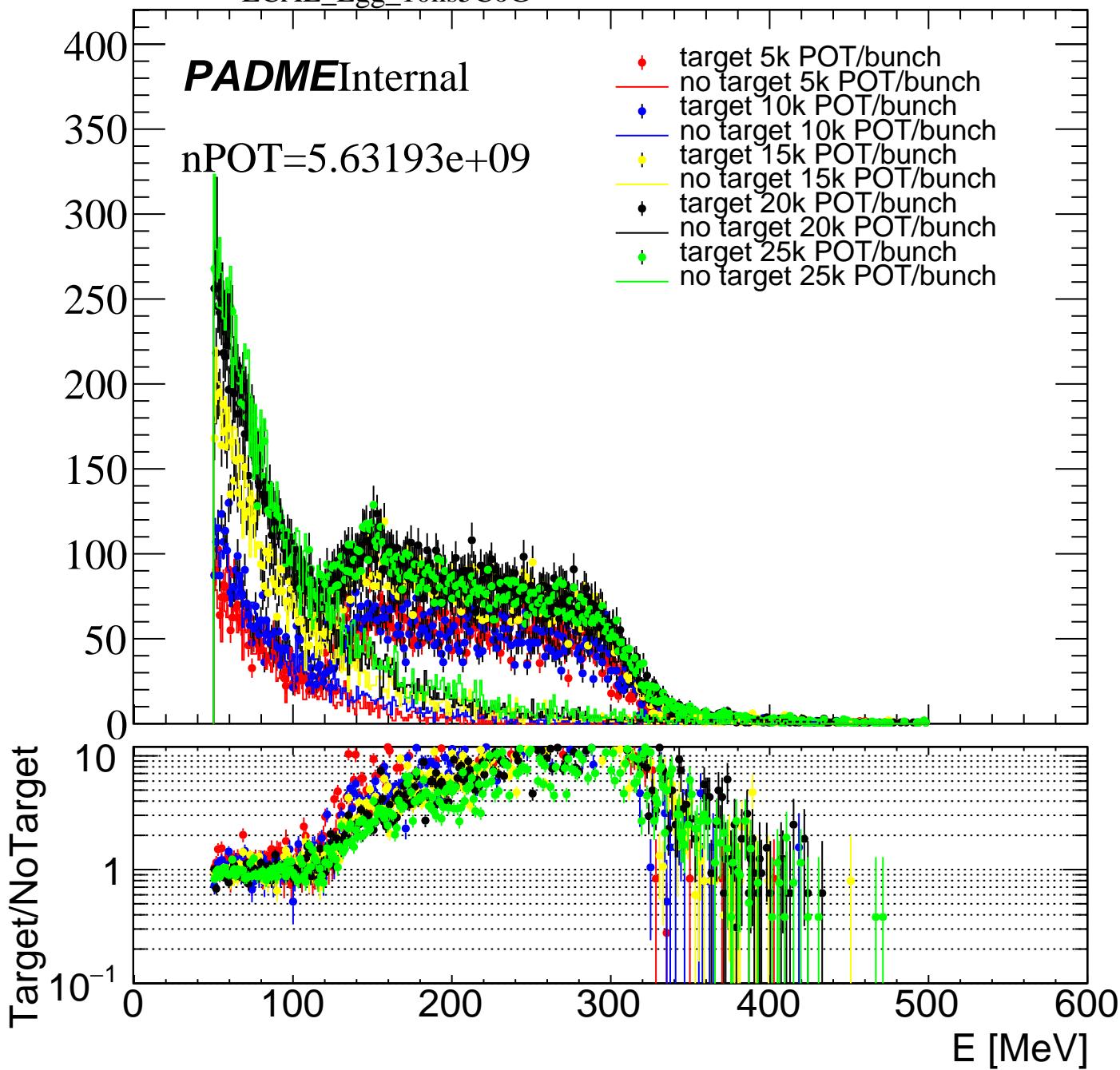
ECAL_Egg_10ns3CoGUnderPeakEThr90_FRY



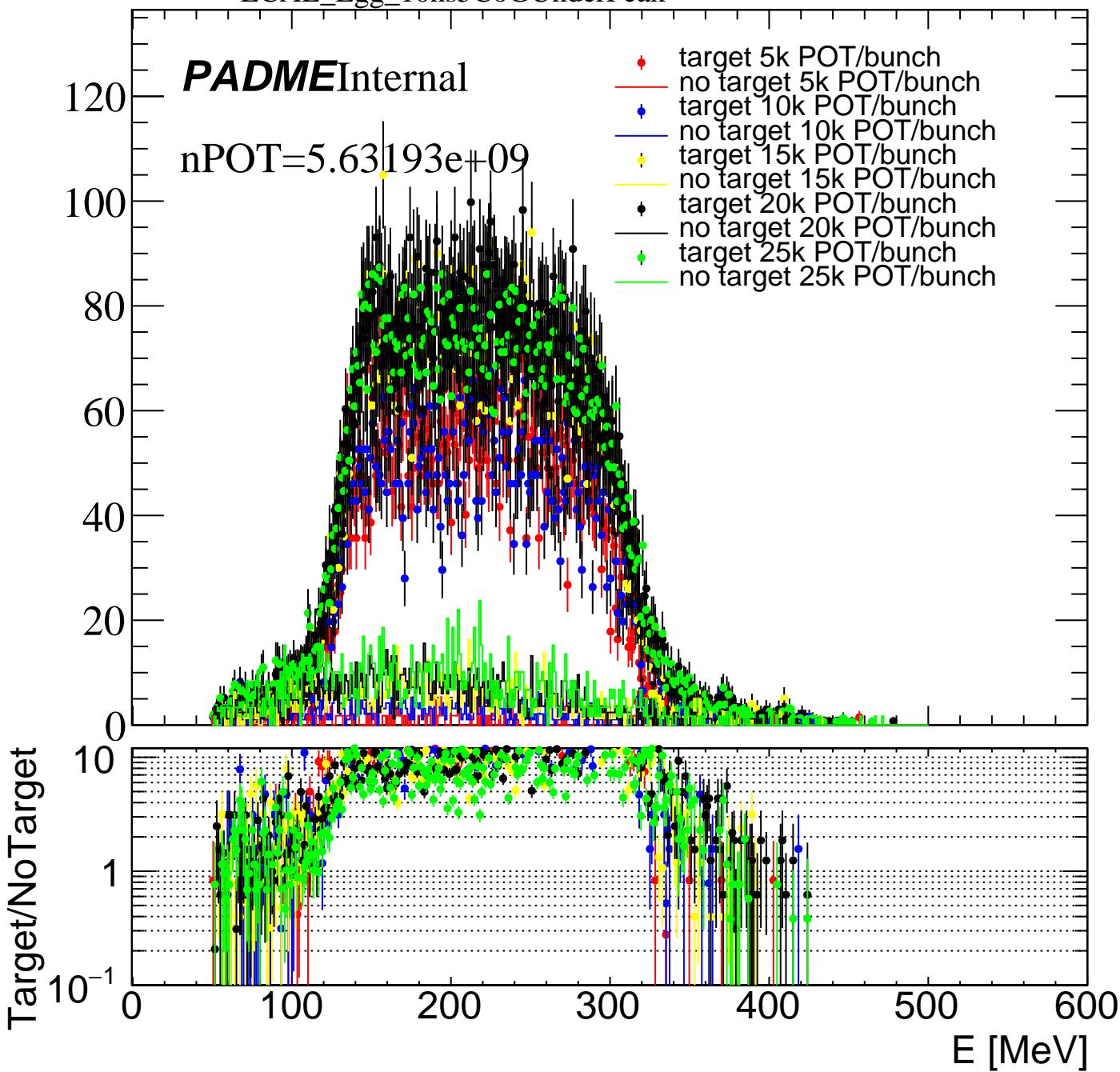
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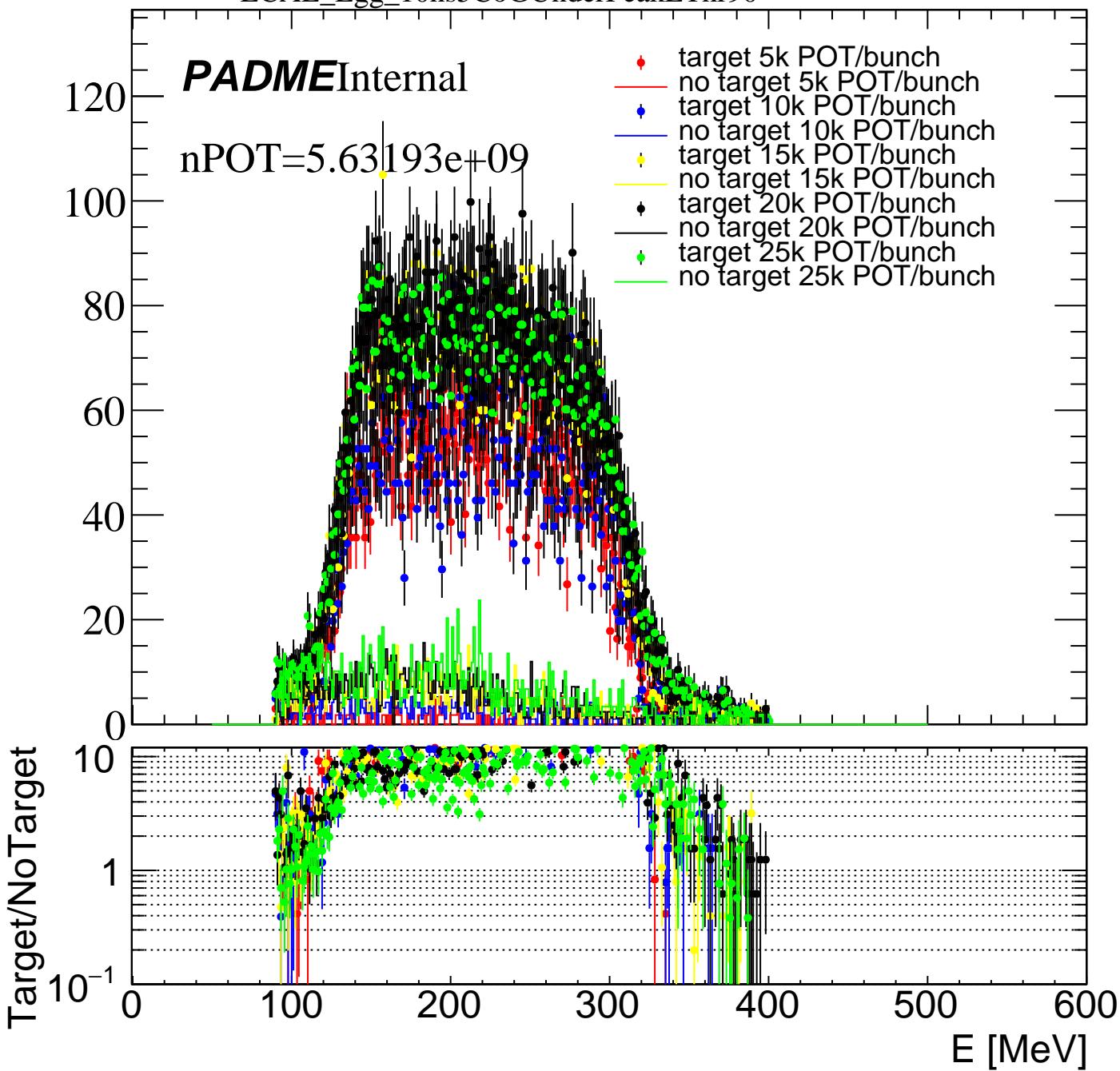
ECAL_Egg_10ns5CoG



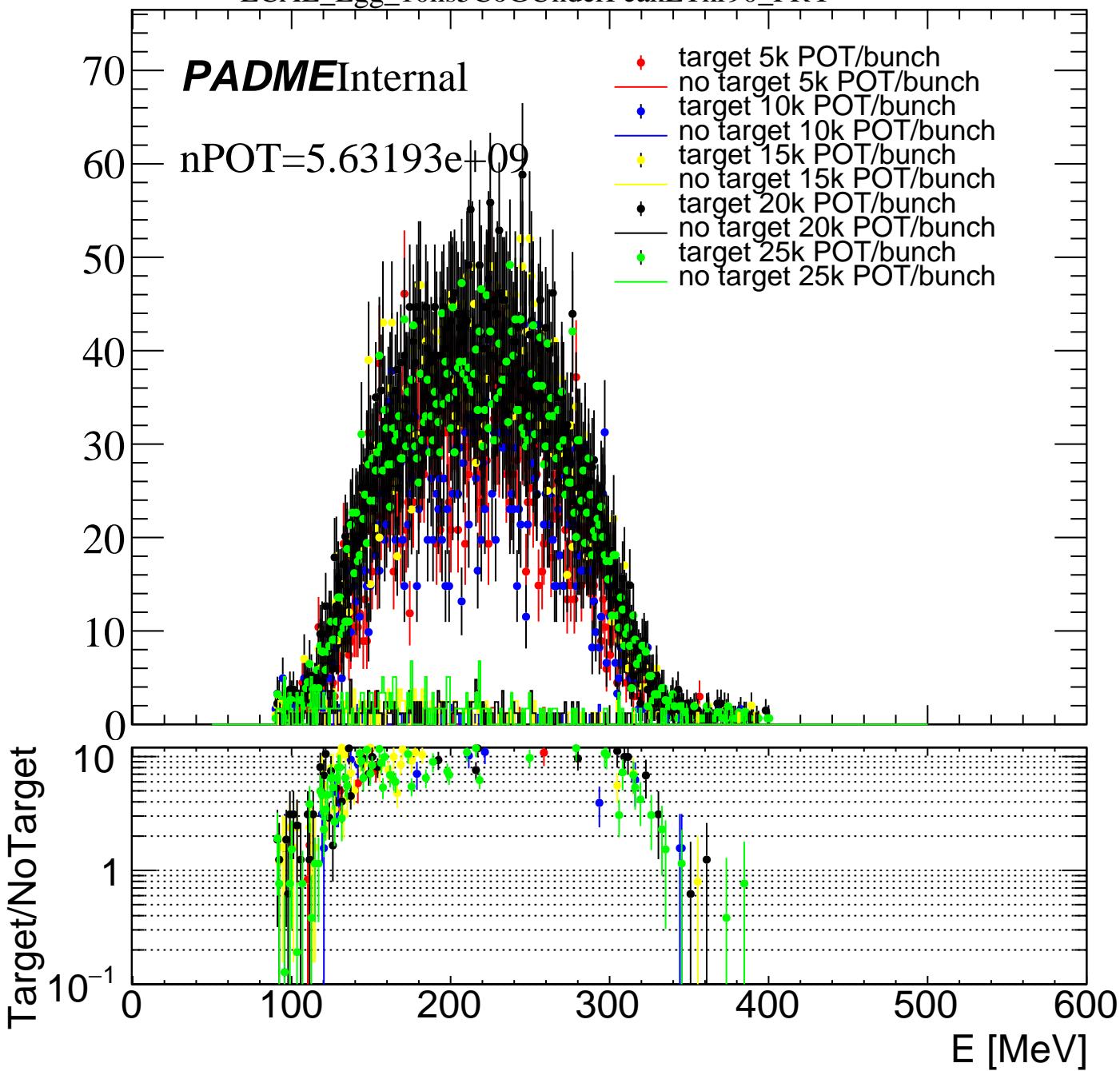
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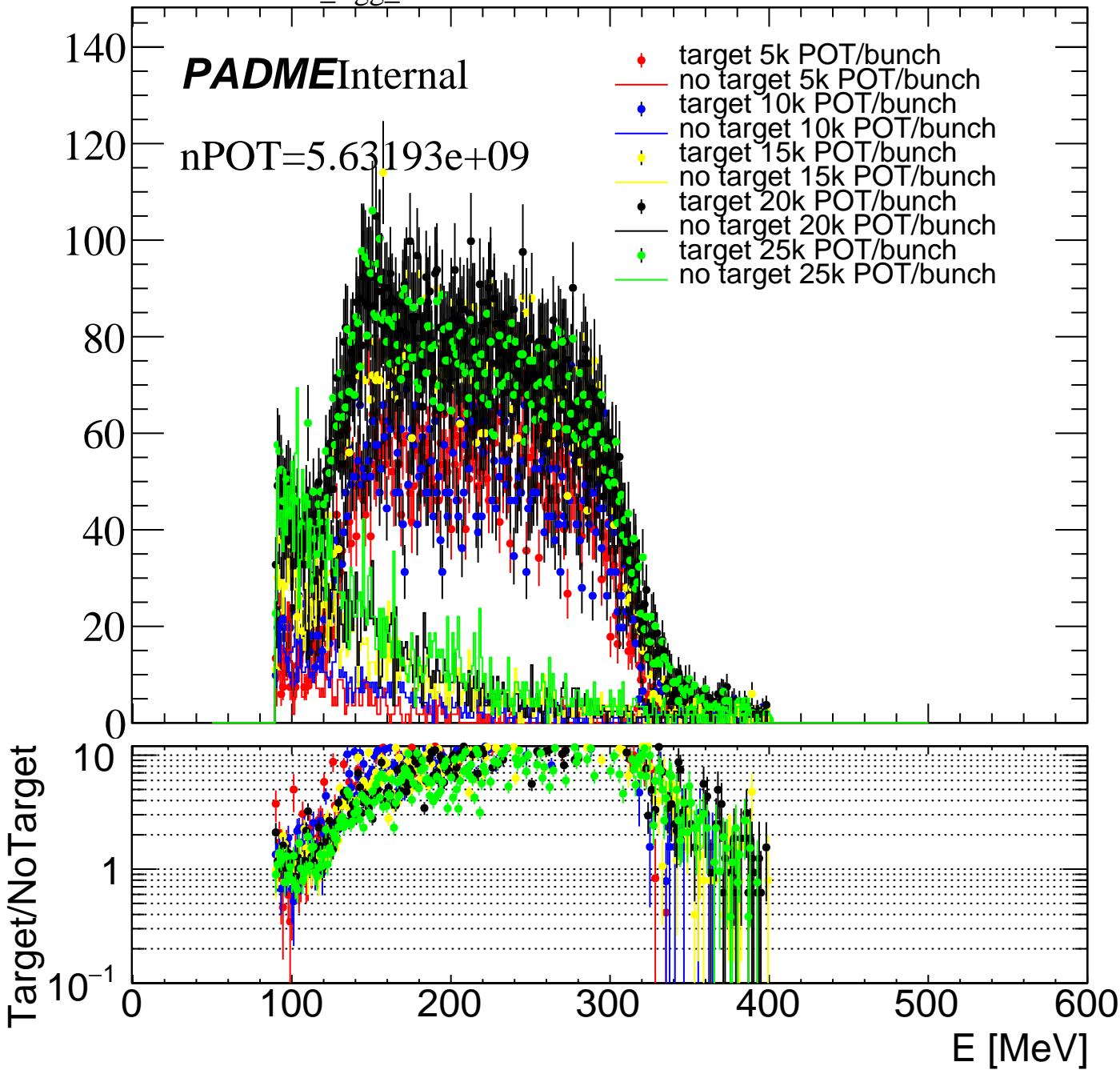
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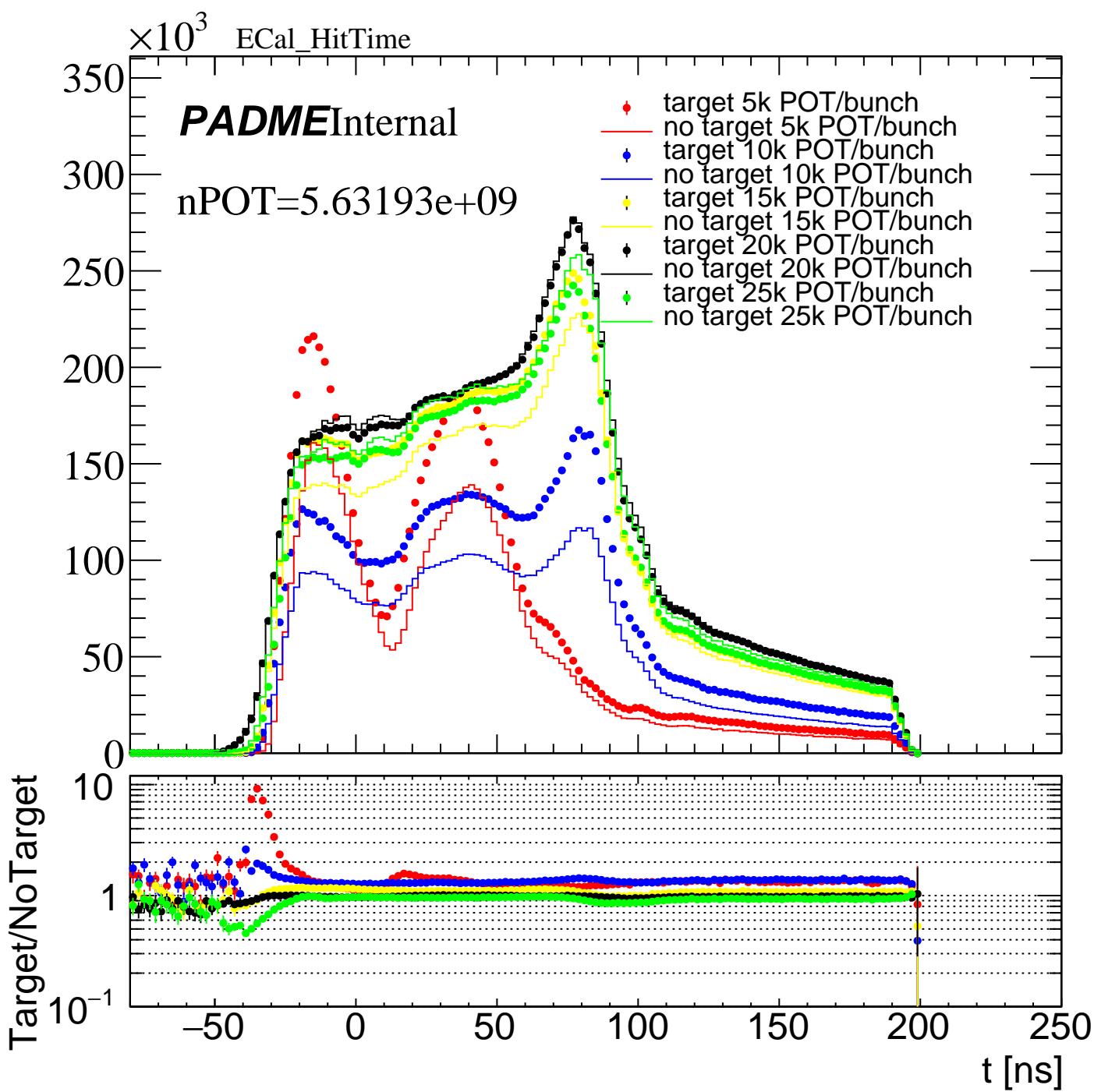


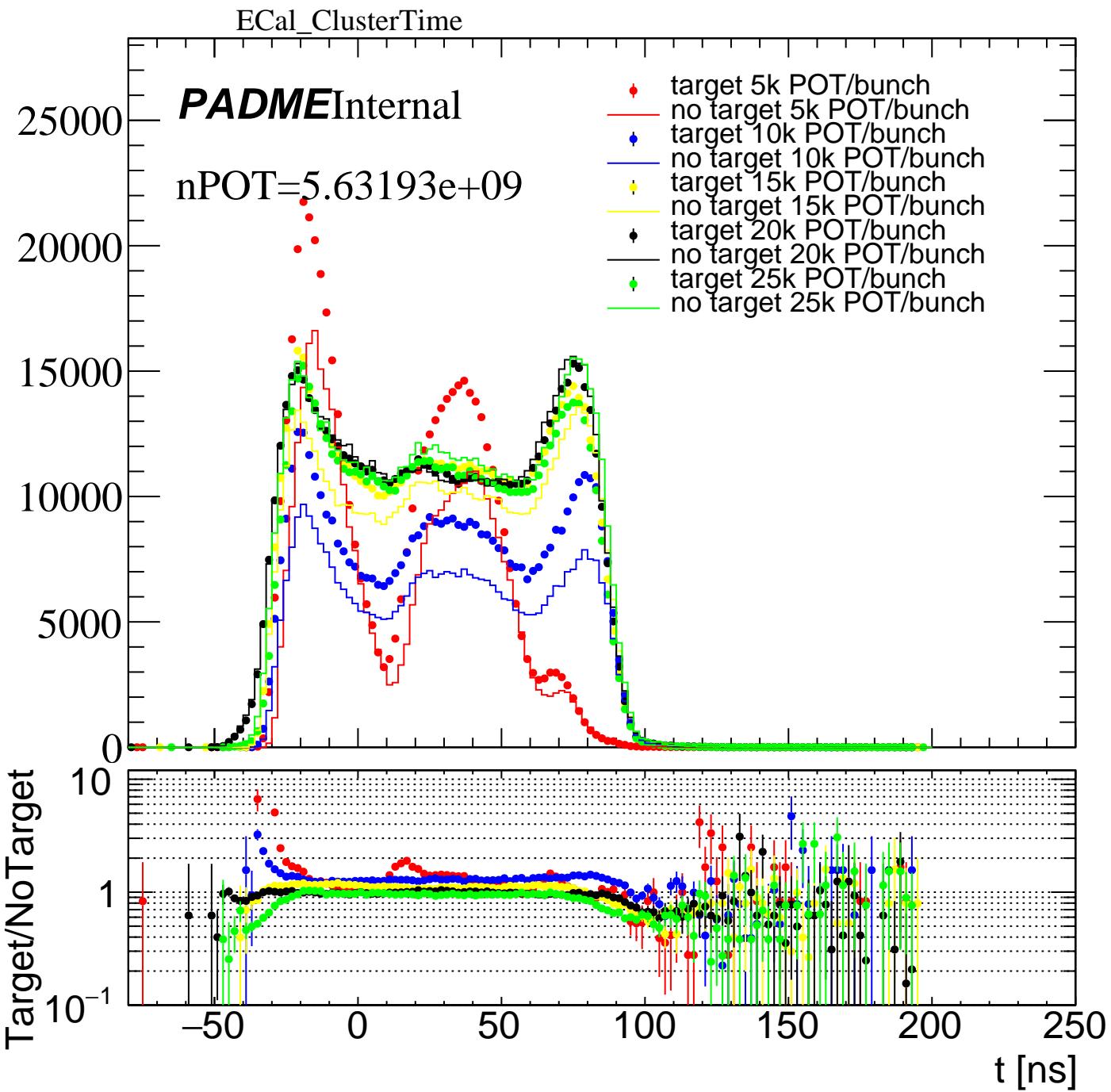
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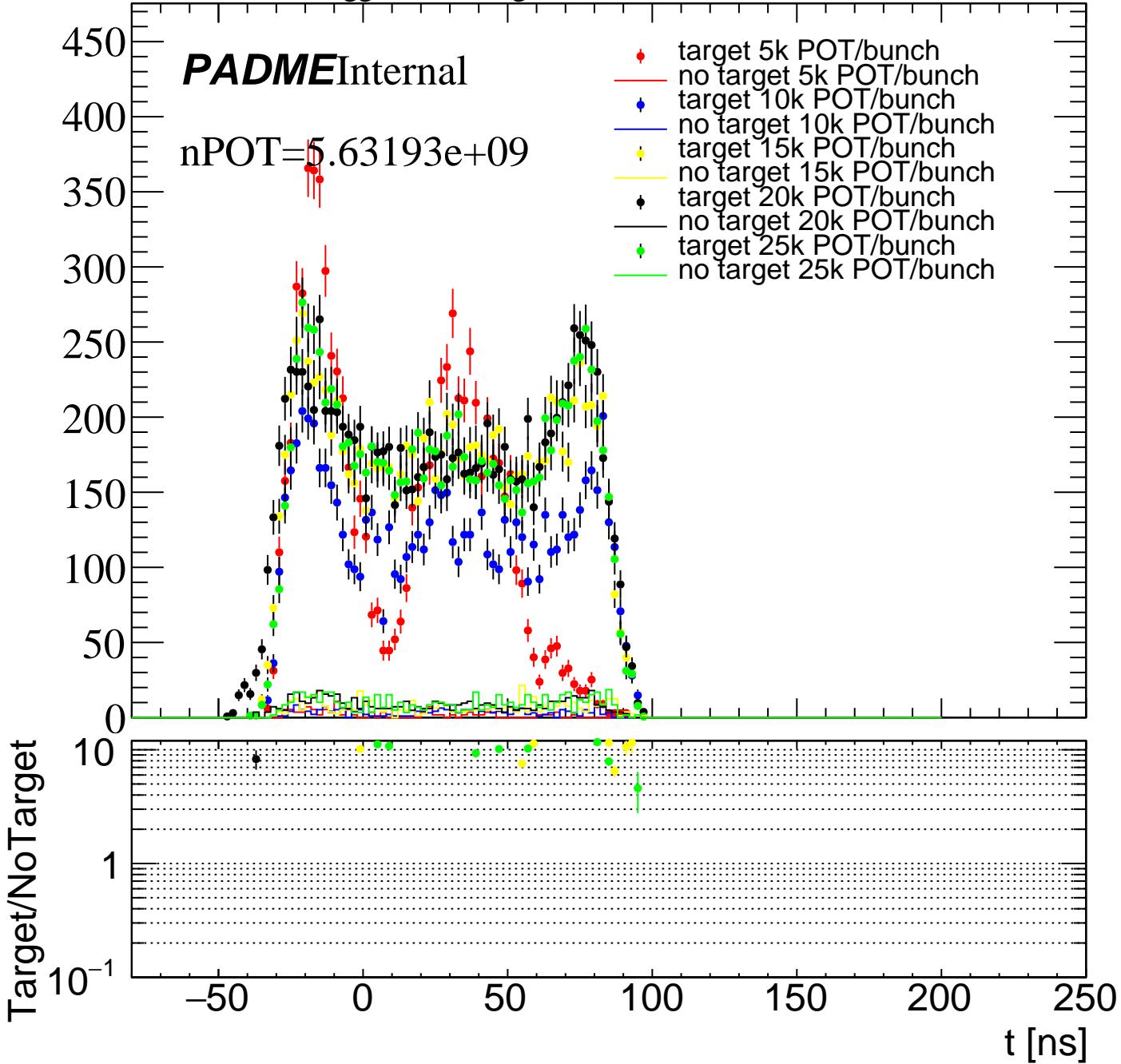
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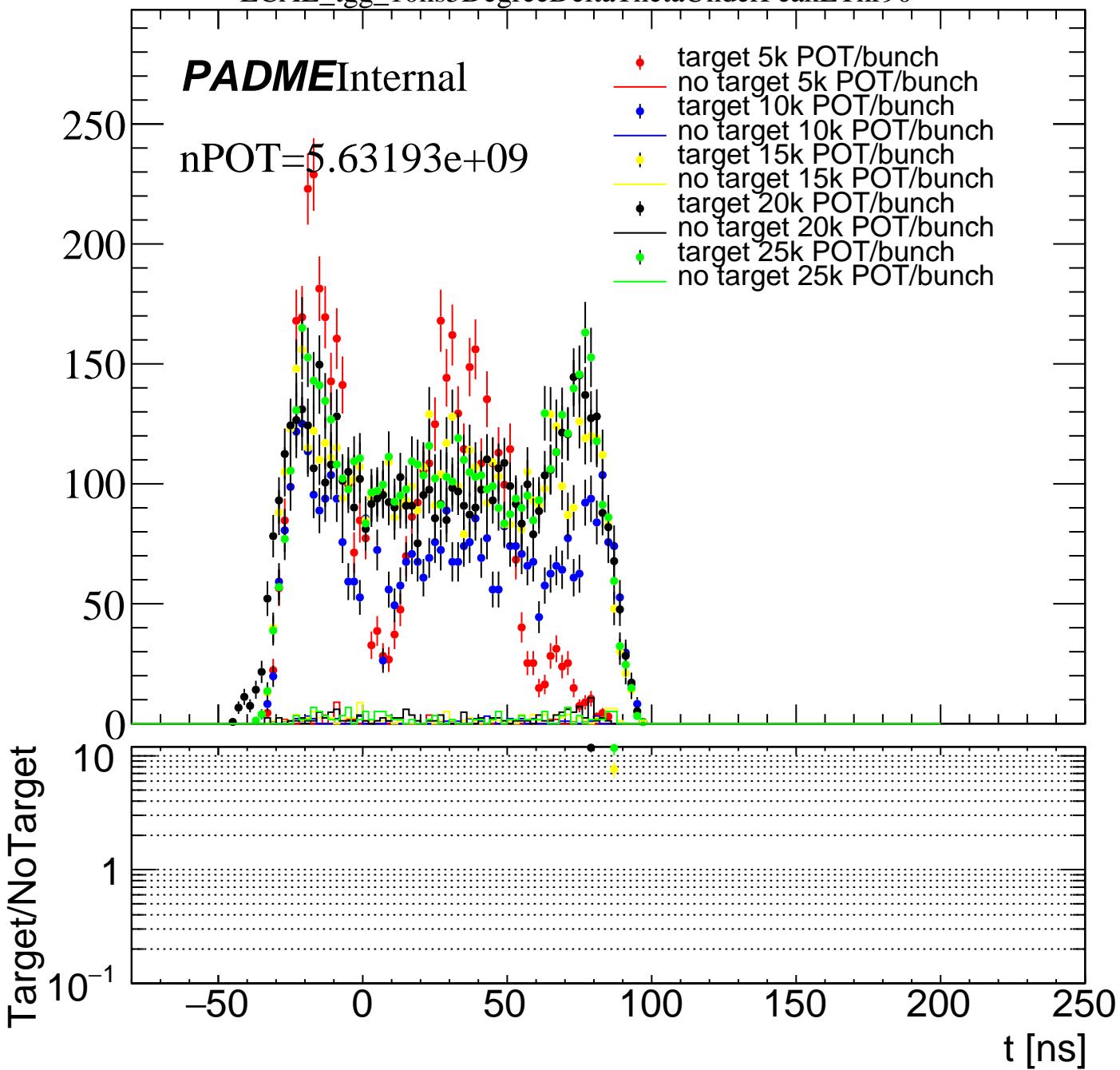




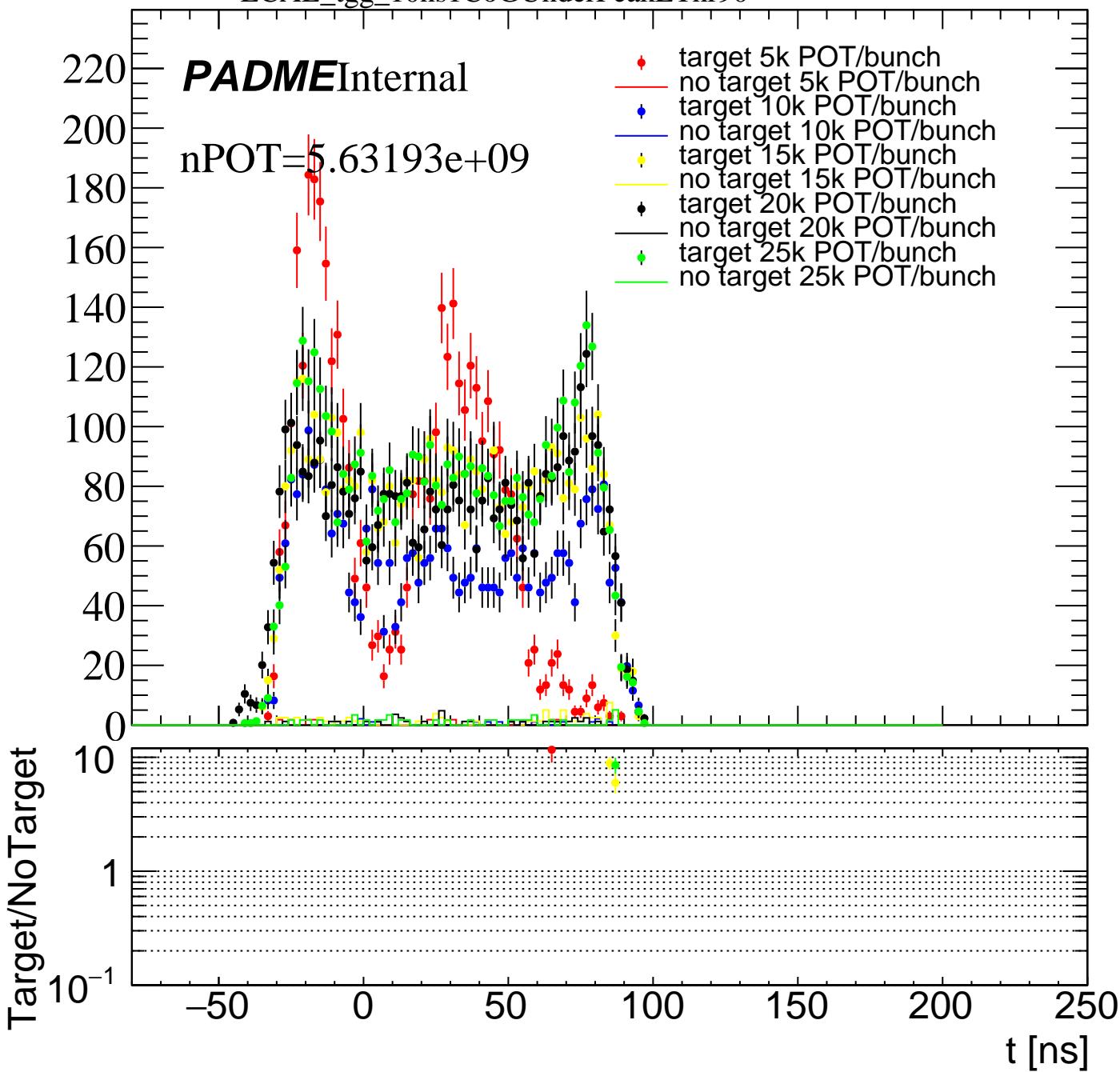
ECAL_tgg_10ns20DegreeDeltaThetaUnderPeakEThr90



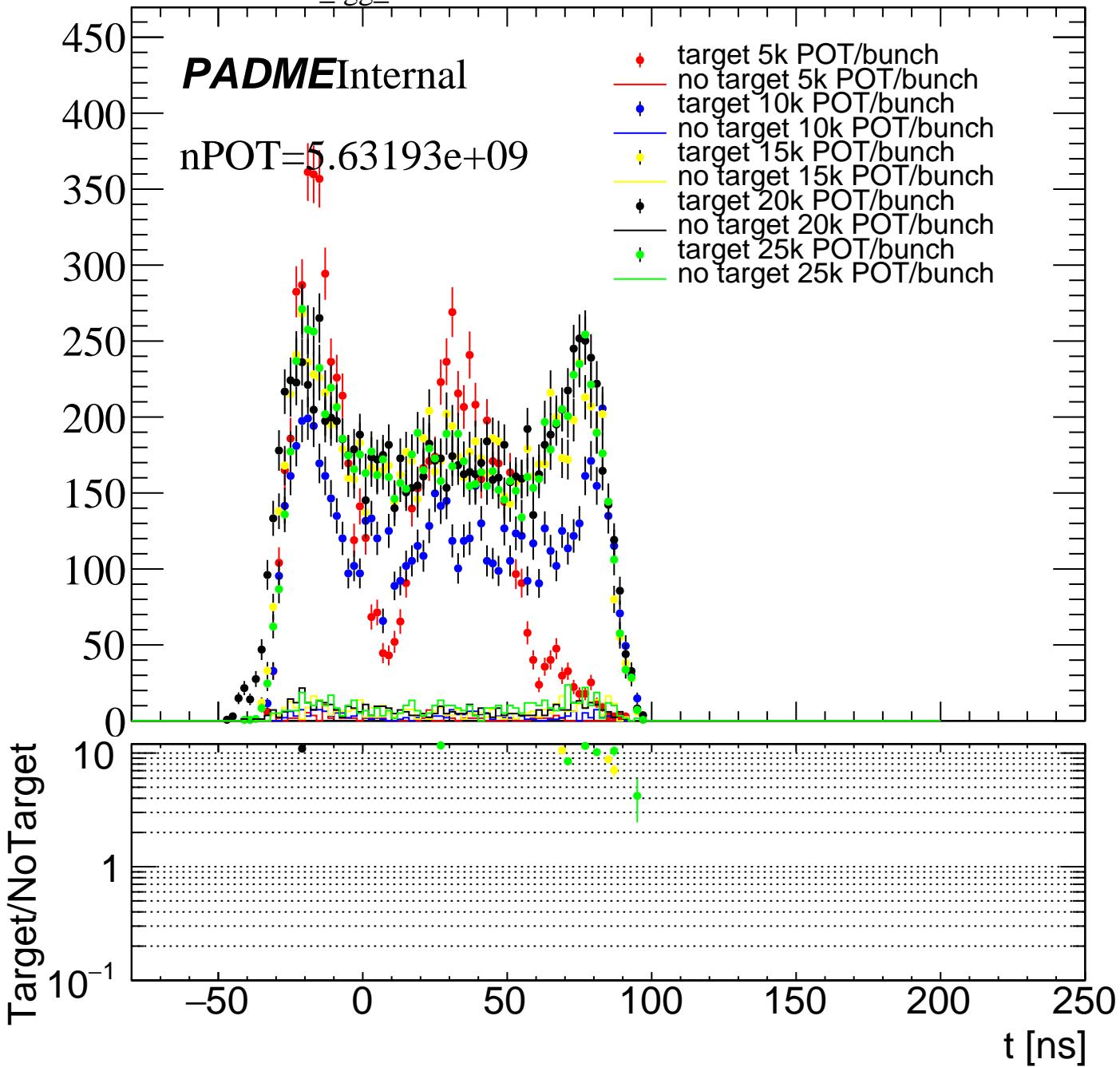
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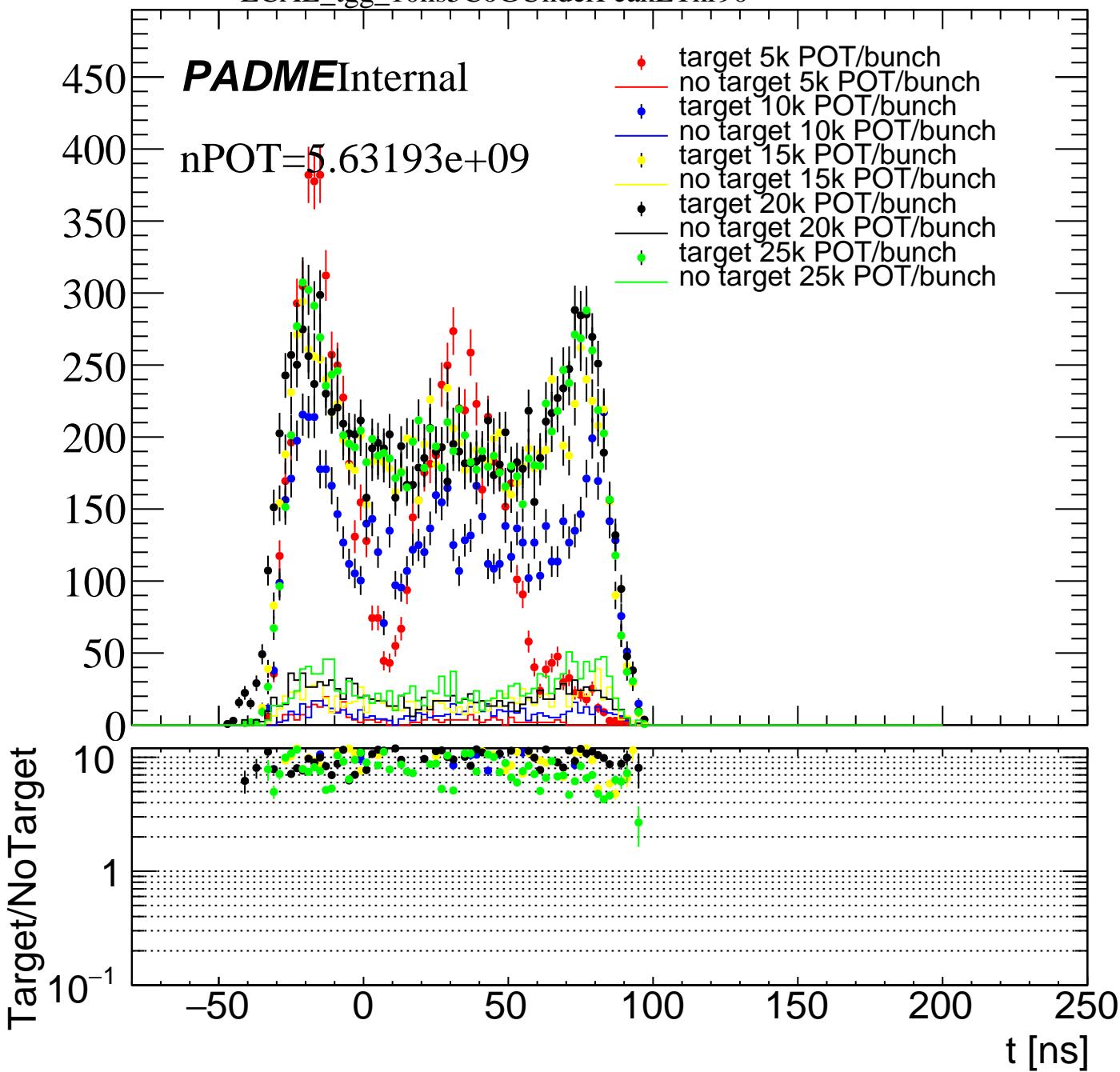
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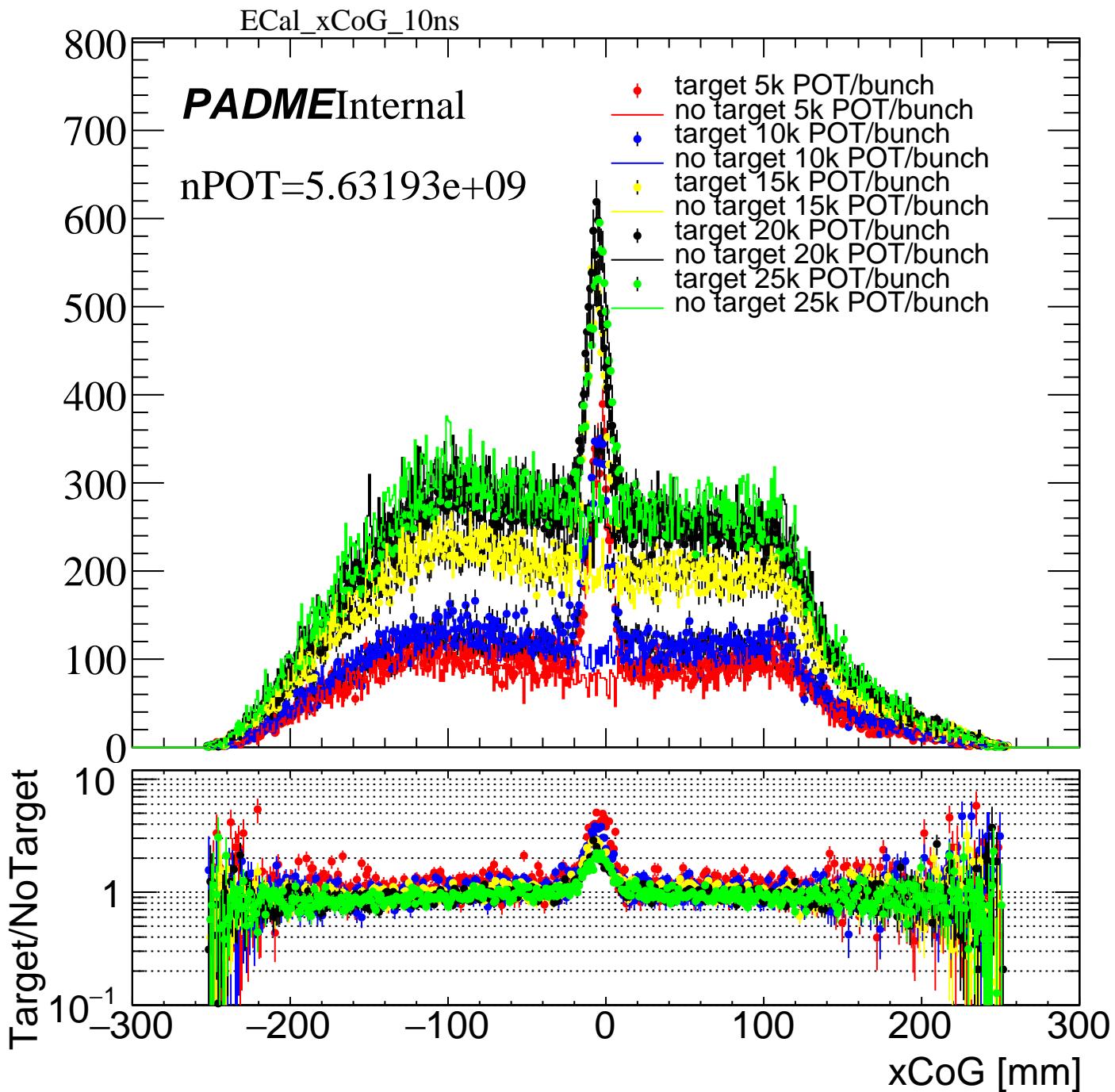


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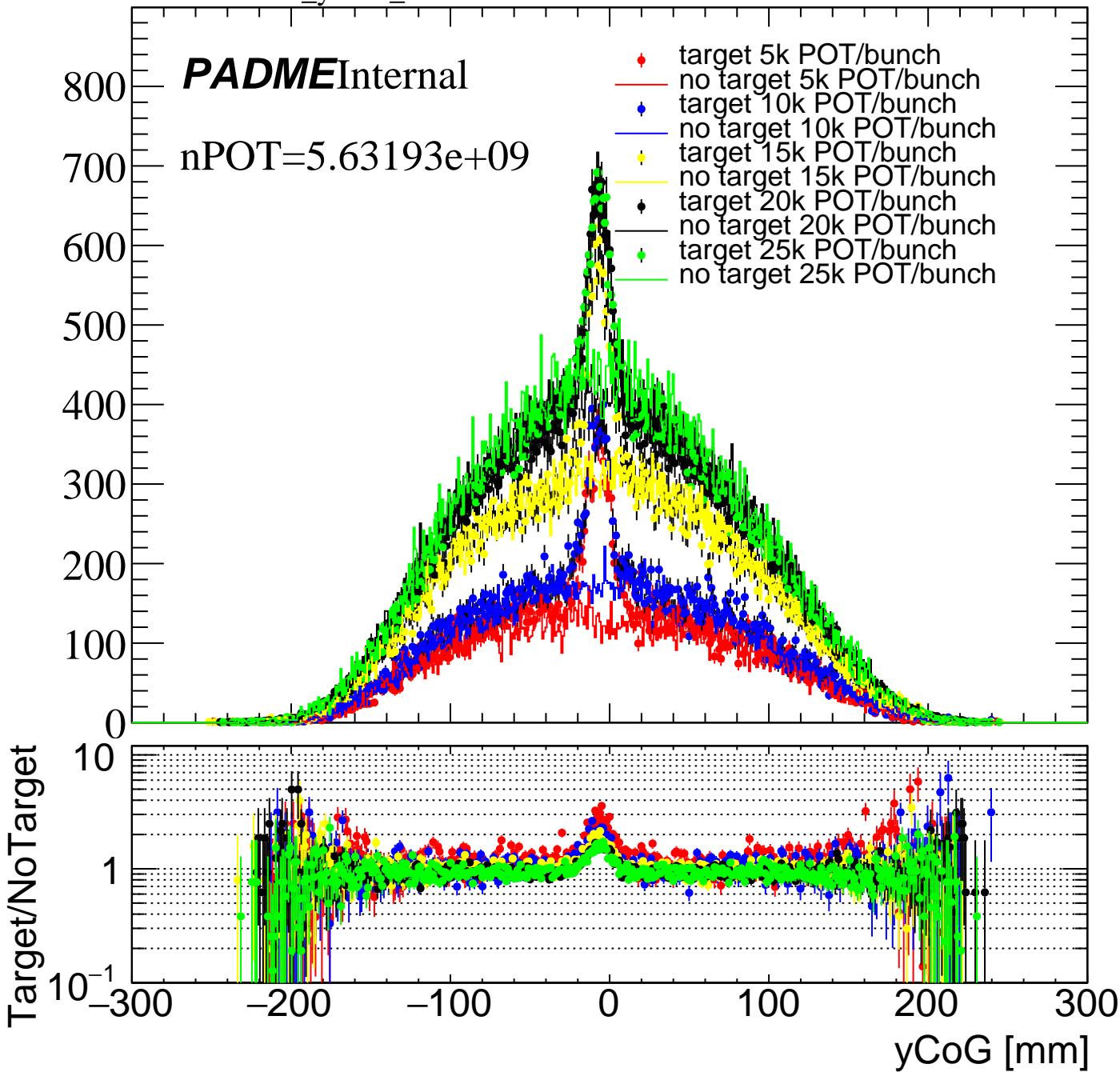


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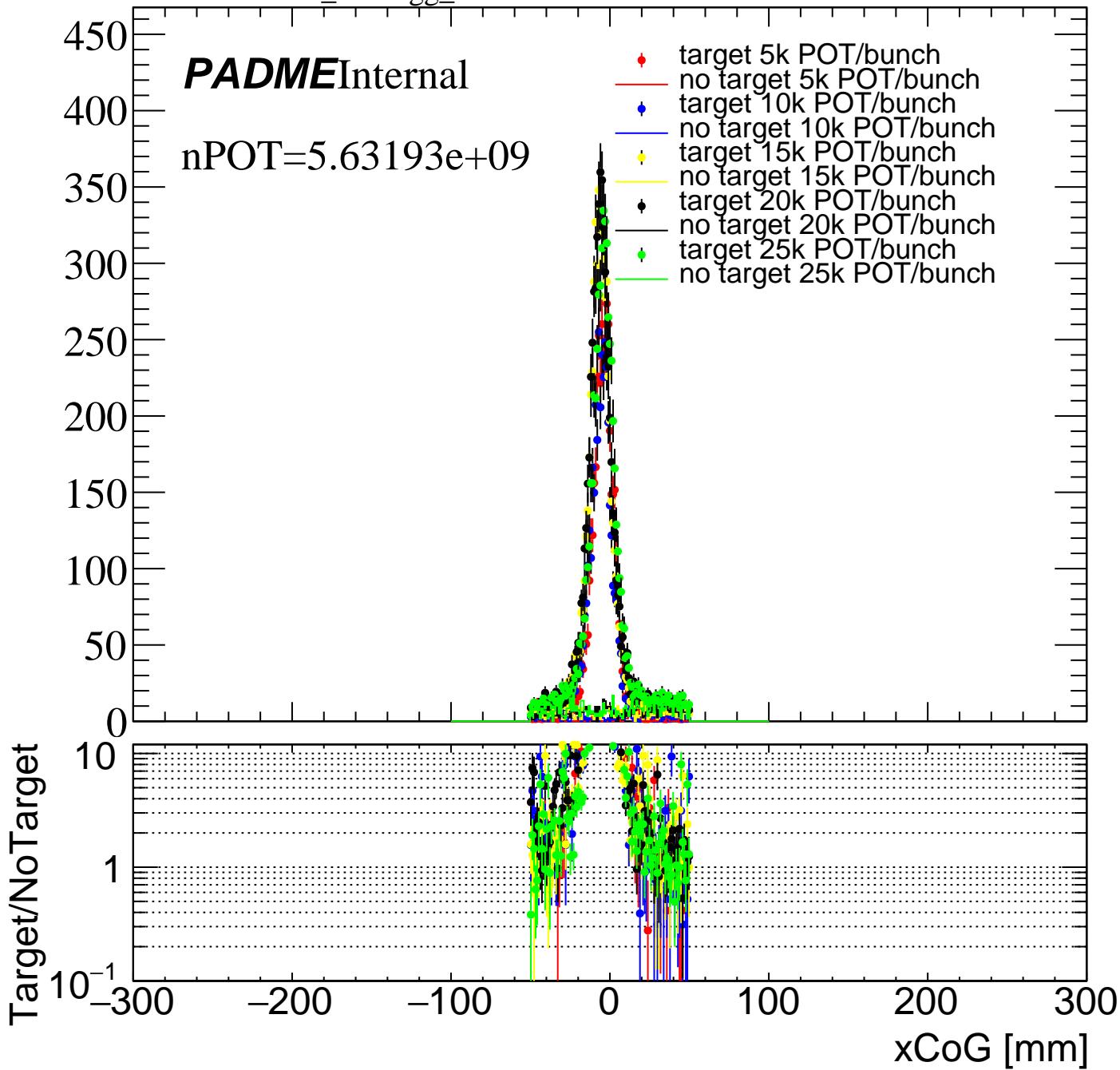


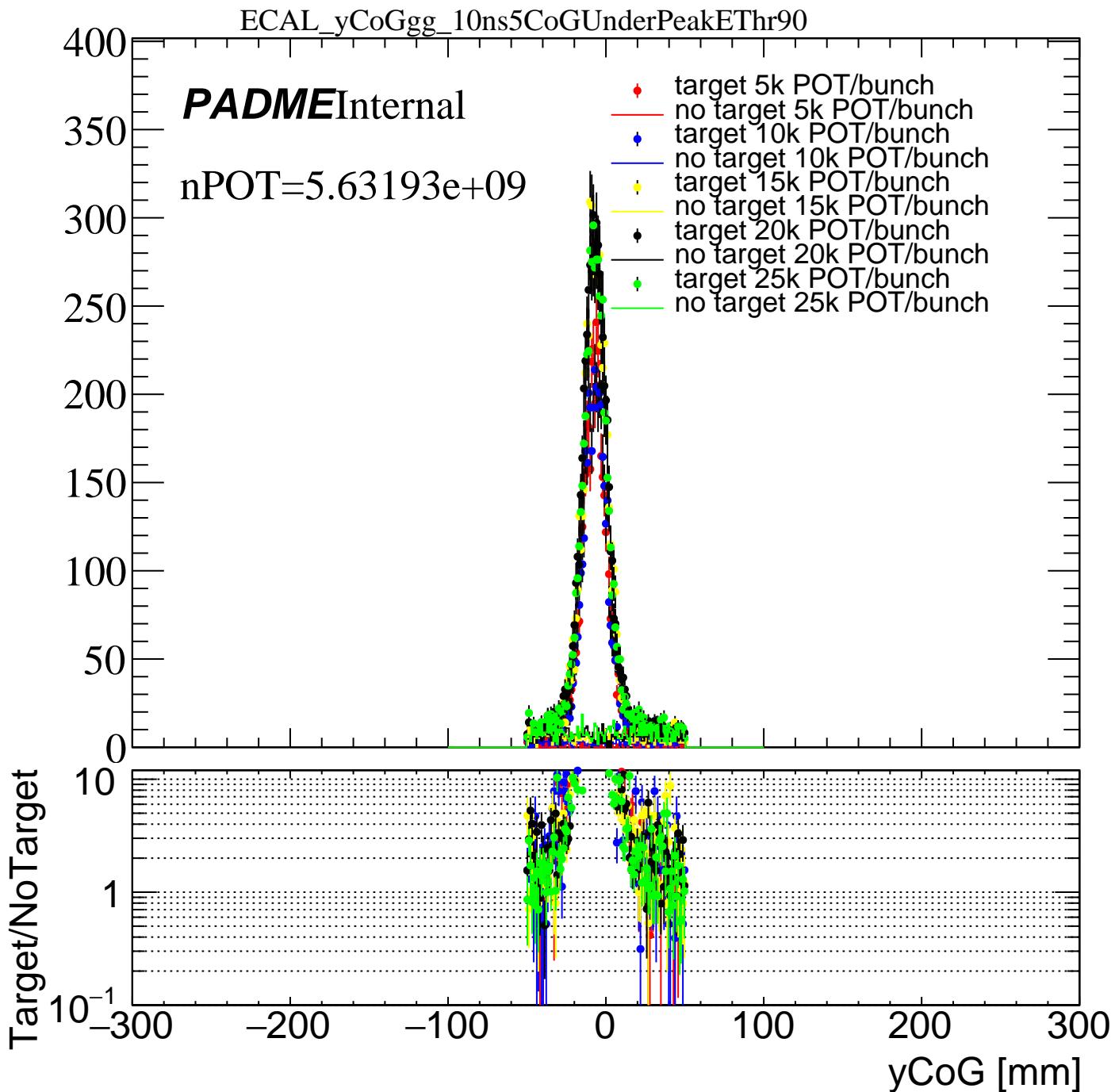


ECal_yCoG_10ns

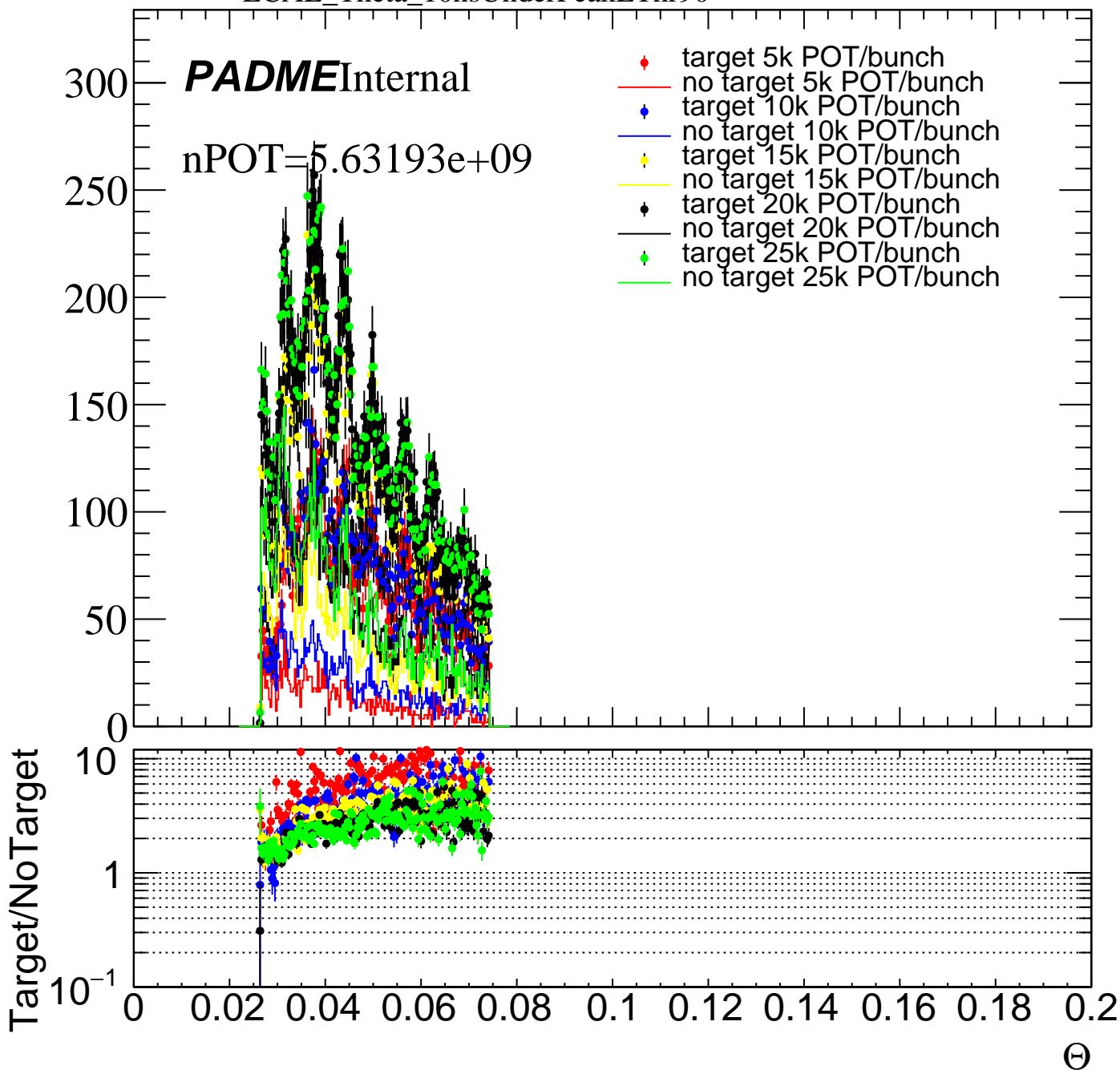


ECAL_xCoGgg_10ns5CoGUnderPeakEThr90

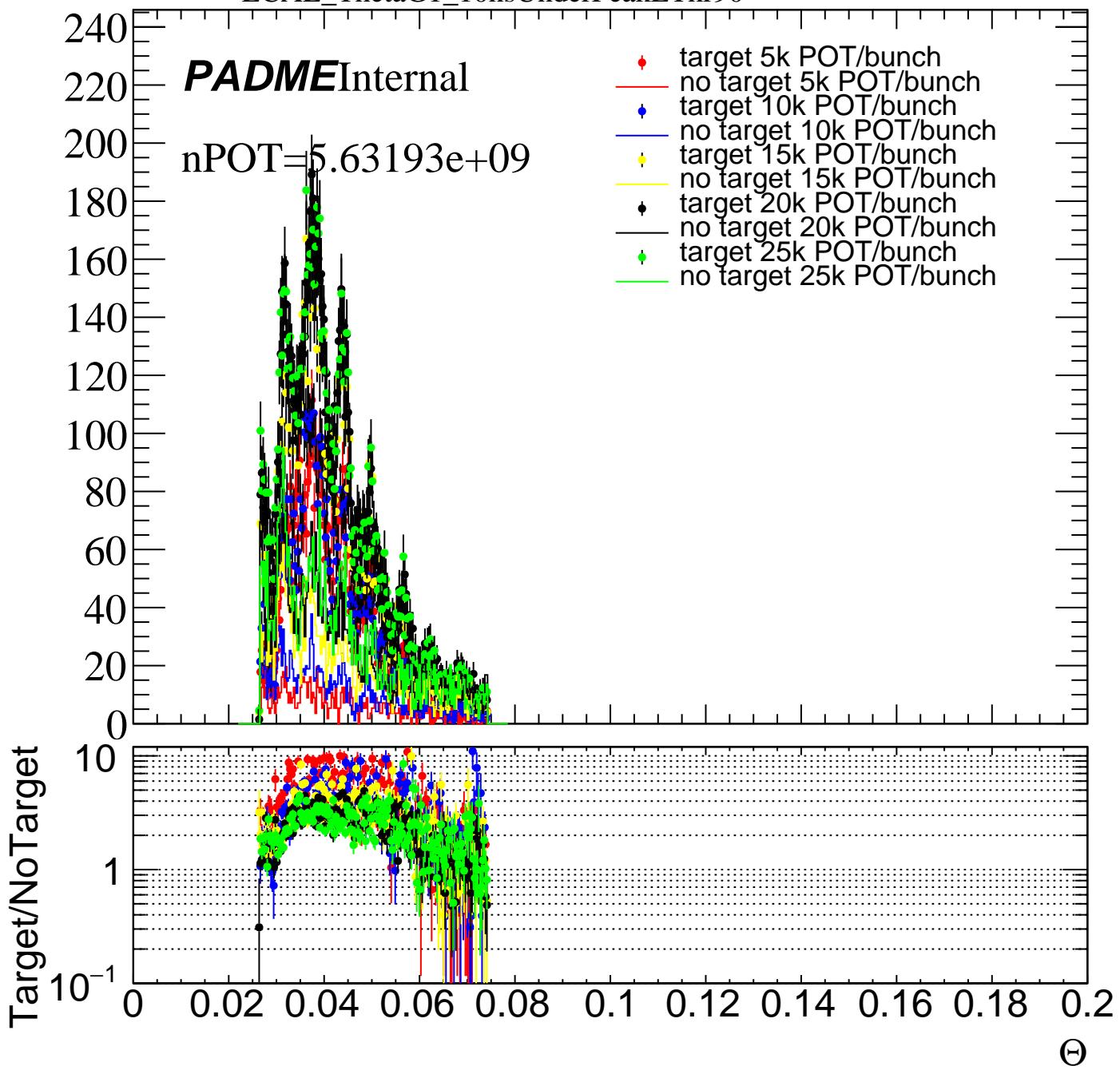




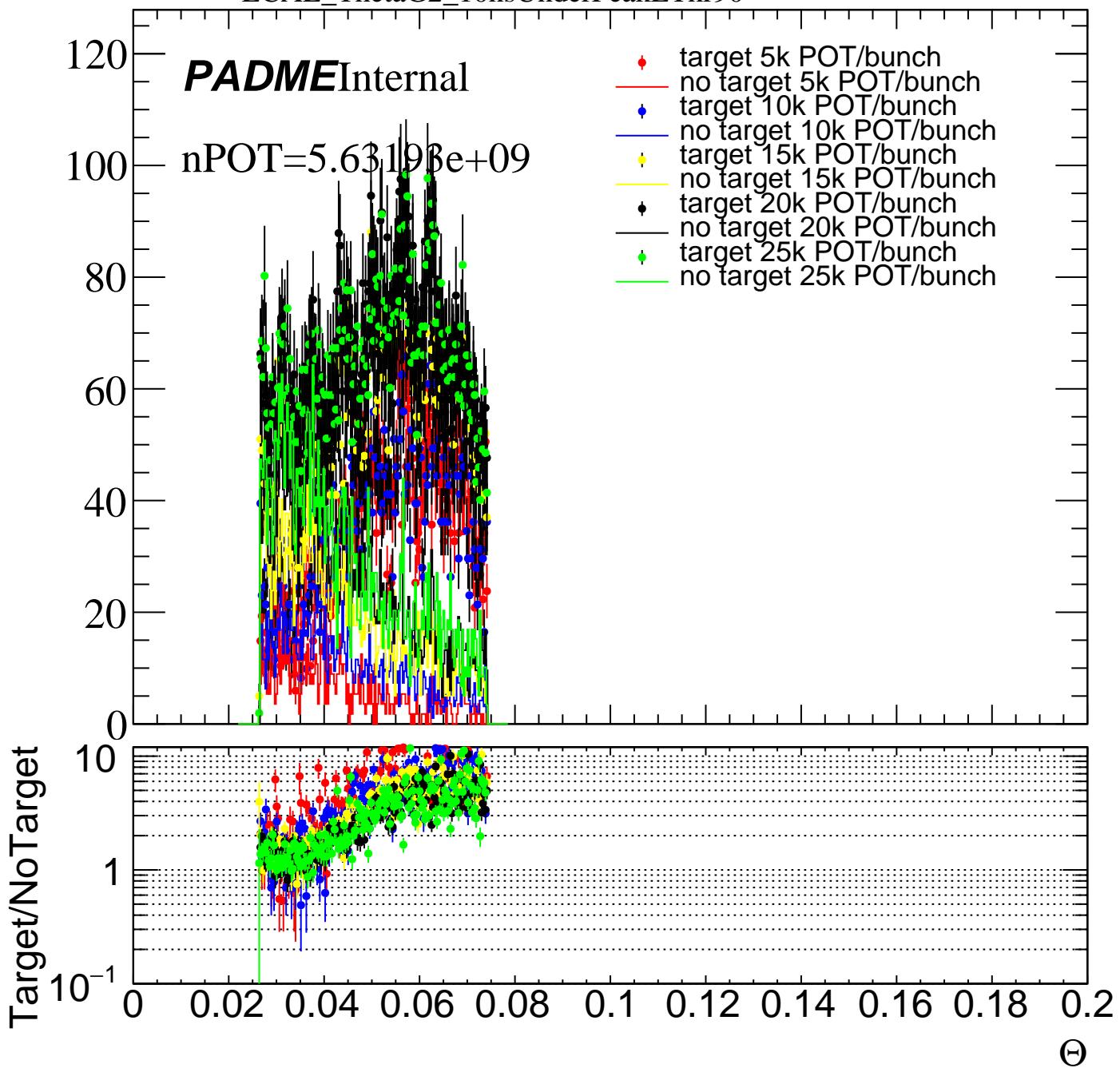
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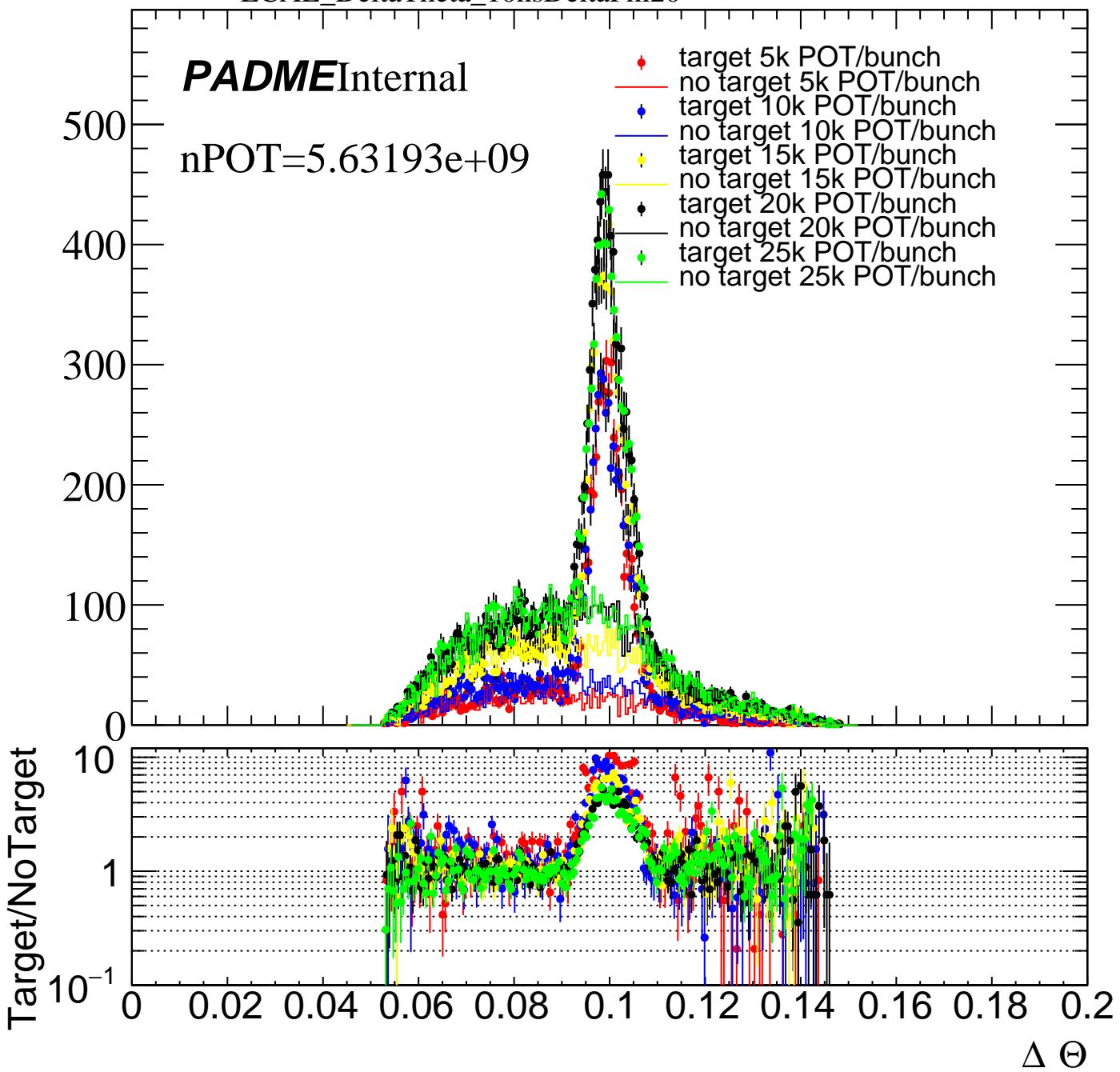
ECAL_ThetaG1_10nsUnderPeakEThr90



ECAL_ThetaG2_10nsUnderPeakEThr90



ECAL_DeltaTheta_10nsDeltaPhi20

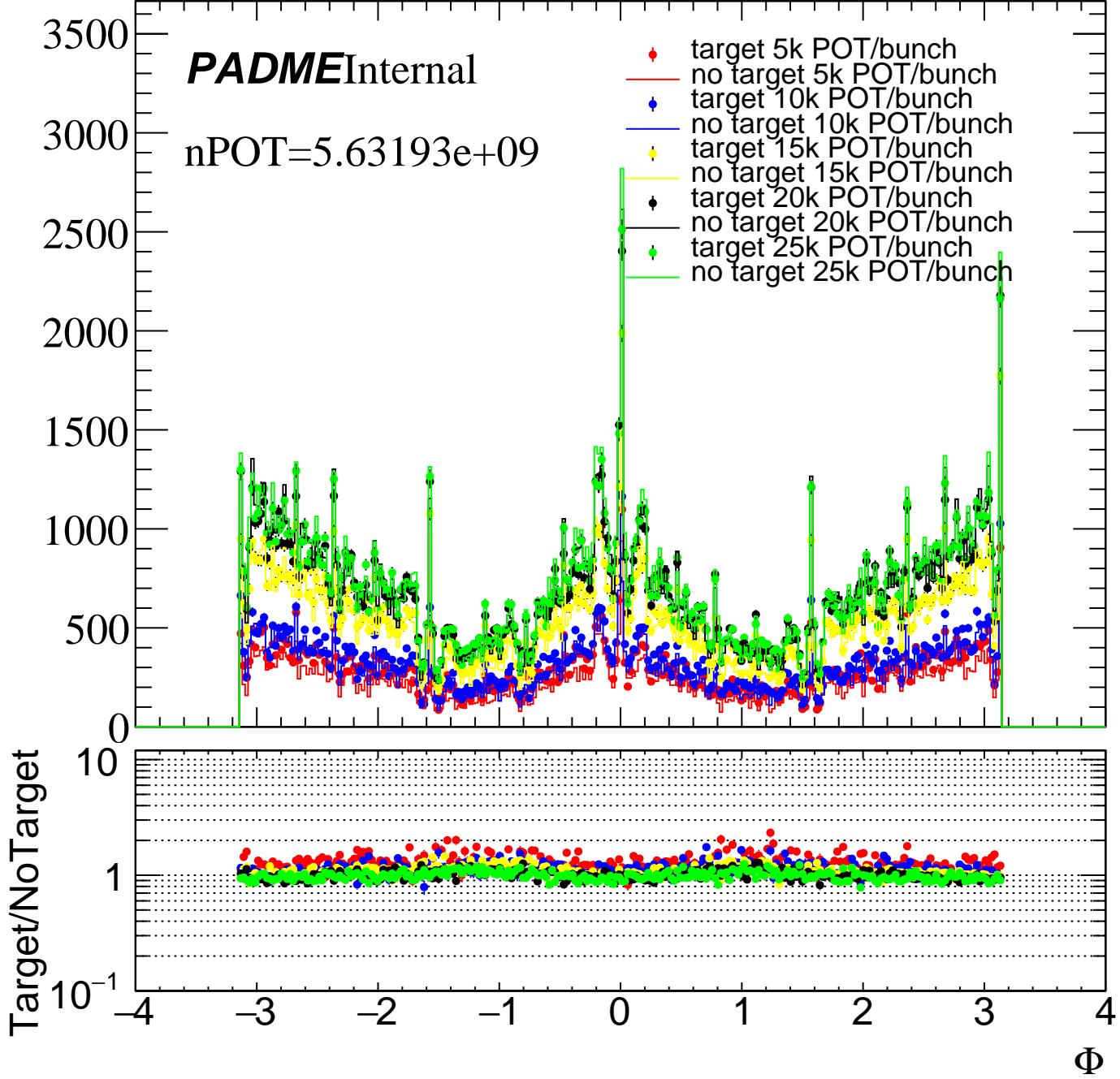


ECAL_Phi_10ns

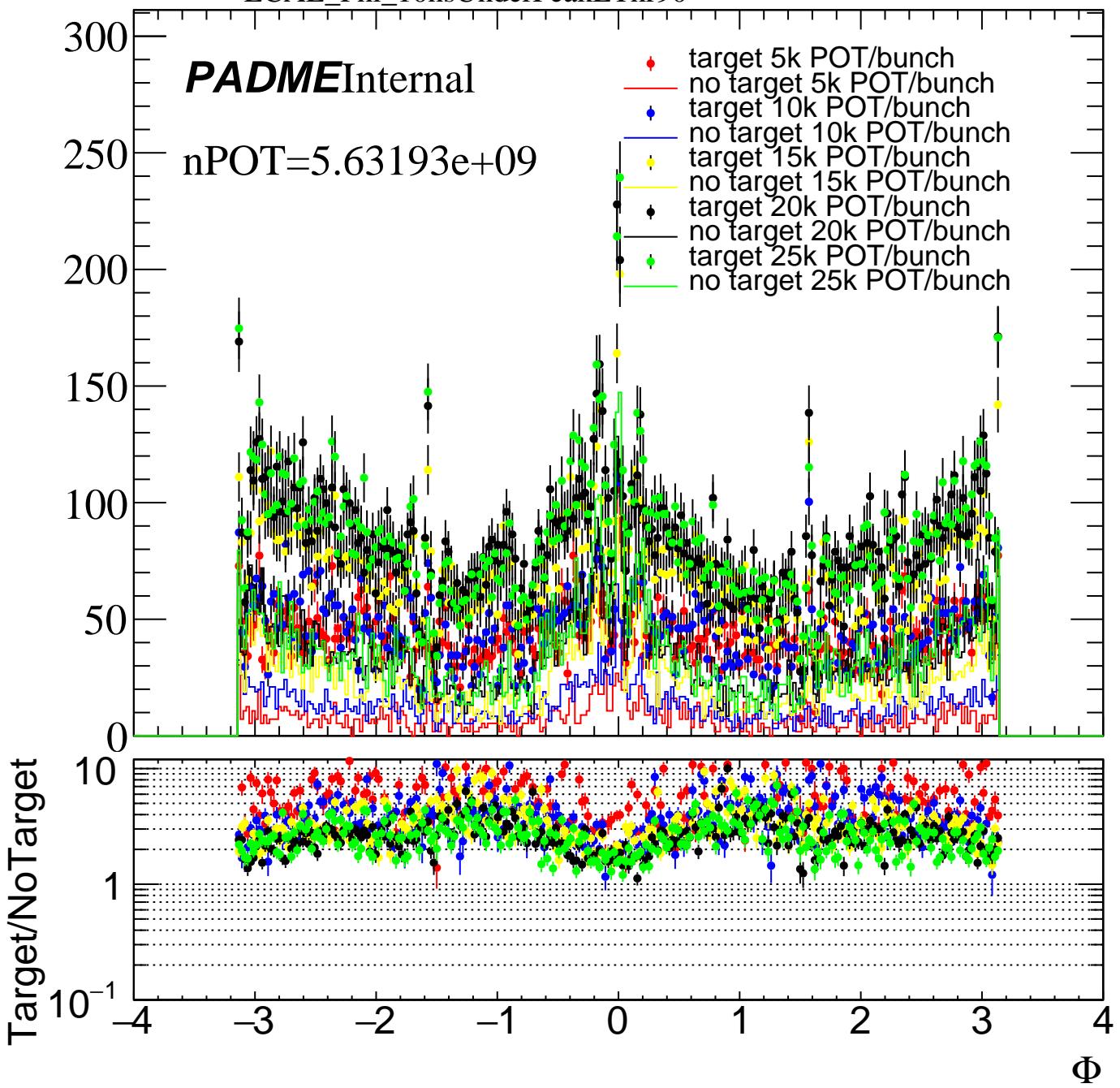
PADMEInternal

nPOT=5.63193e+09

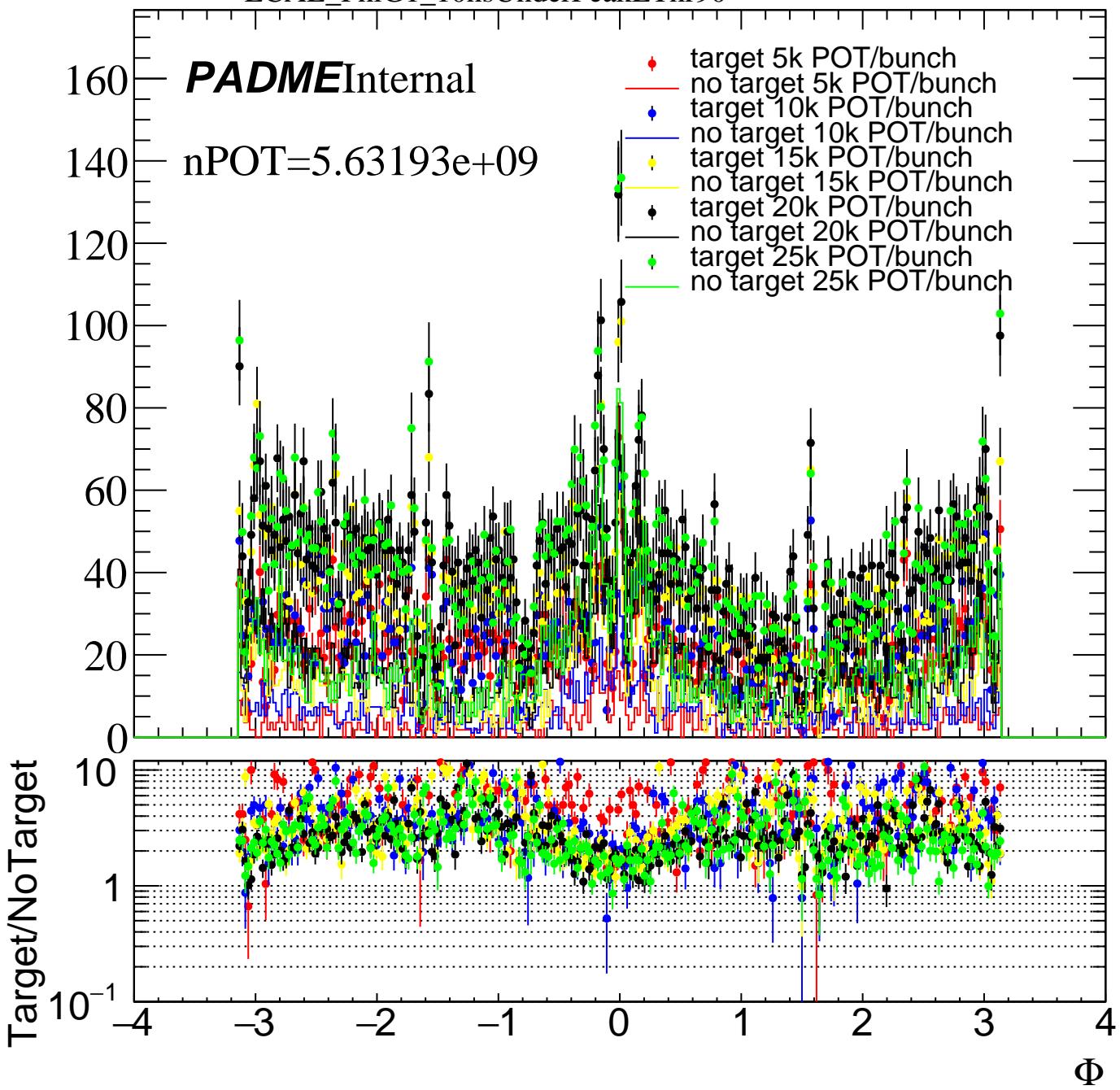
- target 5k POT/bunch
- no target 5k POT/bunch
- target 10k POT/bunch
- no target 10k POT/bunch
- target 15k POT/bunch
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- no target 20k POT/bunch
- target 25k POT/bunch
- no target 25k POT/bunch



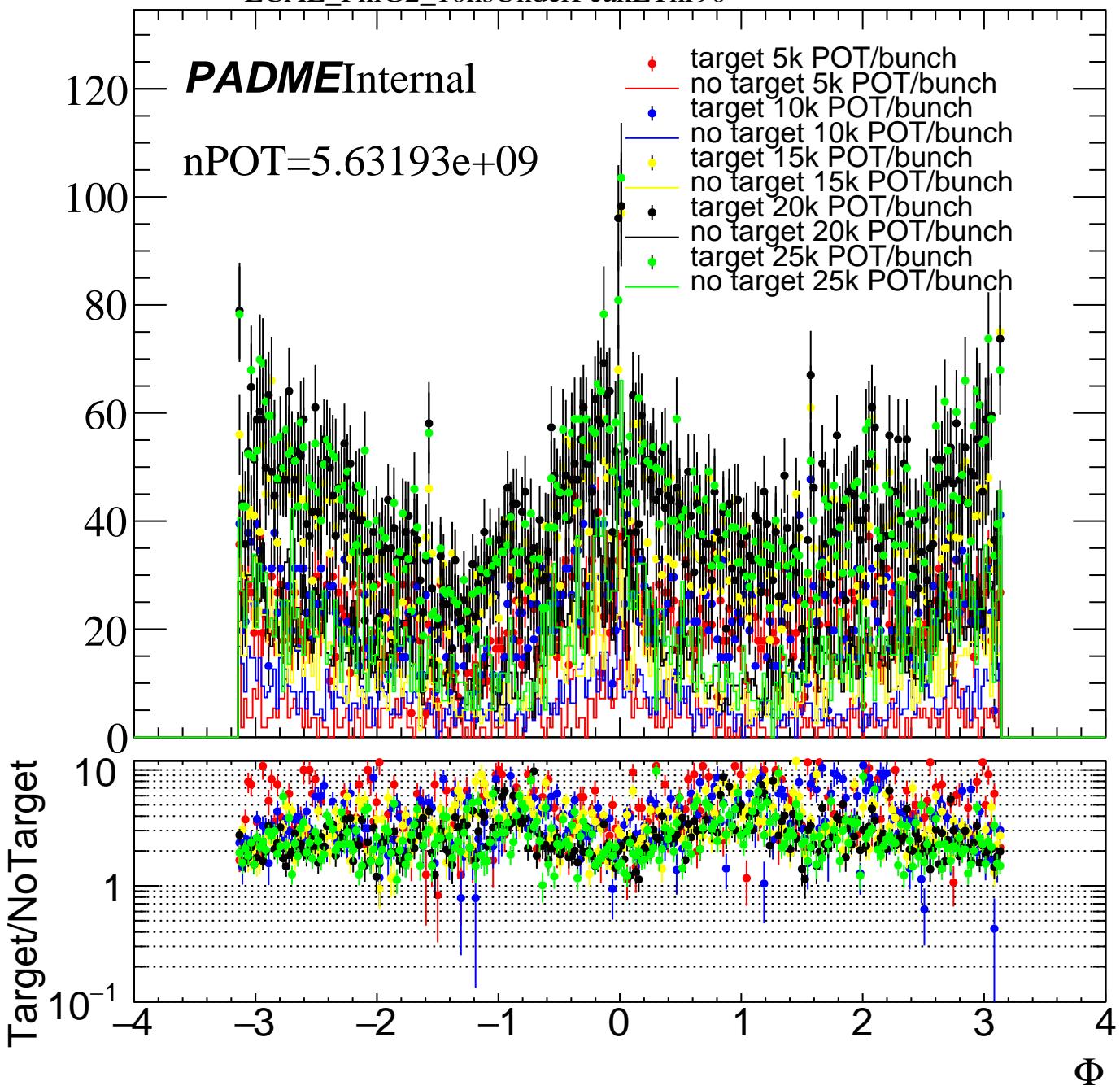
ECAL_Phi_10nsUnderPeakEThr90



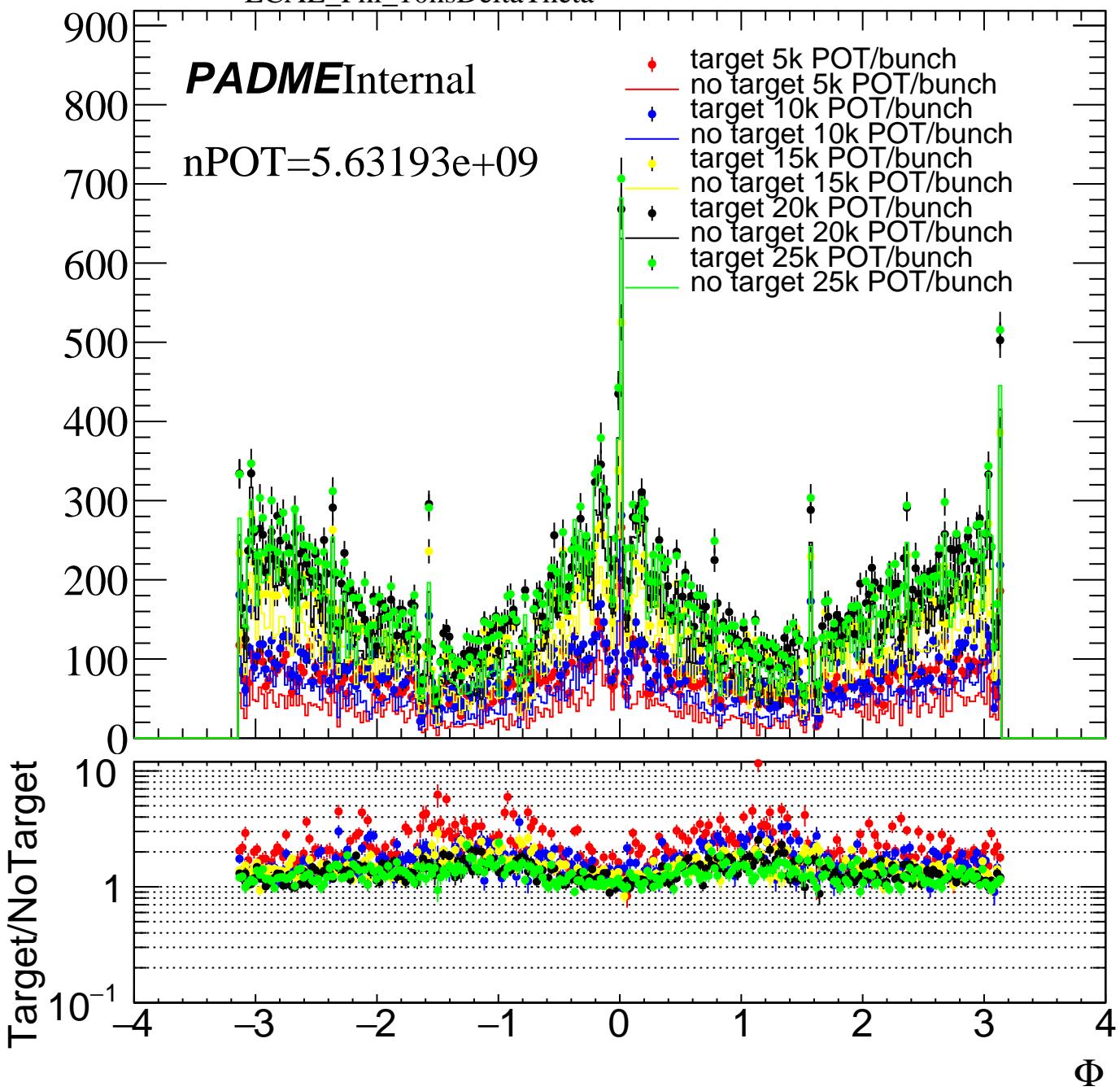
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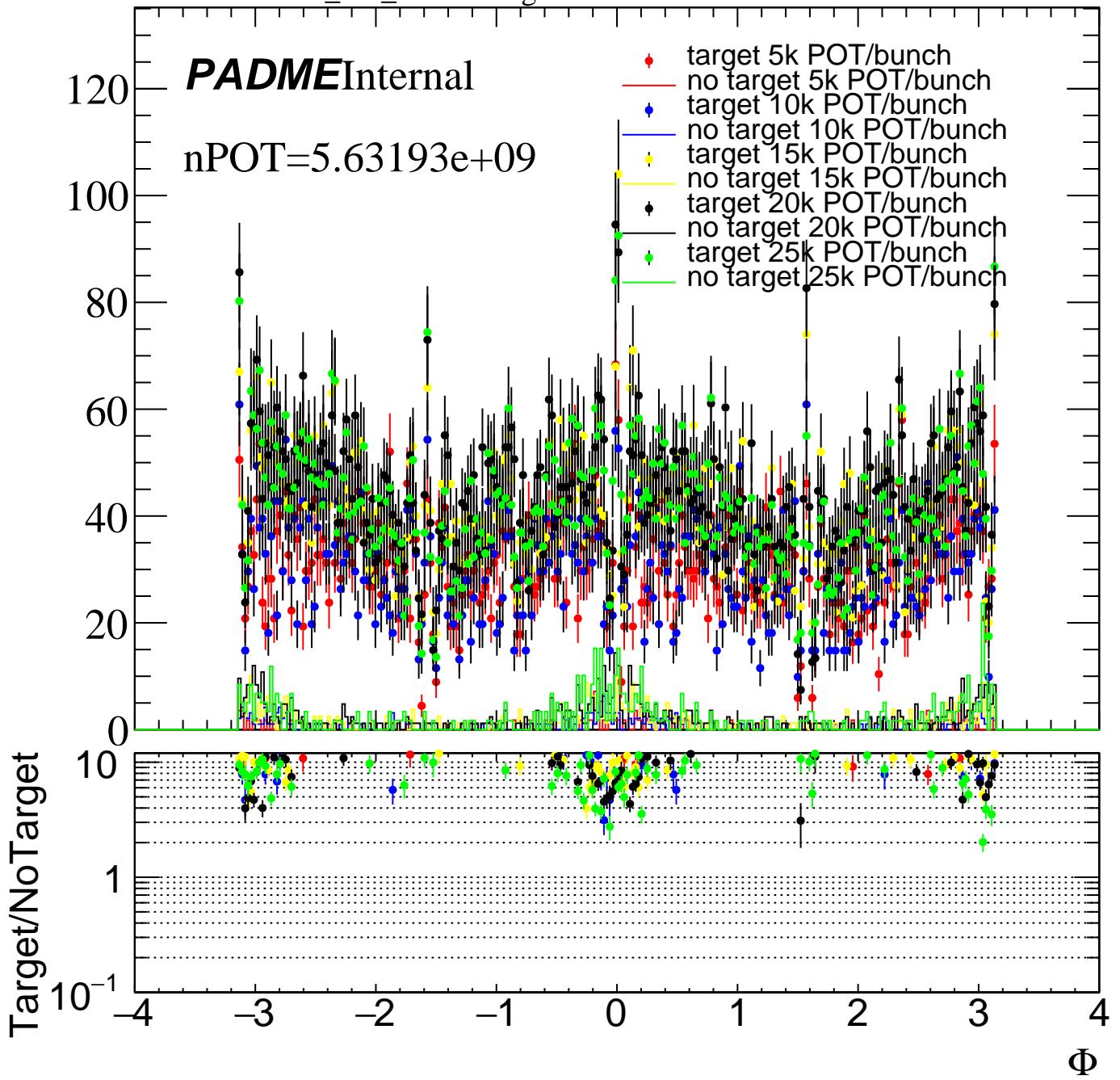
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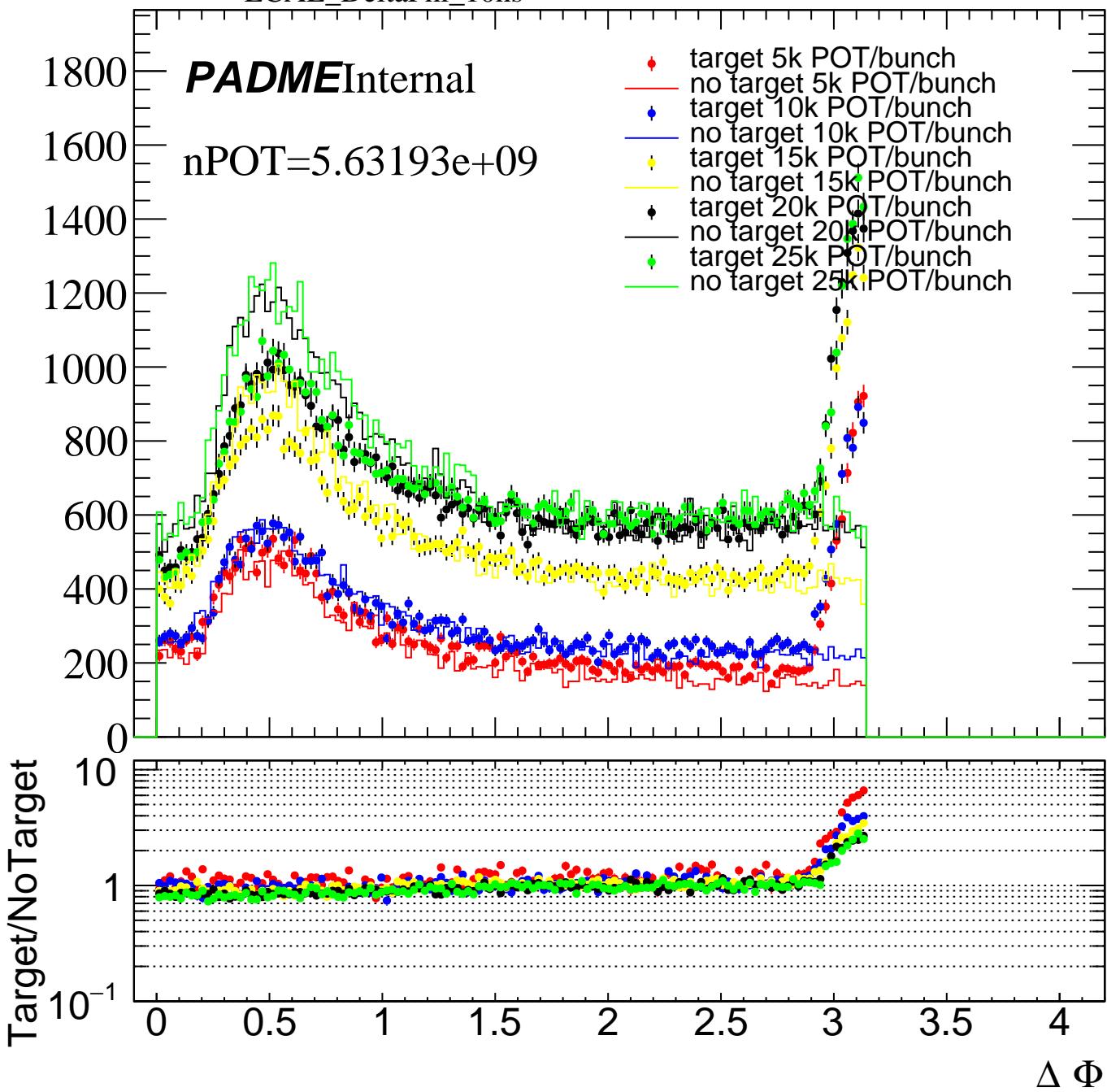
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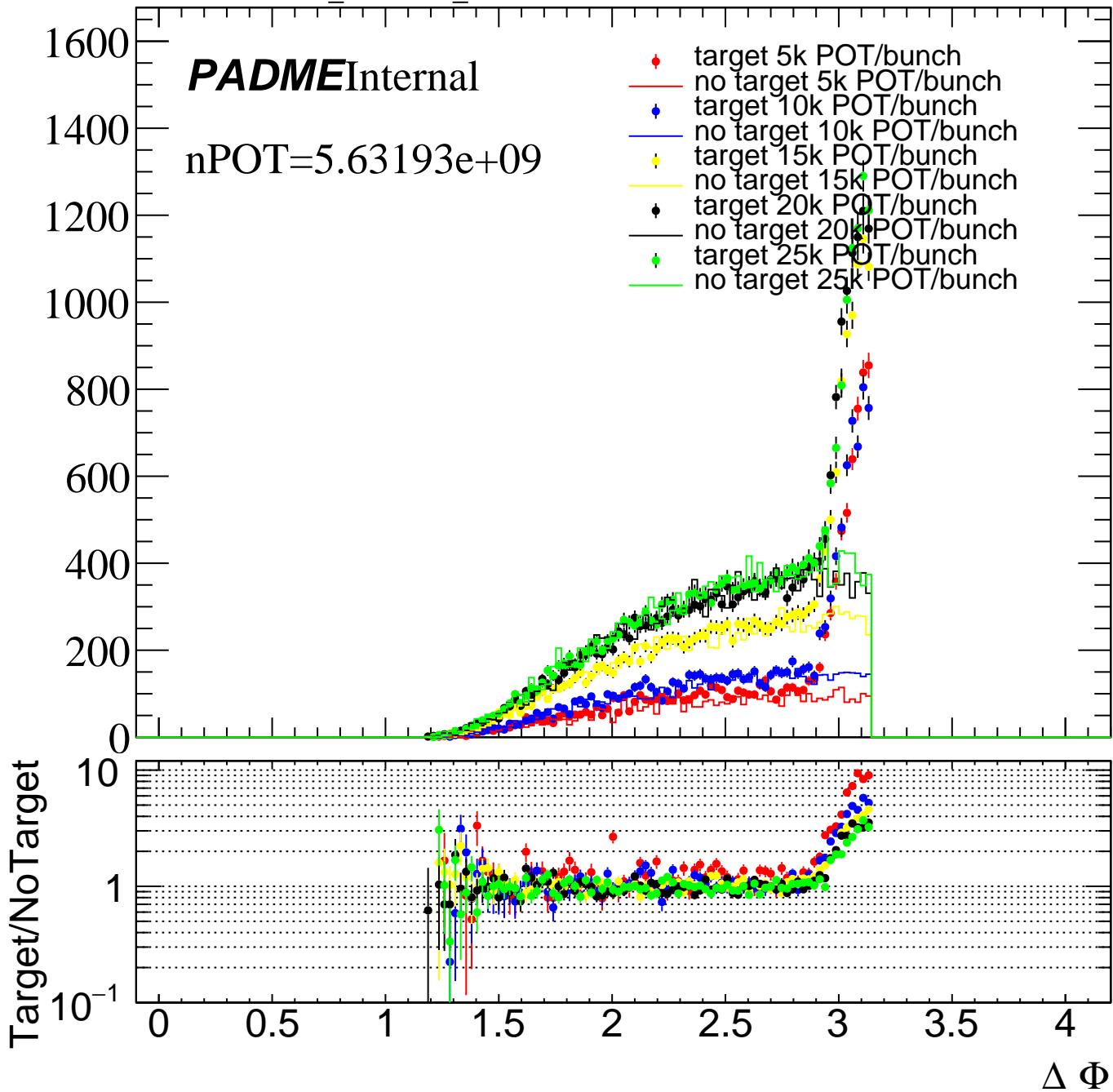
ECAL_Phi_10ns20DegreeDeltaThetaUnderPeakEThr90



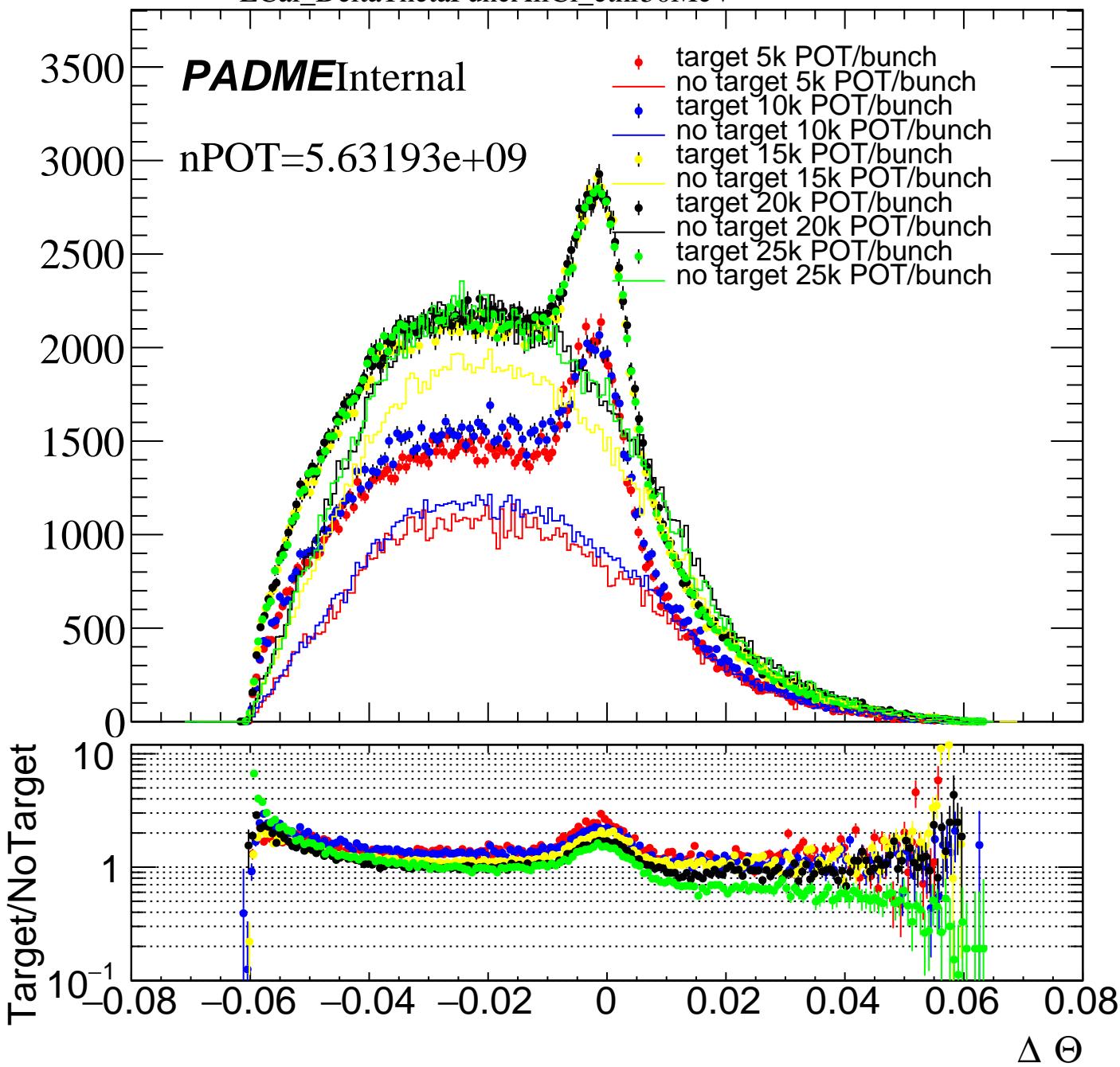
ECAL_DeltaPhi_10ns



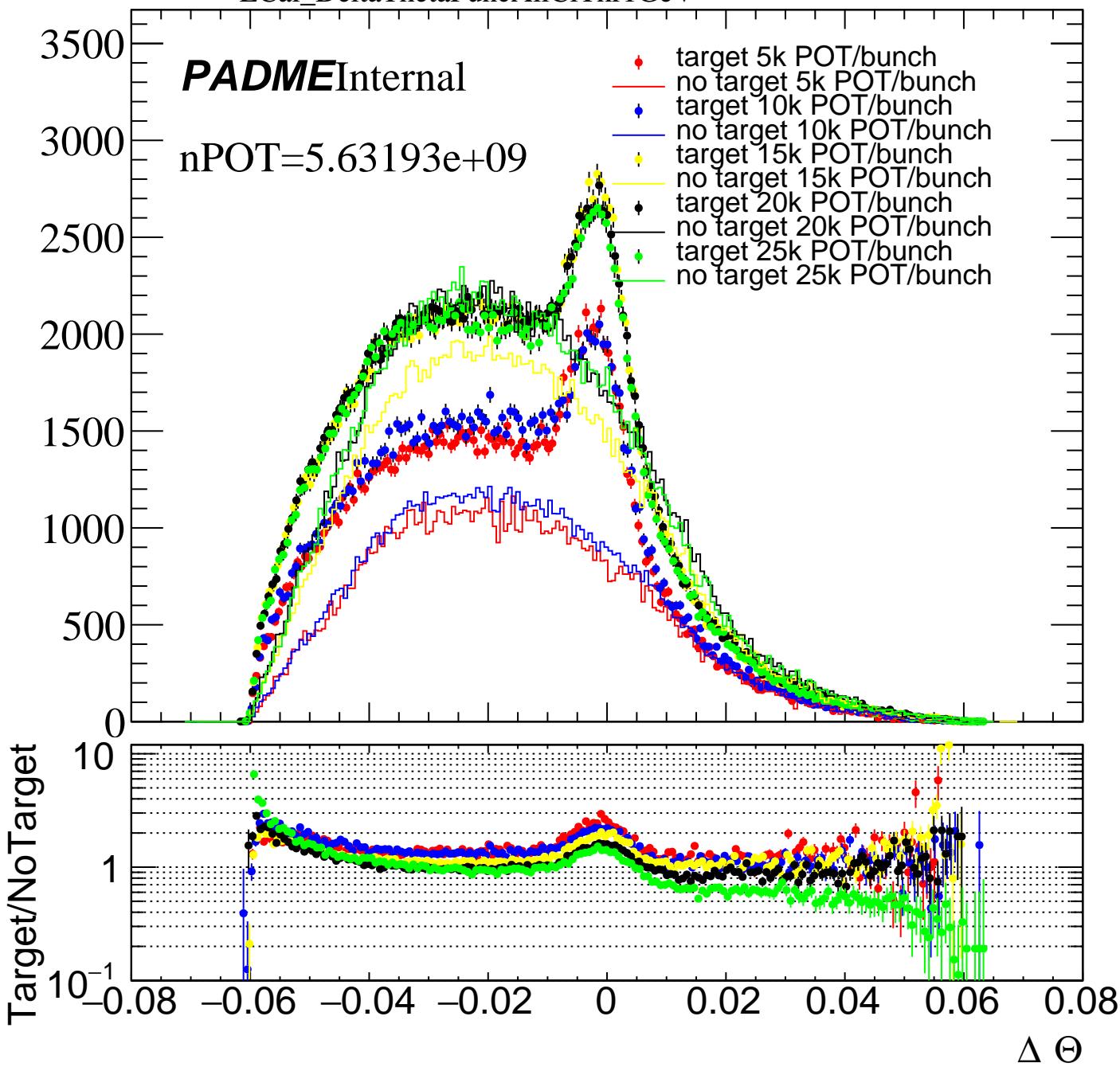
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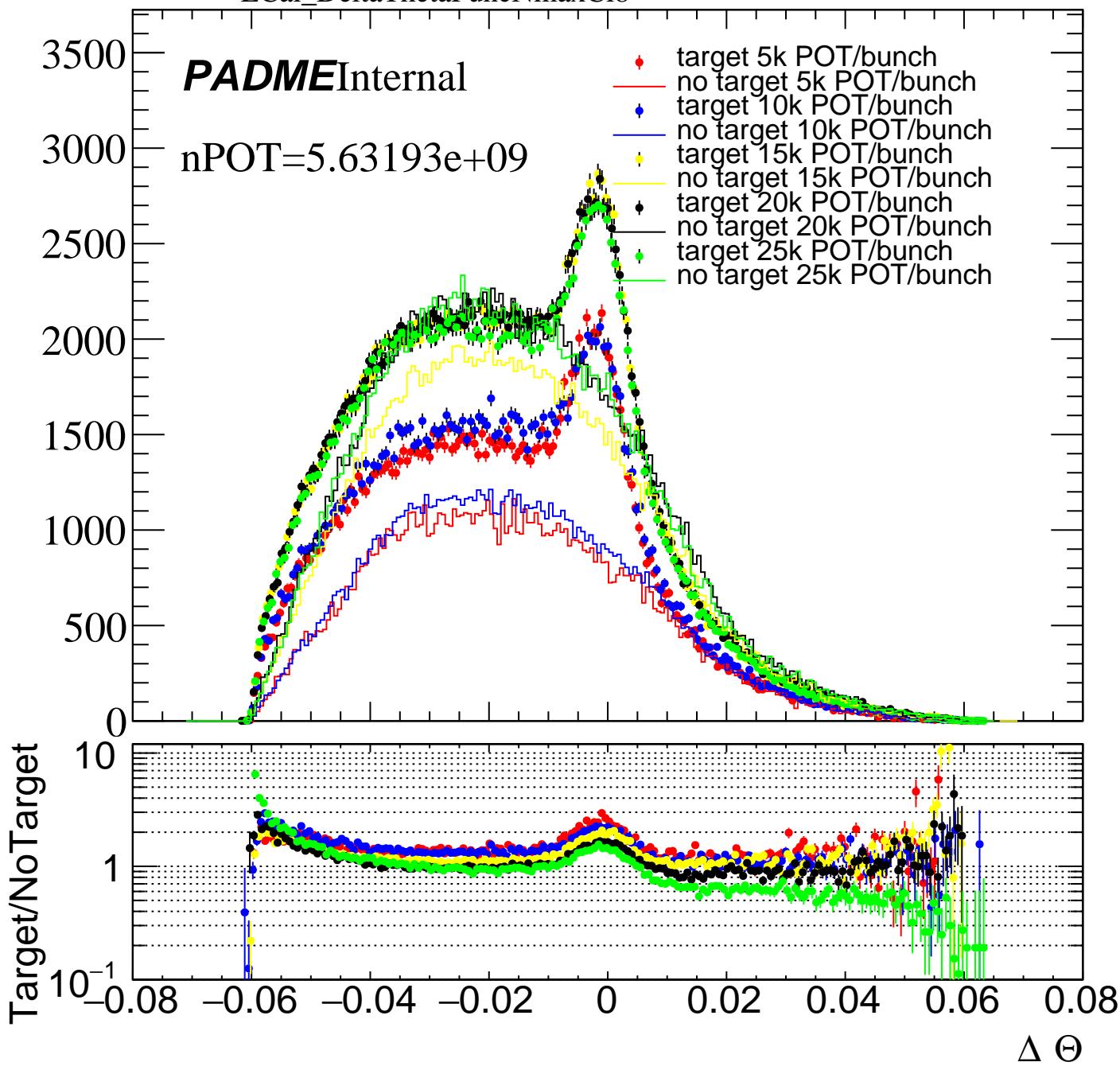
ECal_DeltaThetaFuncAllCl_ethyl50MeV



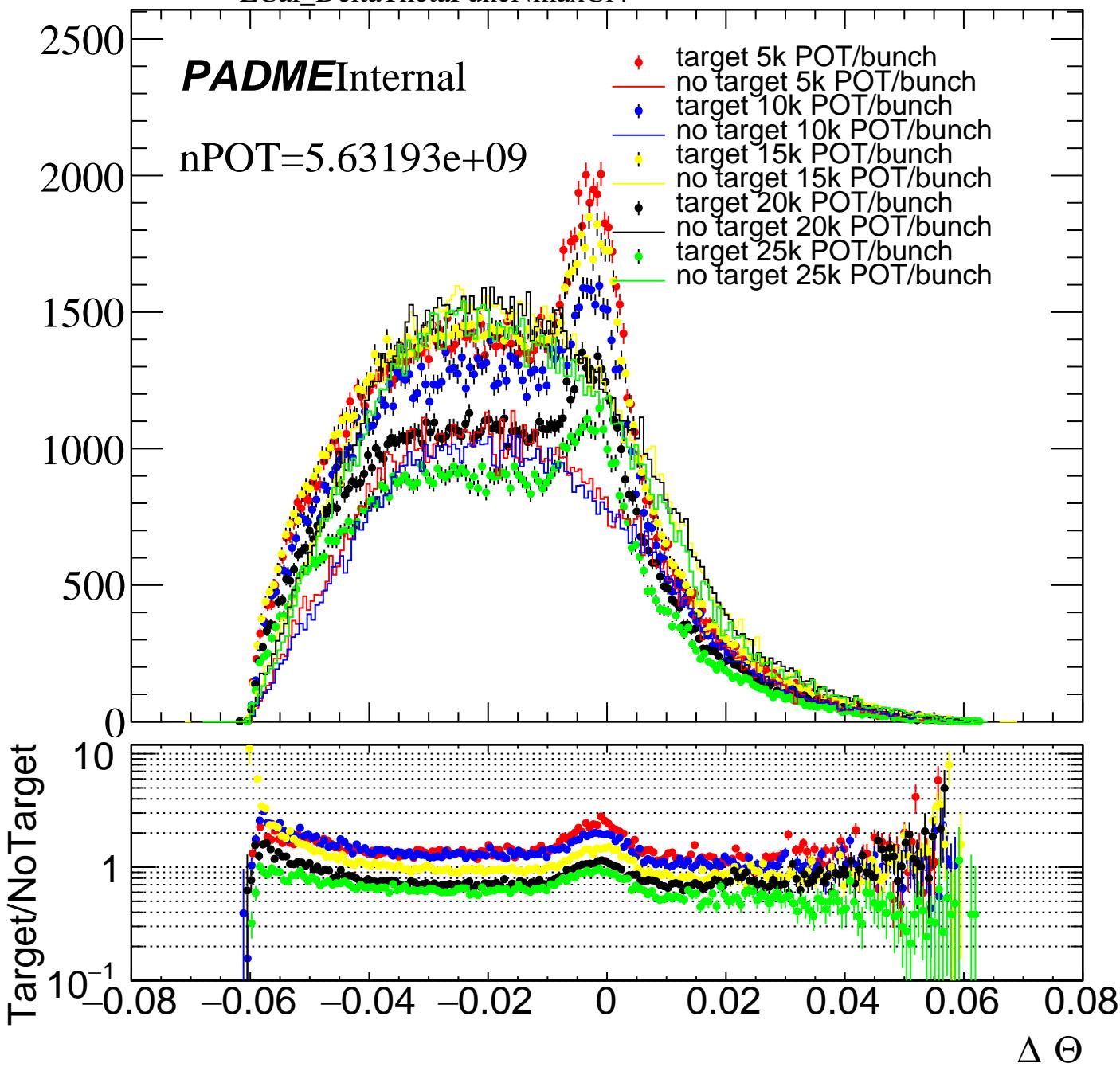
ECal_DeltaThetaFuncAllClThr1GeV



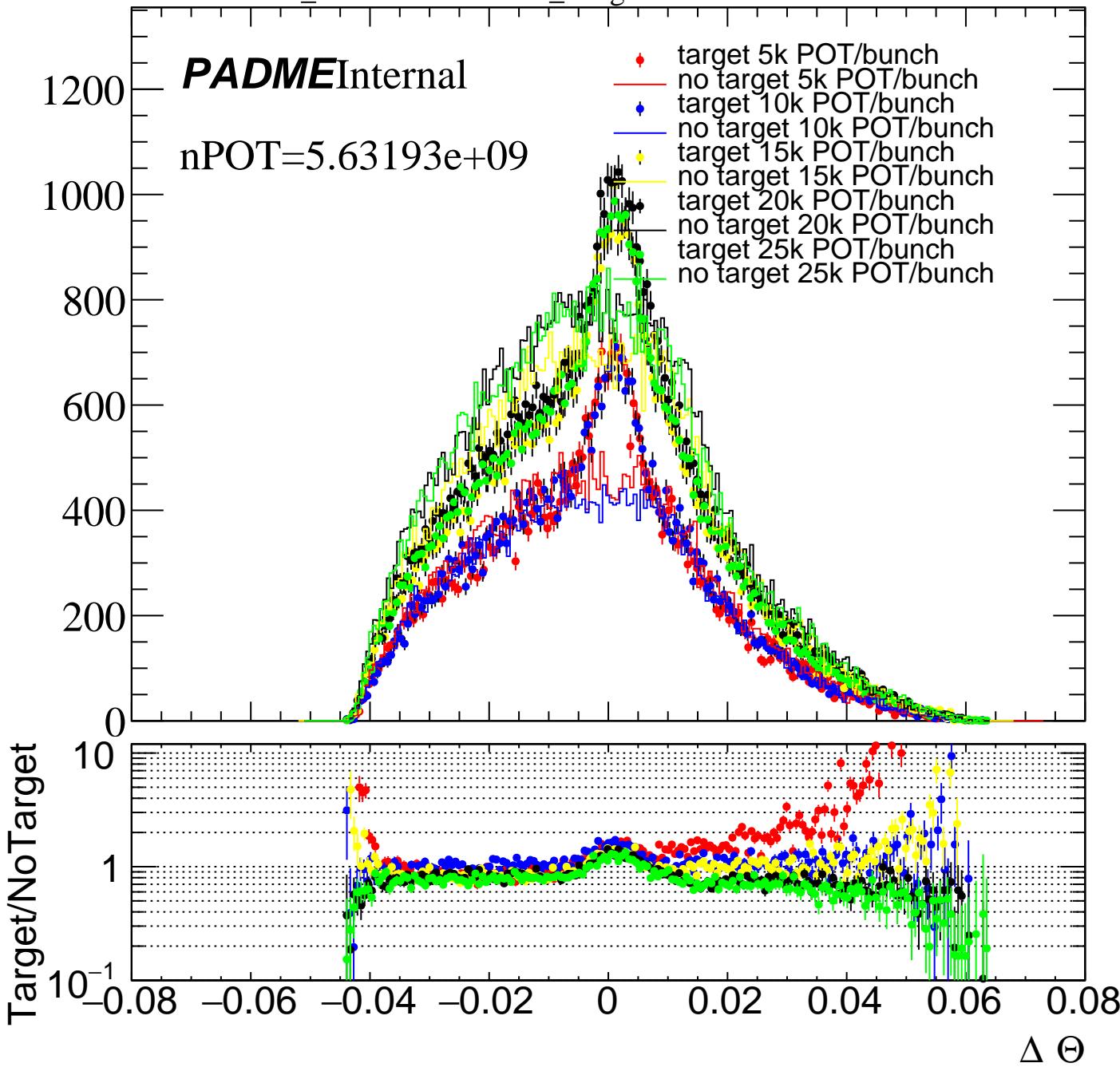
ECal_DeltaThetaFuncNmaxC18



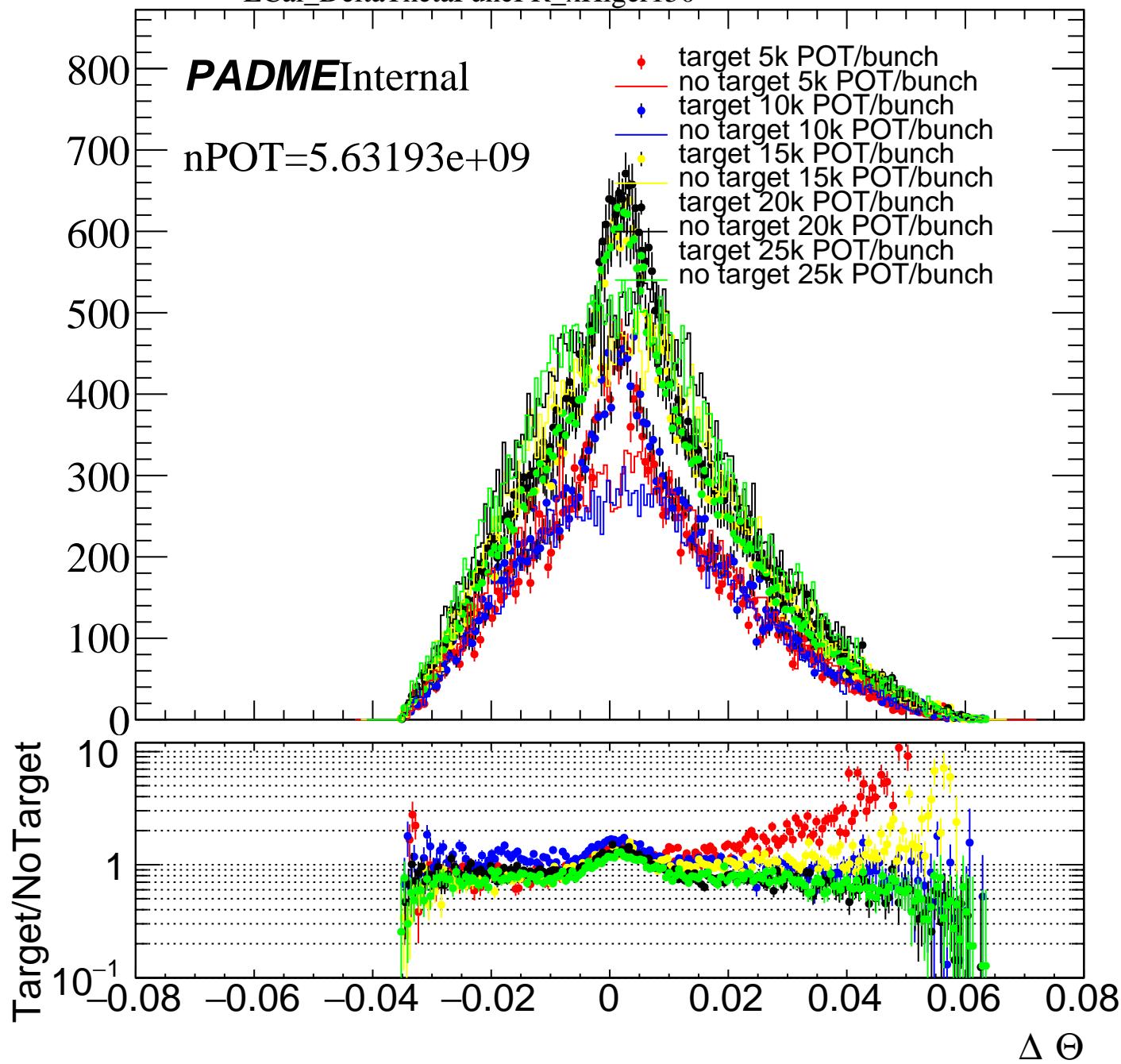
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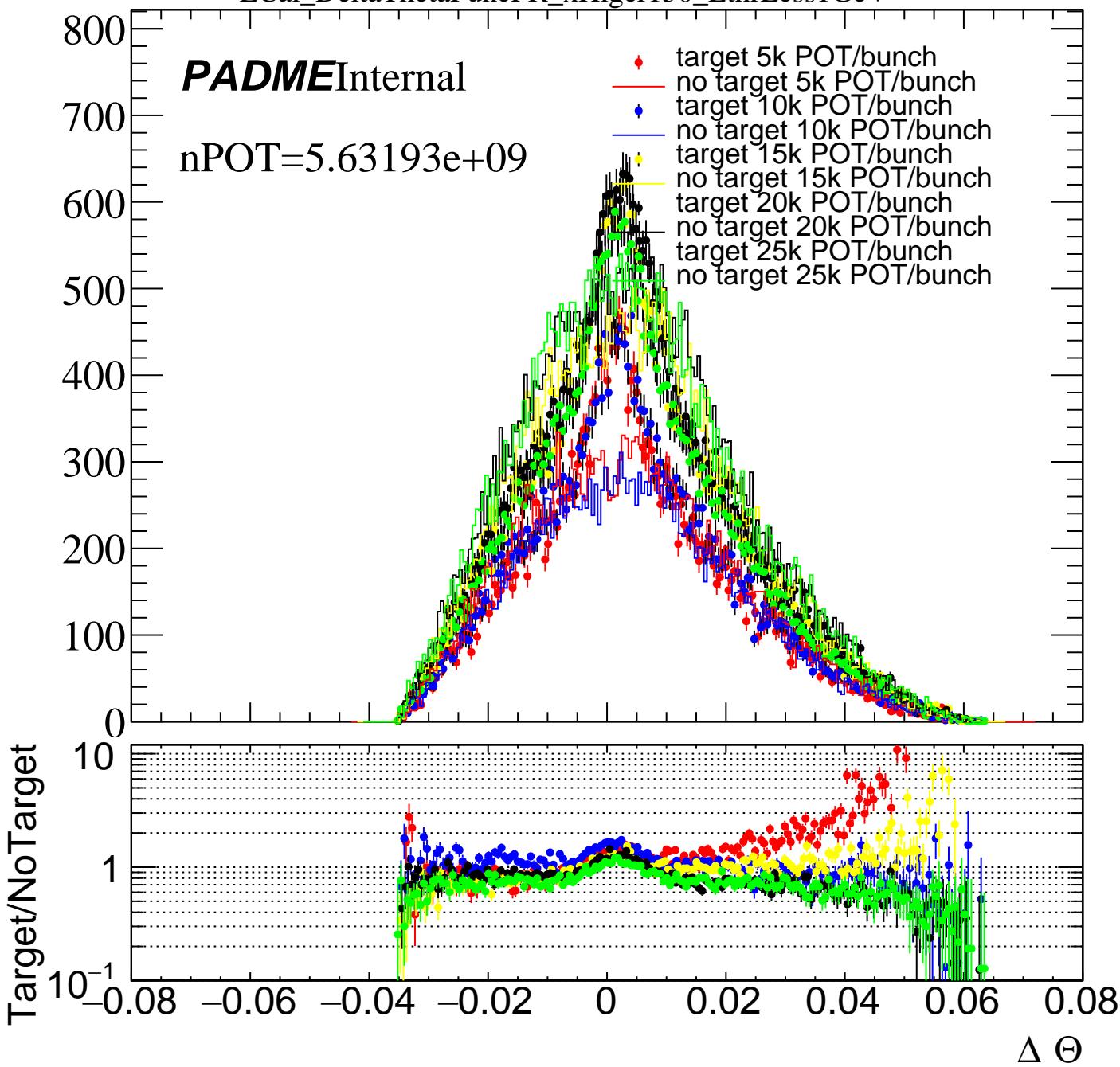
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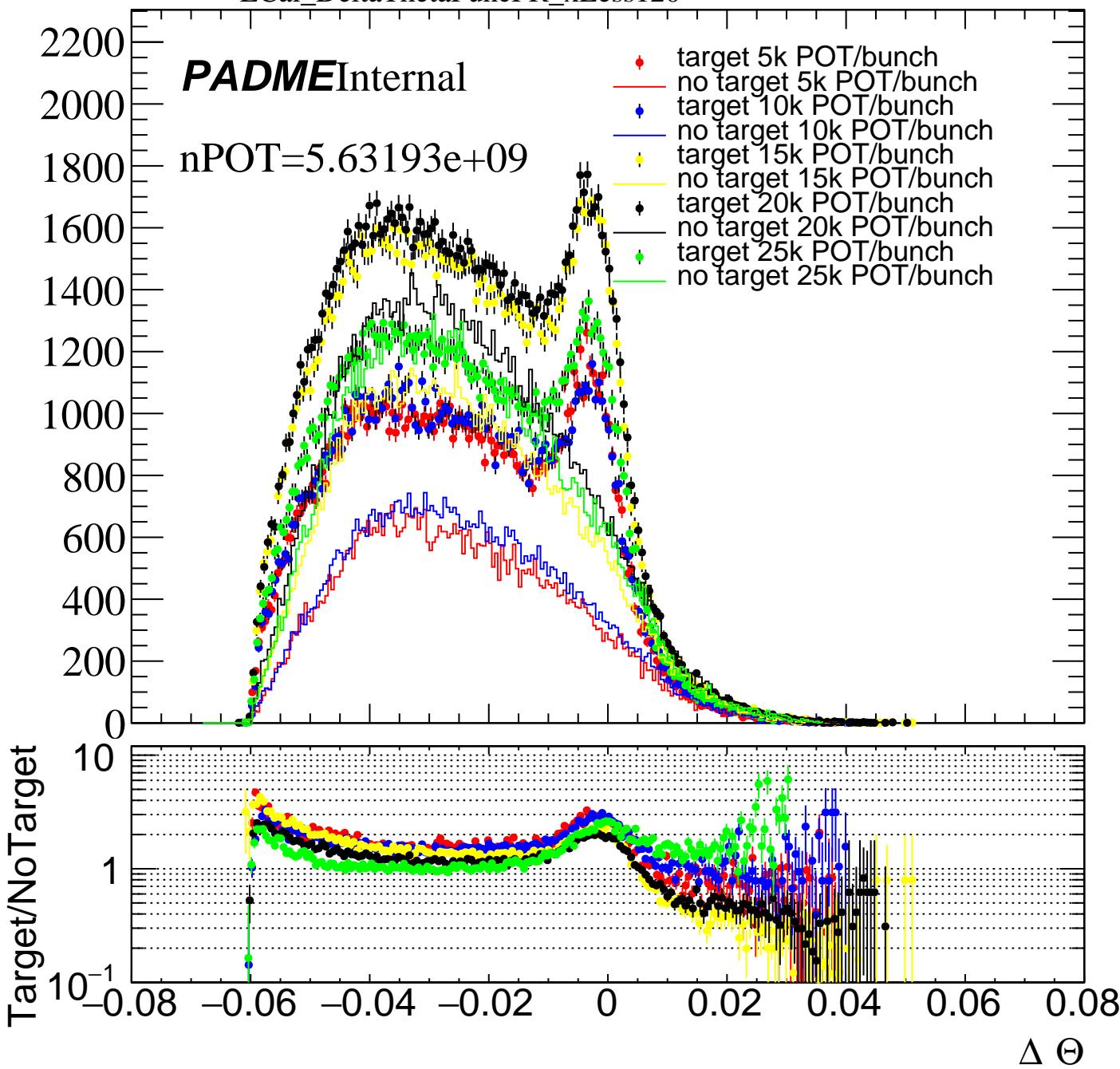
ECal_DeltaThetaFuncFR_xHiger150



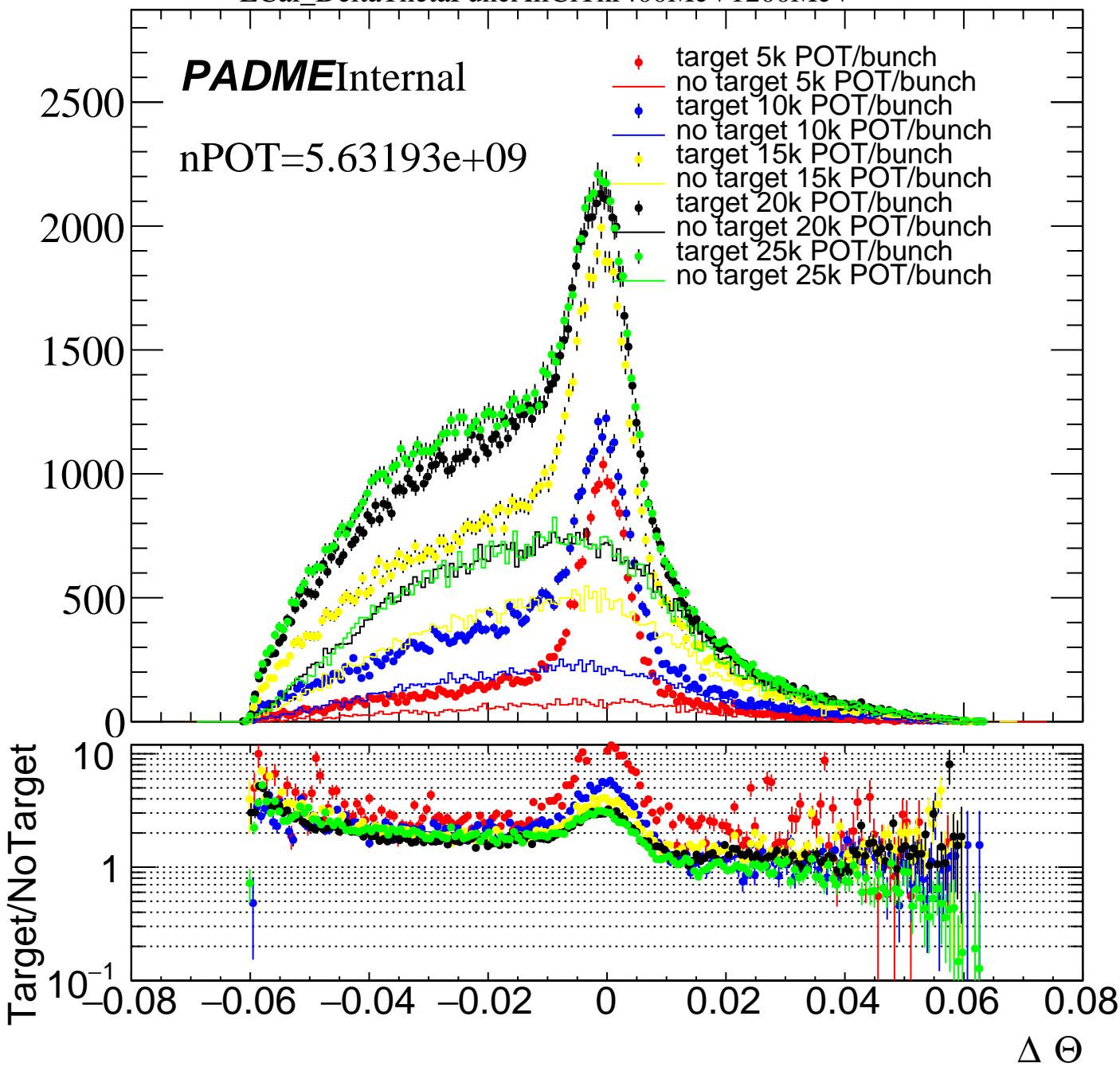
ECal_DeltaThetaFuncFR_xHiger150_EthrLess1GeV

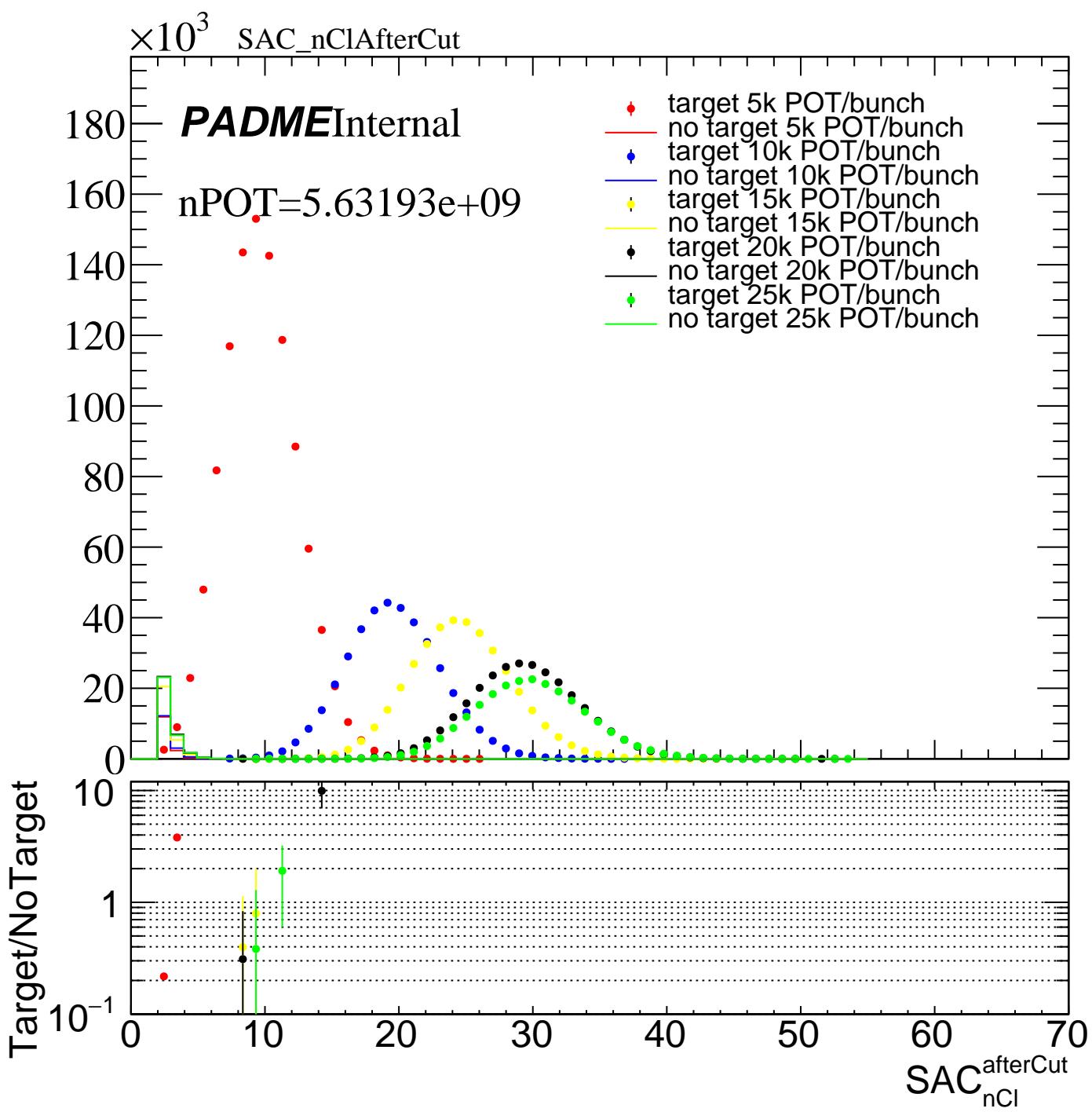


ECal_DeltaThetaFuncFR_xLess120

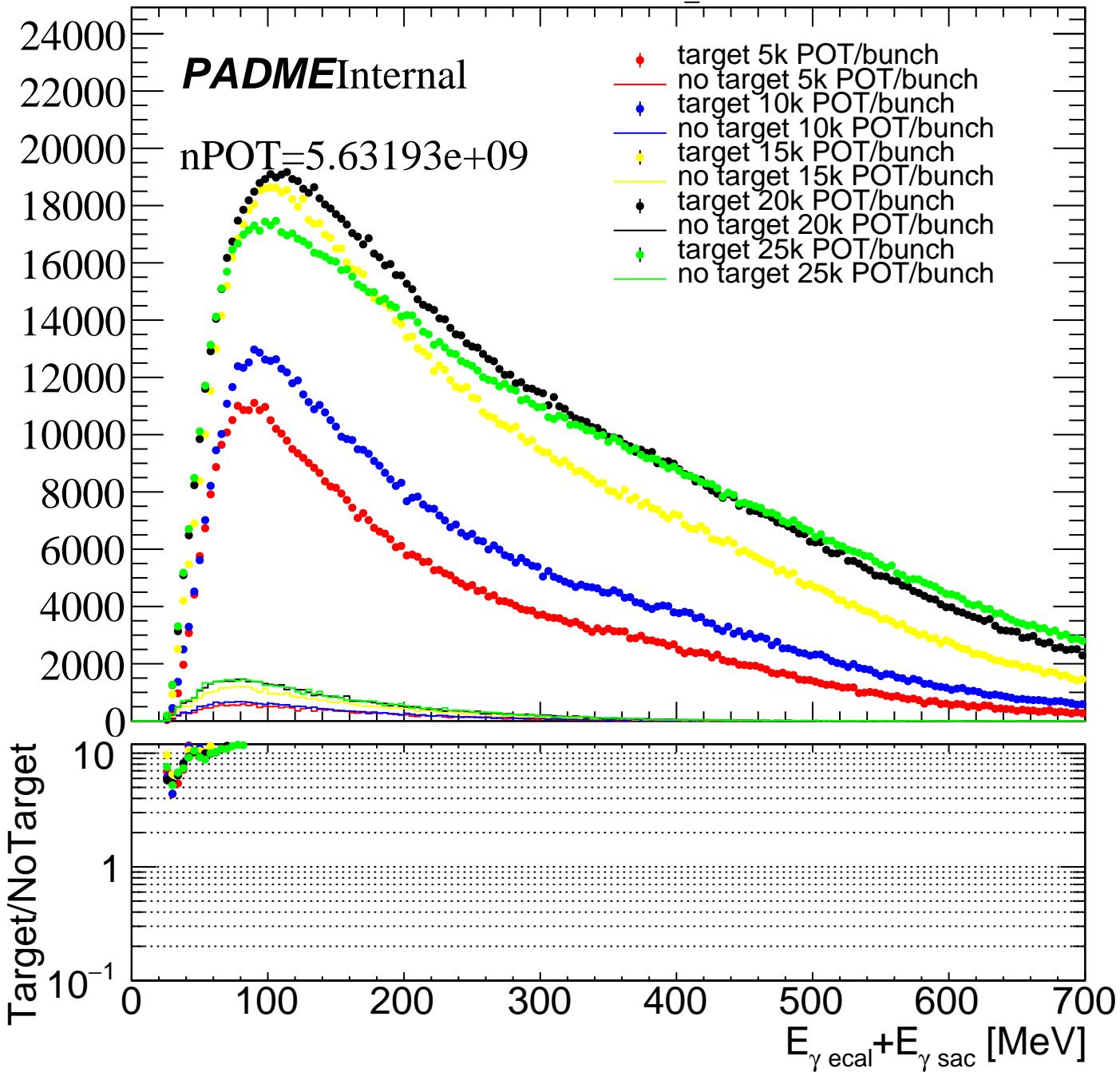


ECal_DeltaThetaFuncAllClThr400MeV1200MeV

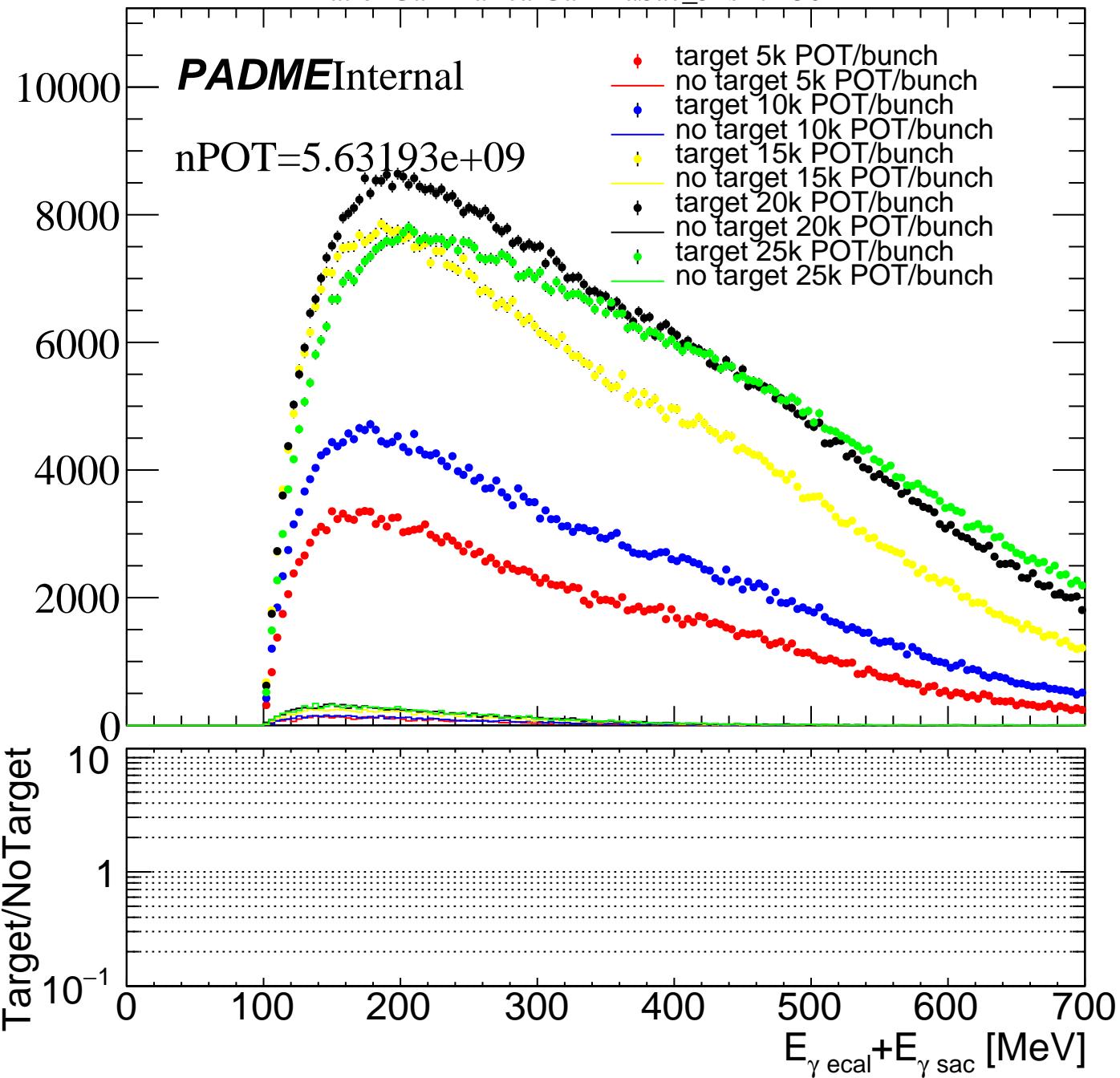


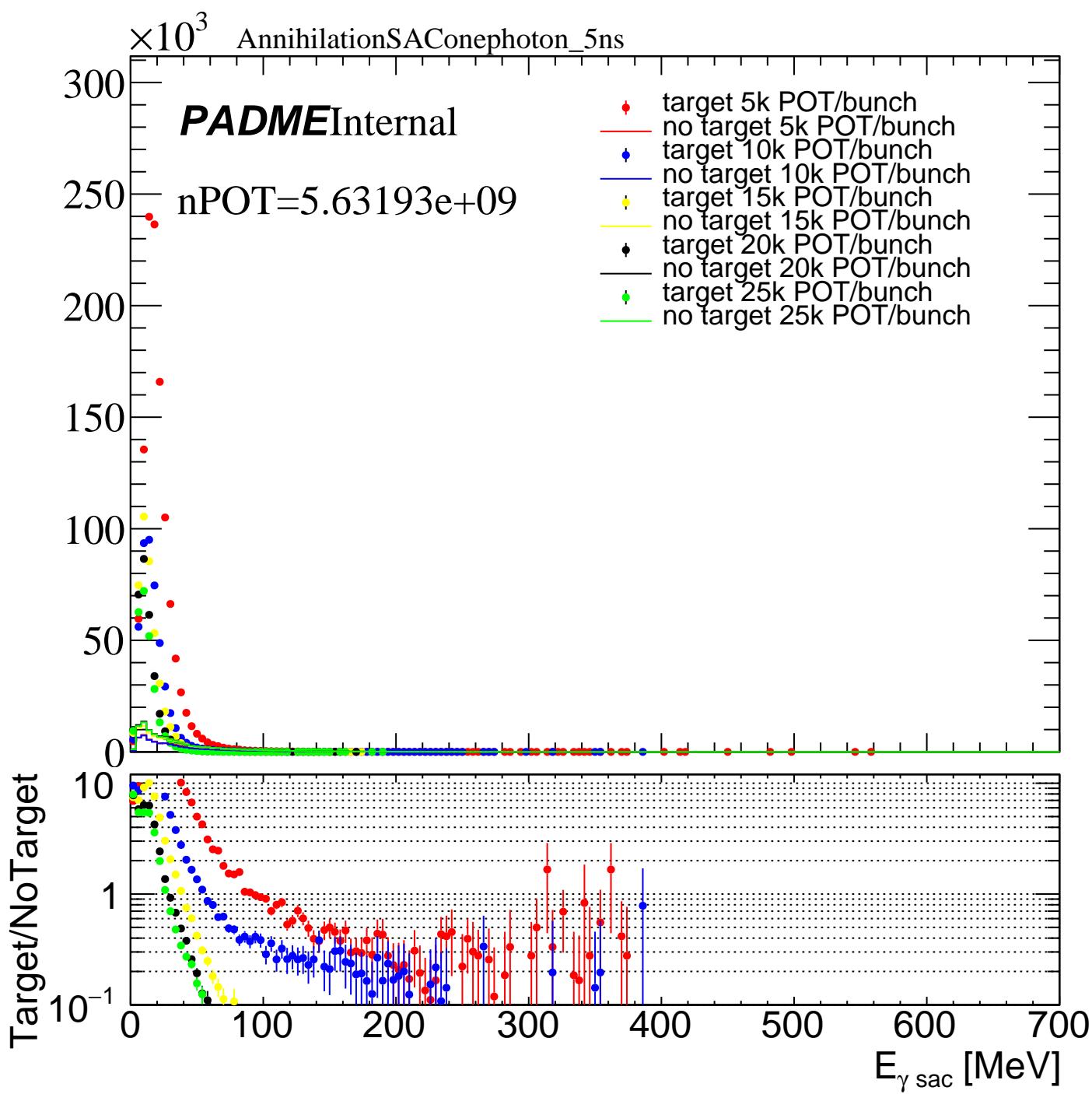


AnnihilationGammaEcalGammaSac_5ns

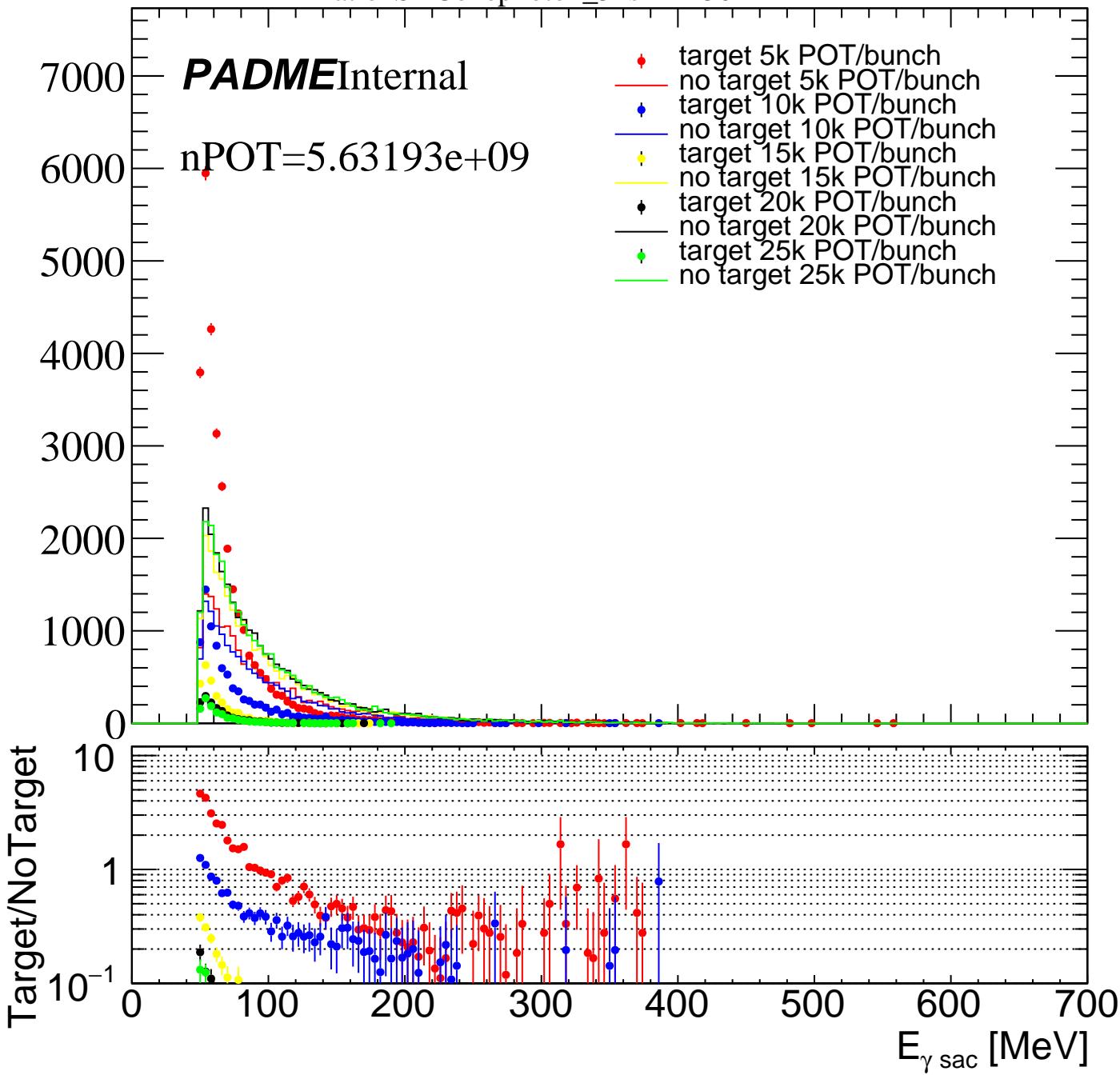


AnnihilationGammaEcalGammaSac_5nsEthr50





AnnihilationSAConephoton_5nsEThr50

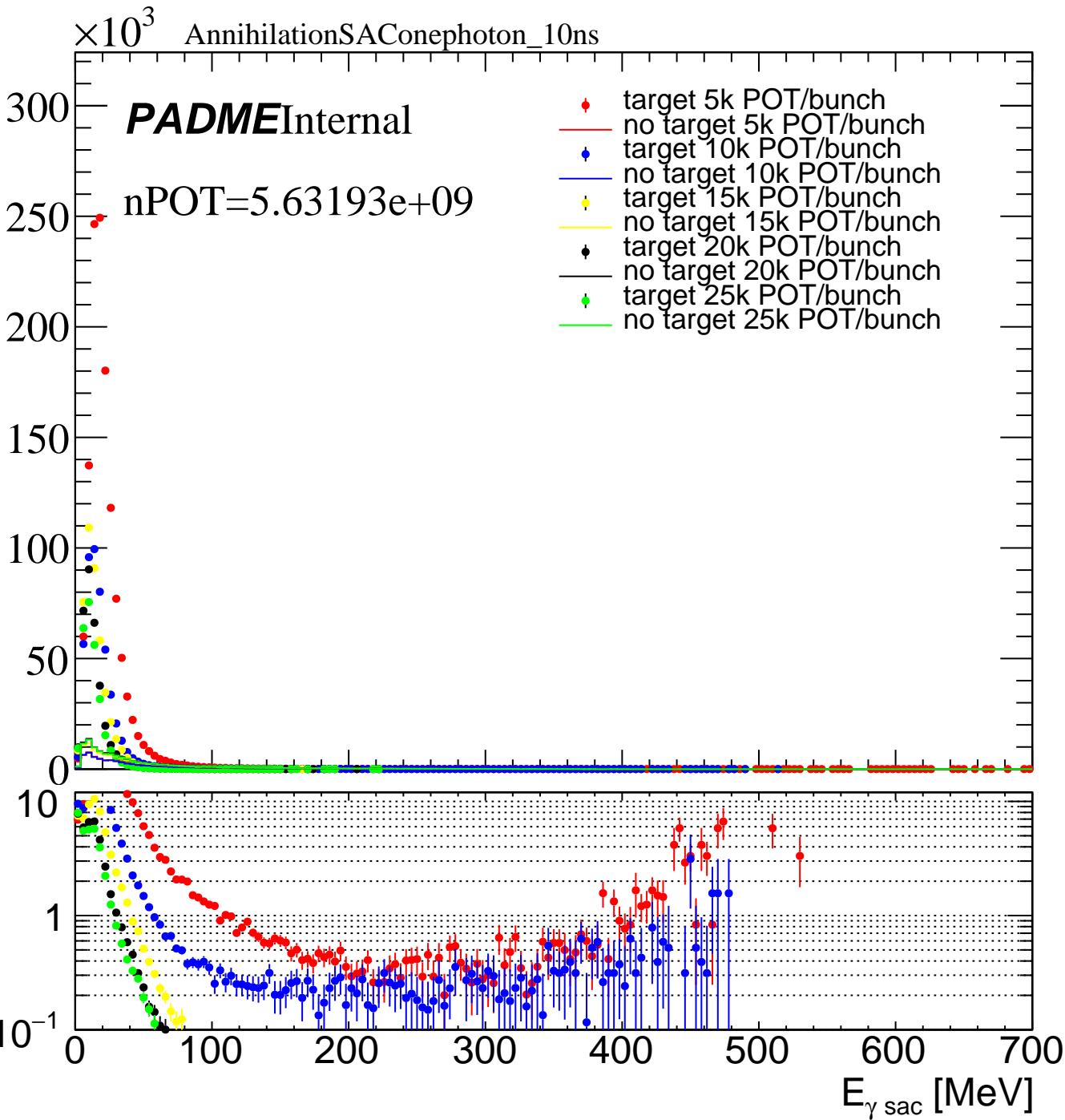


$\times 10^3$ AnnihilationSAConephoton_10ns

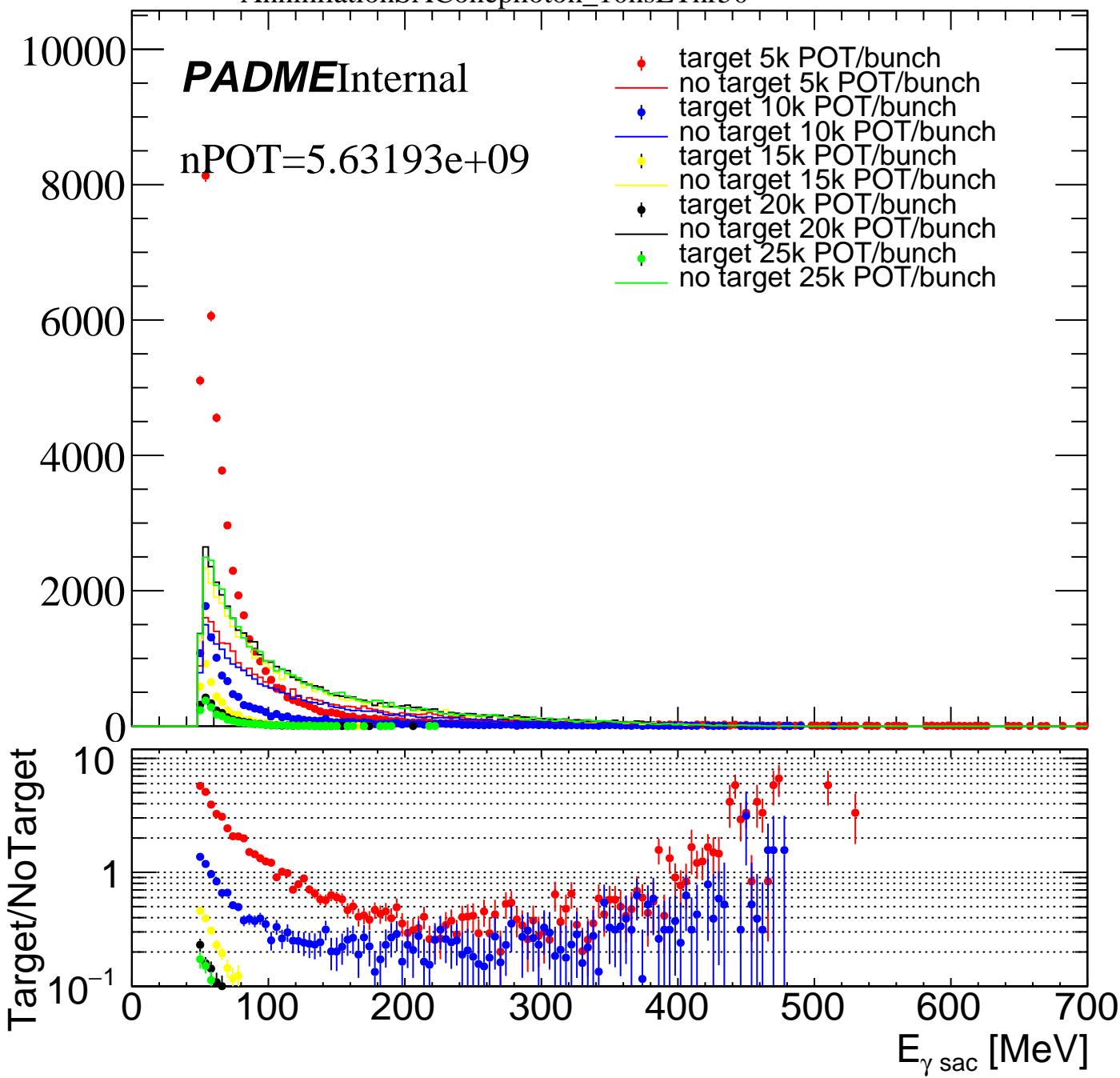
PADME Internal
nPOT=5.63193e+09

- target 5k POT/bunch
- no target 5k POT/bunch
- target 10k POT/bunch
- no target 10k POT/bunch
- target 15k POT/bunch
- no target 15k POT/bunch
- target 20k POT/bunch
- no target 20k POT/bunch
- target 25k POT/bunch
- no target 25k POT/bunch

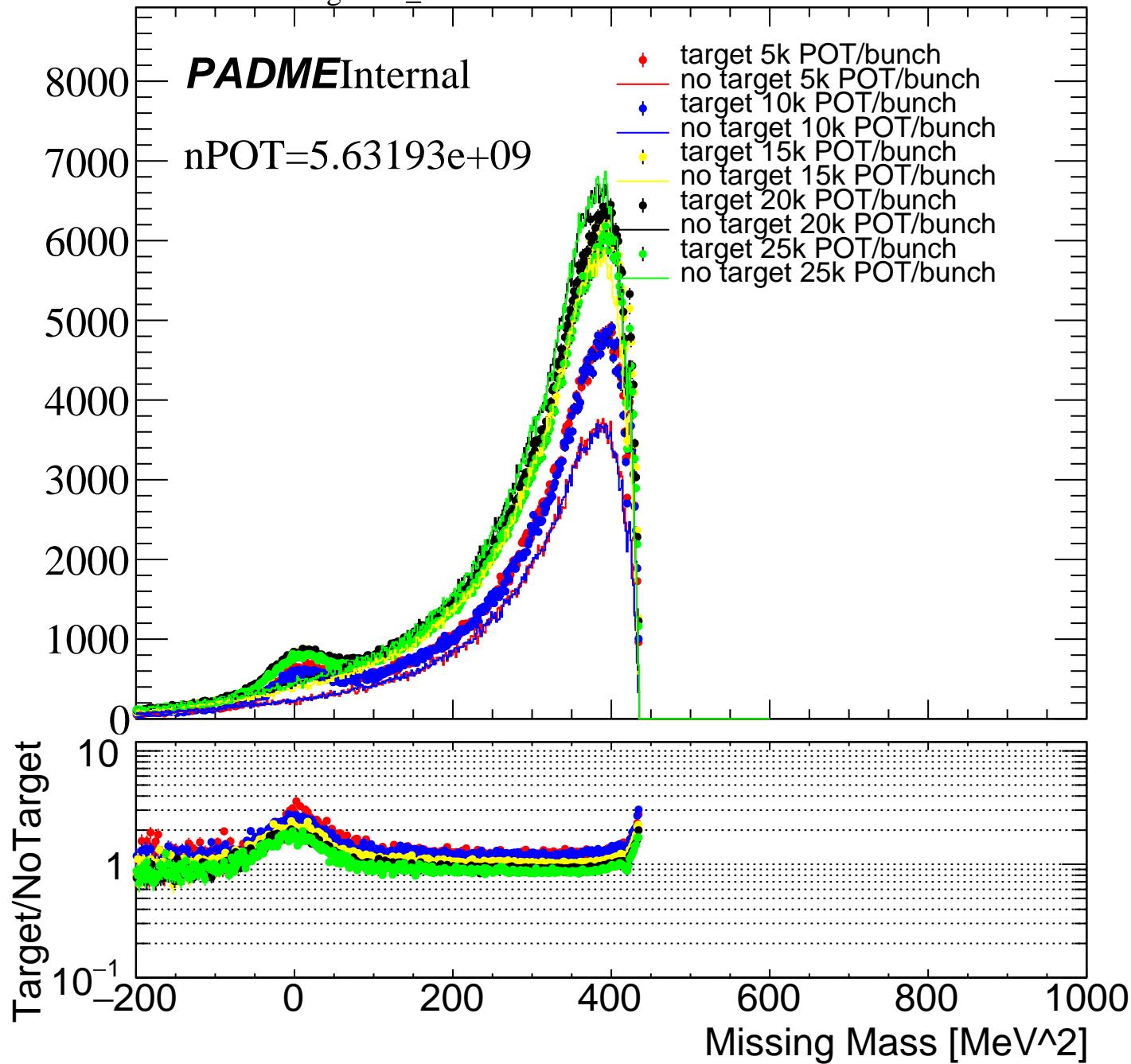
Target/NoTarget



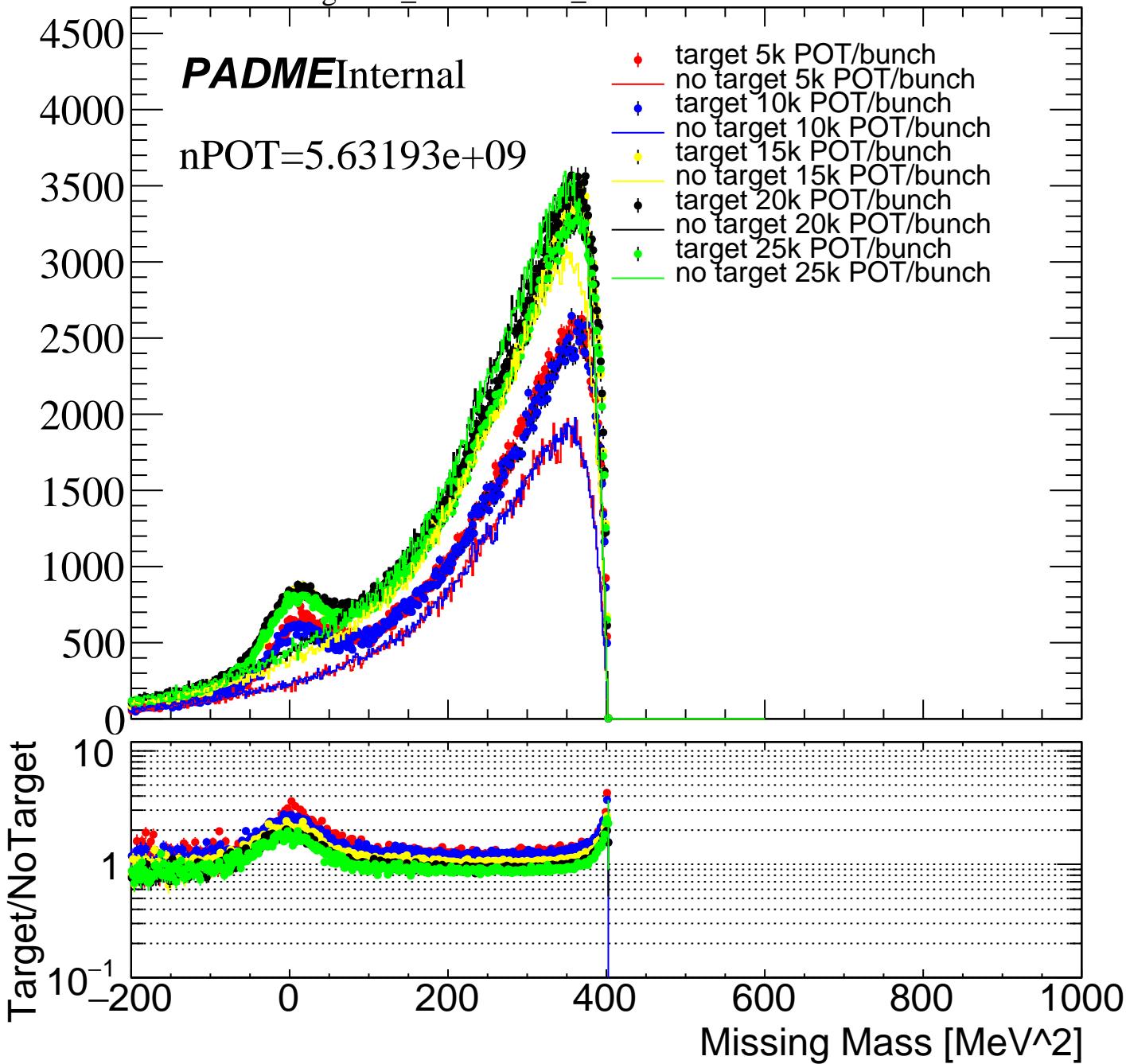
AnnihilationSAConephoton_10nsEThr50



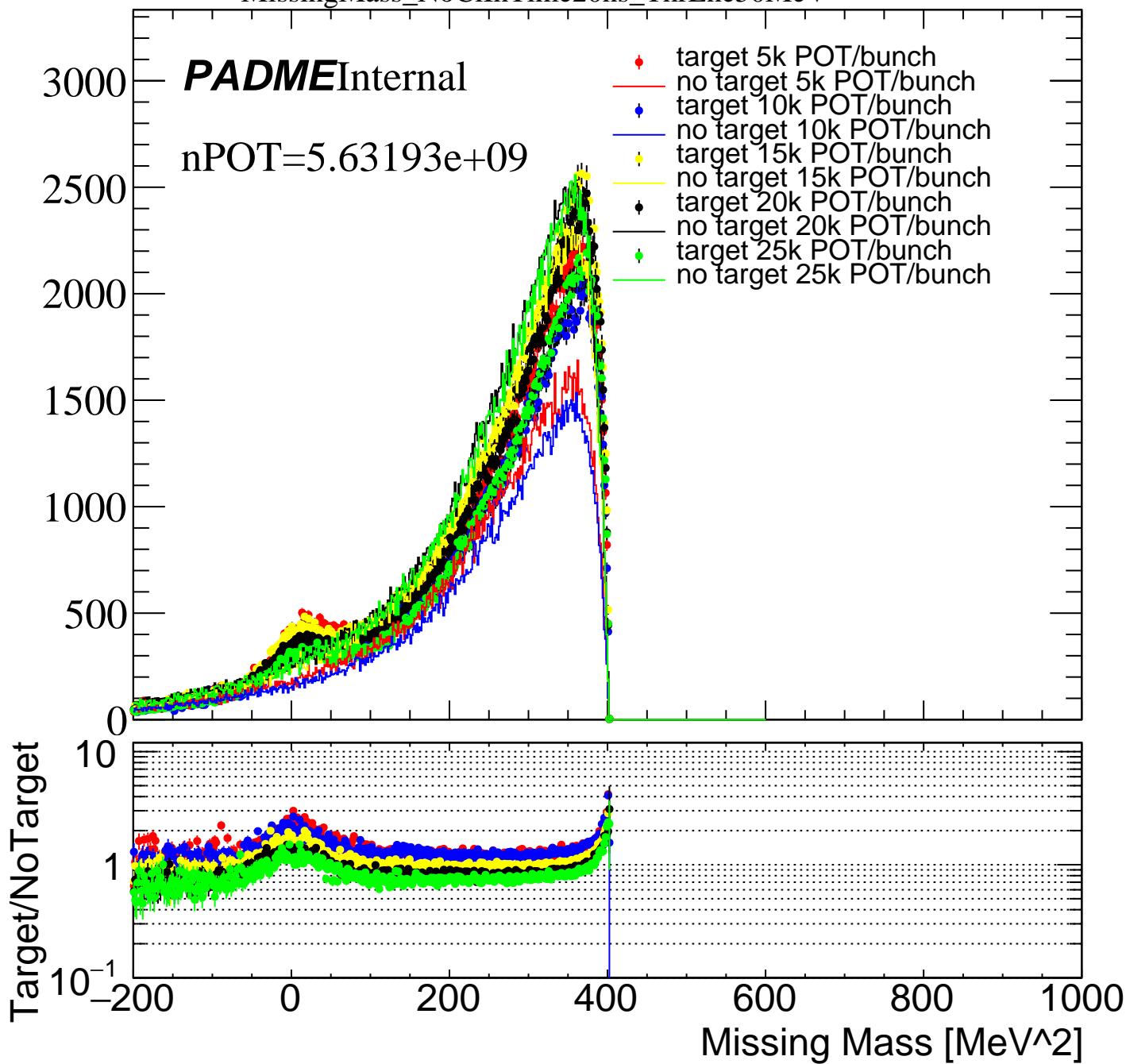
MissingMass_AllECALclu



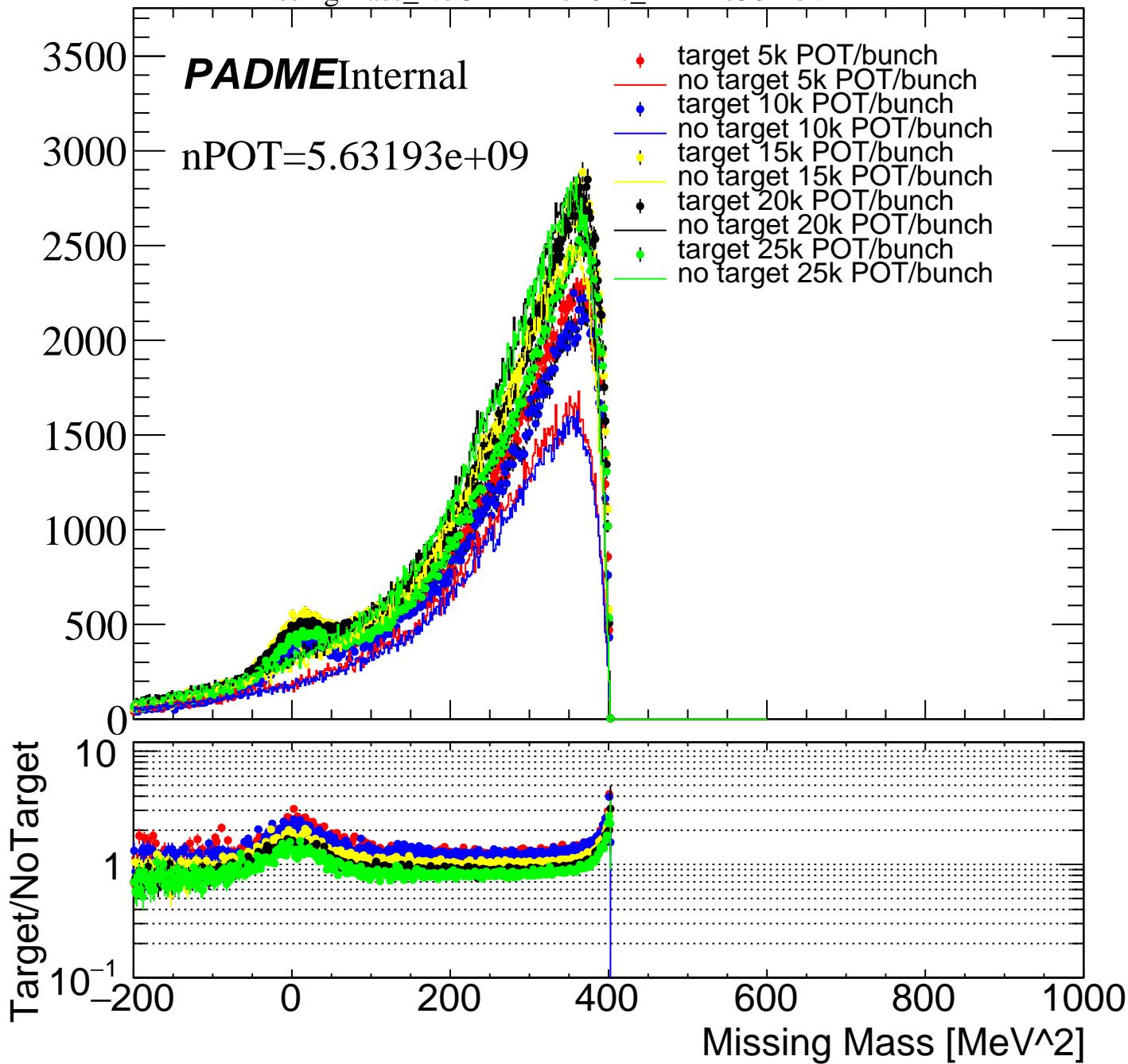
MissingMass_AllECALclu_ThrEne50MeV



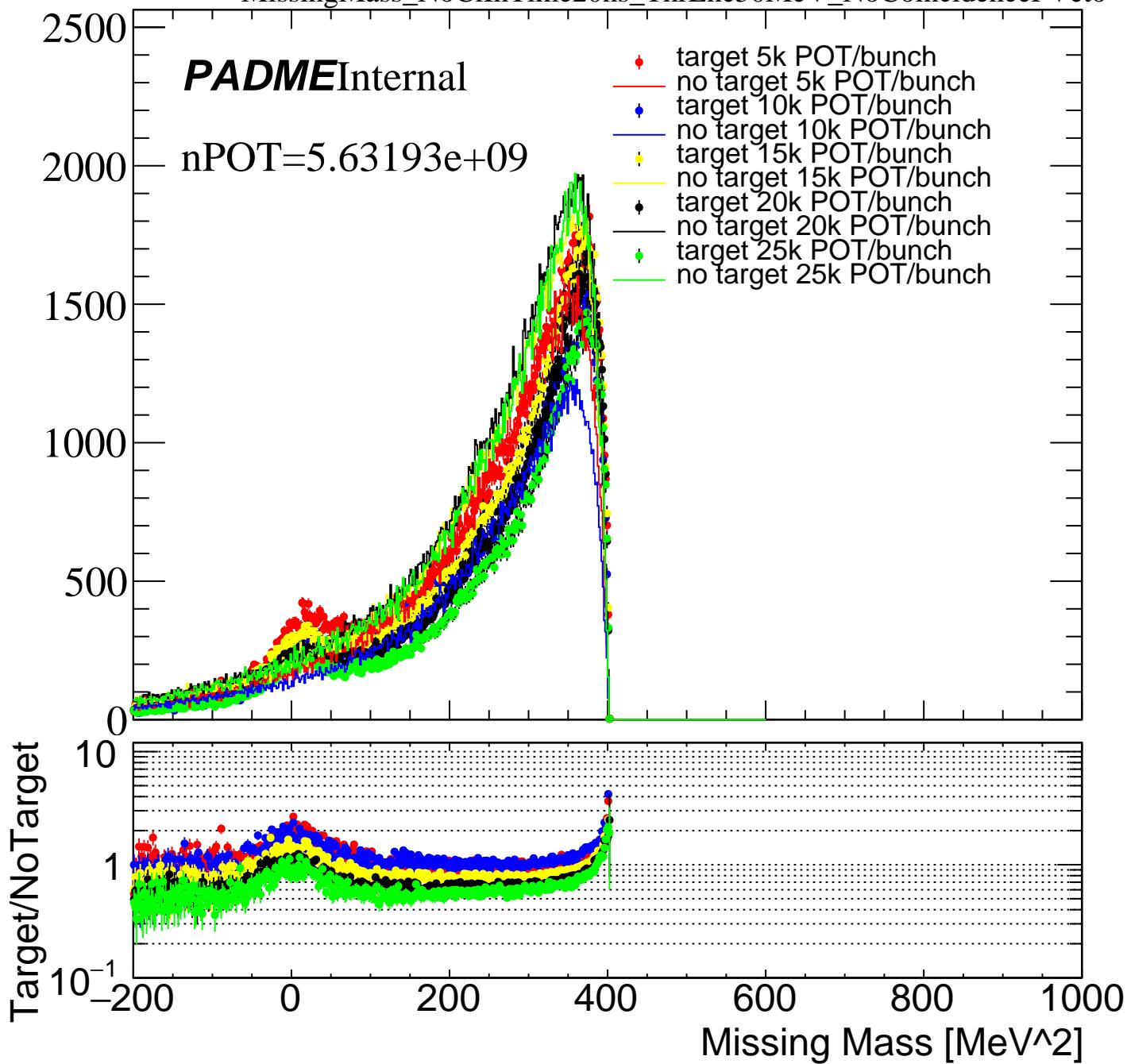
MissingMass_NoClInTime20ns_ThrEne50MeV

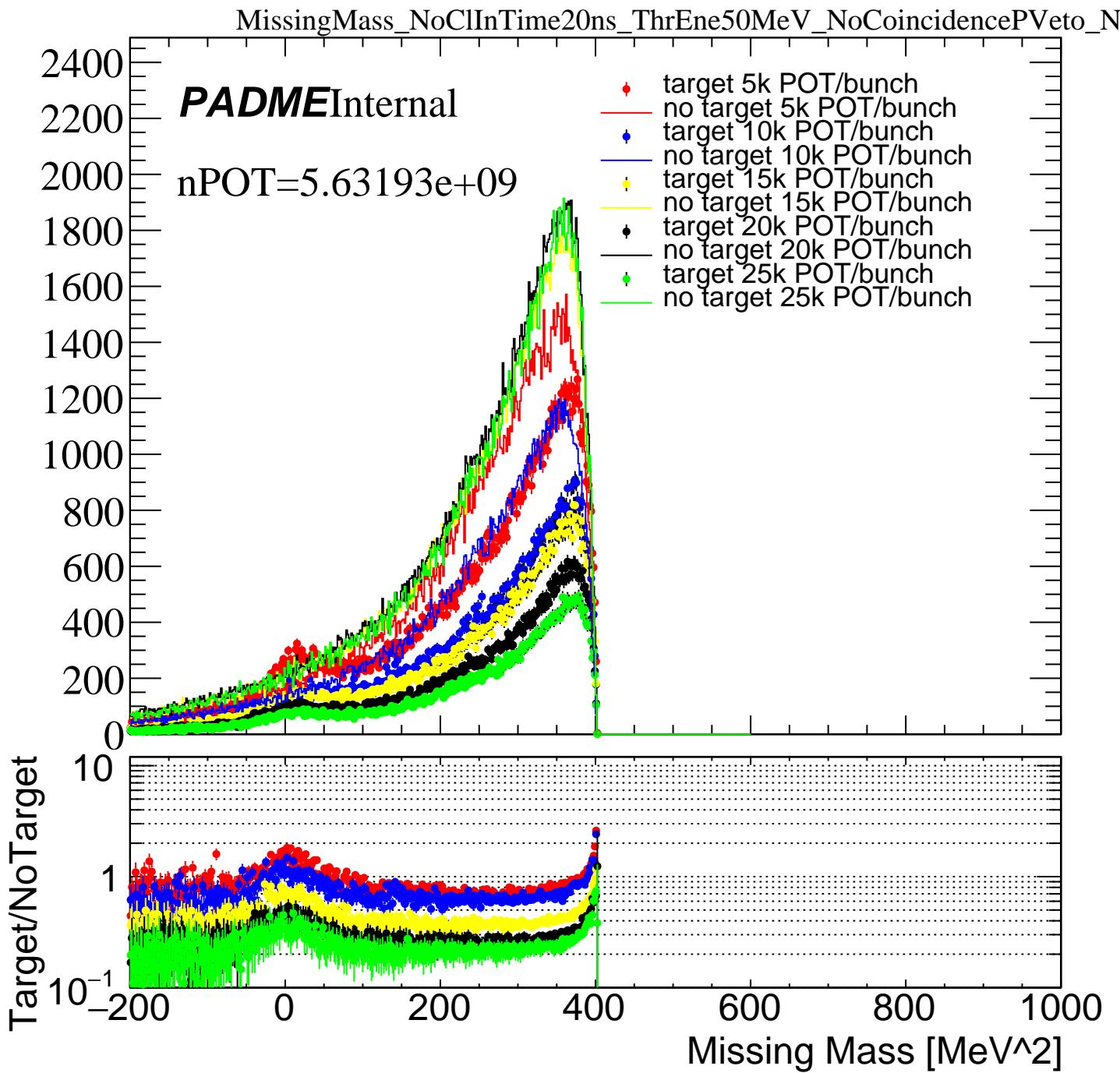


MissingMass_NoClInTime10ns_ThrEne50MeV

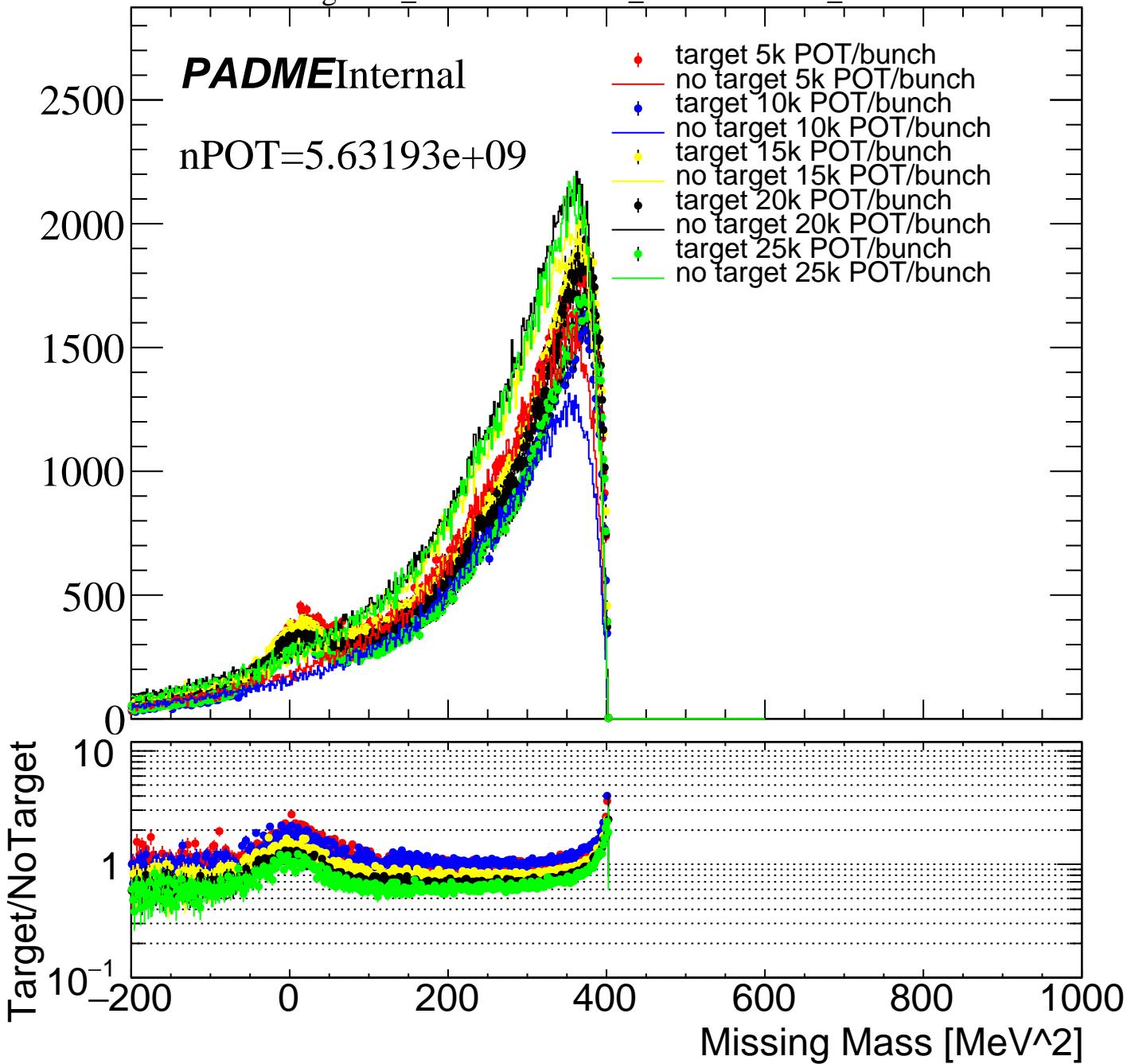


MissingMass_NoClInTime20ns_ThrEne50MeV_NoCoincidencePVeto

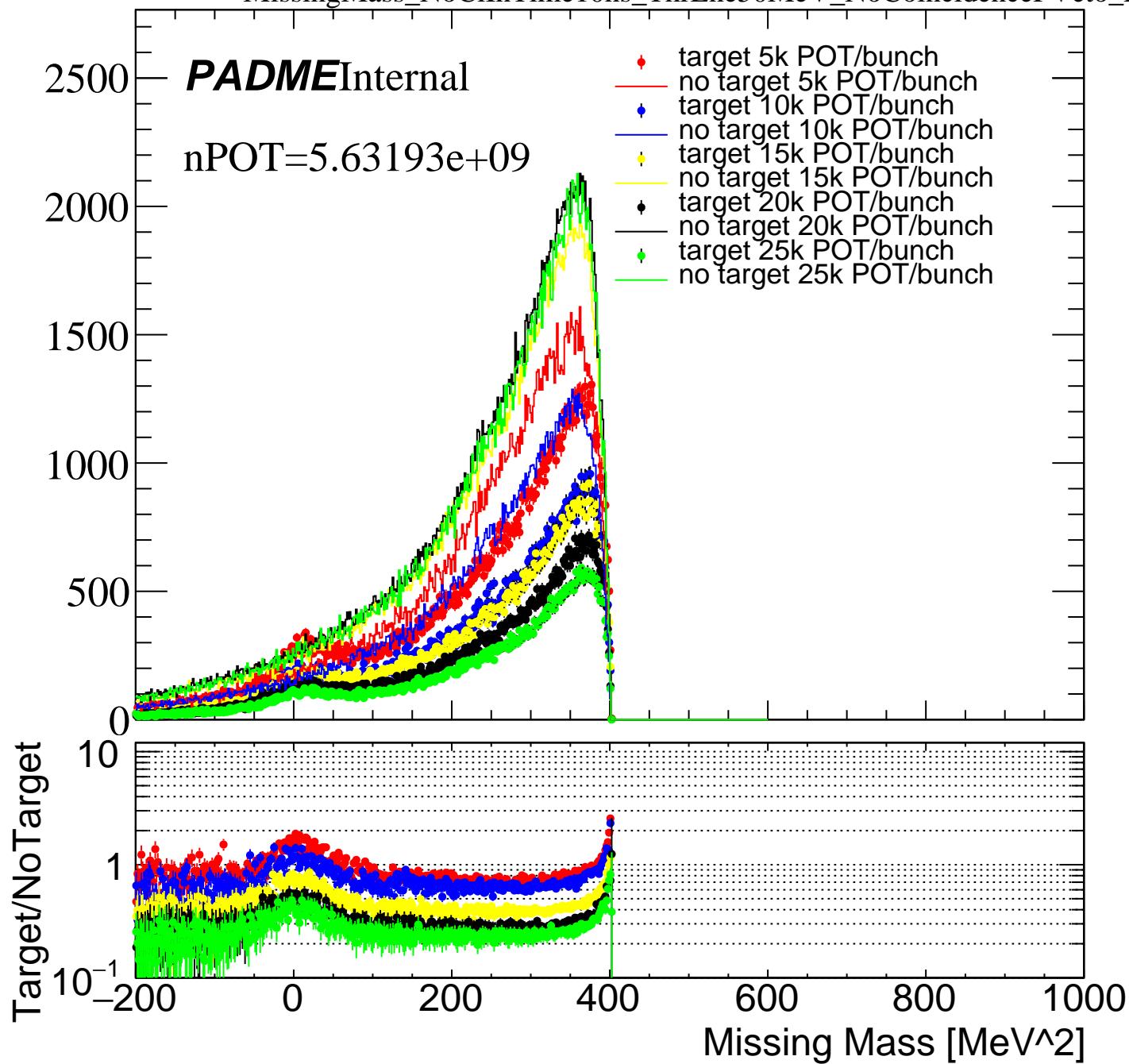




MissingMass_NoClInTime10ns_ThrEne50MeV_NoCoincidencePVeto



MissingMass_NoClInTime10ns_ThrEne50MeV_NoCoincidencePVeto_N



ECAL_MissingMassAnnihilation_10ns5CoGUnderPeakEThr90

