



HB-HE RadDam Analysis with 2015 pp Data

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27.08.2015
Weekly Meeting

Outline

- 2015 data Analysis for 3.8 T.(25 ns,50ns) and 0T (25ns)
 - HE& HB RadDam Analysis
 - Analysis Details
 - Energy vs ieta plots for different runs
- Summary & Next Plans

3.8 Tesla (25ns vs 50ns) HE Raddam Results

Run Information

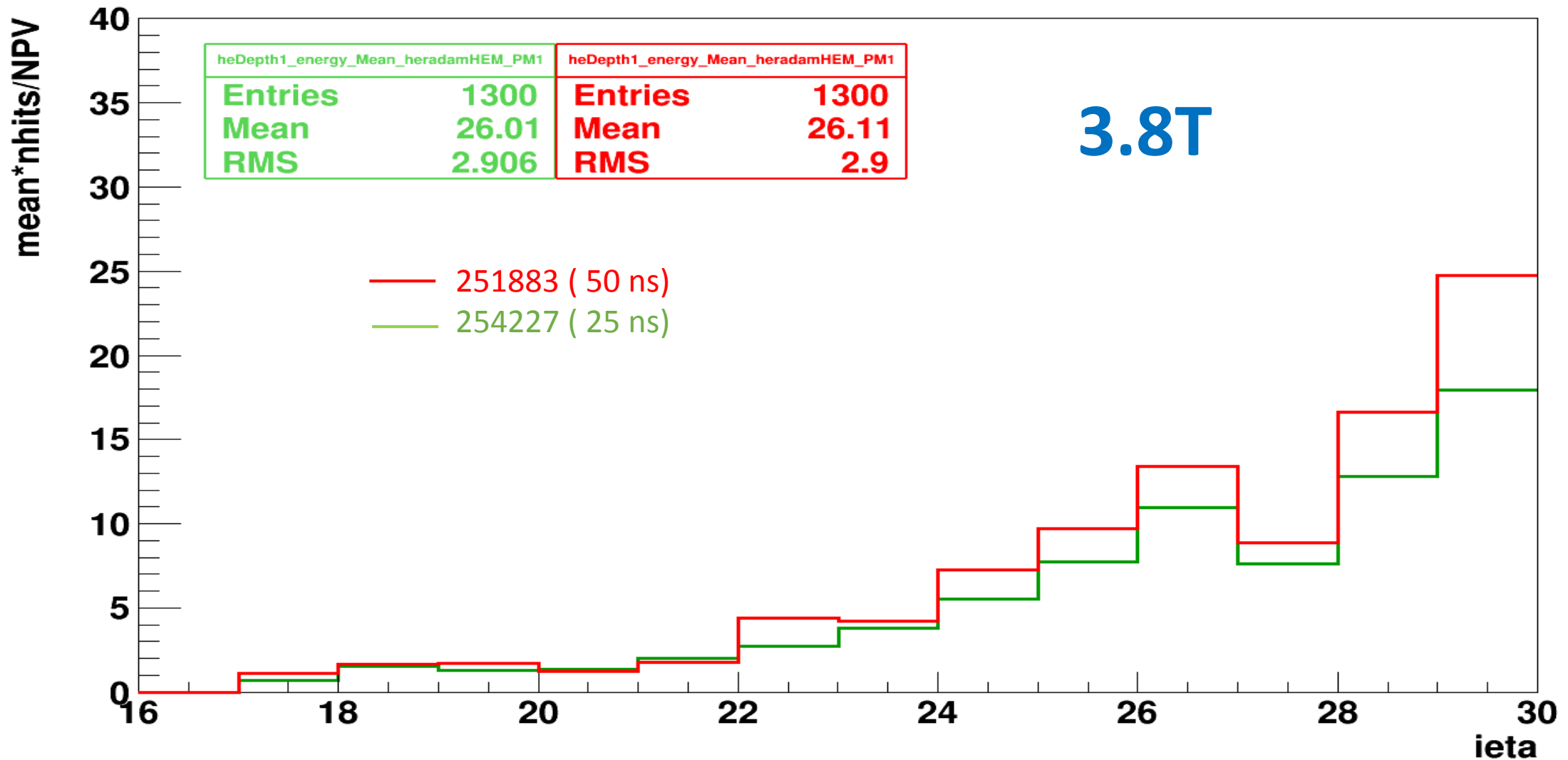
Run Number	Date	Time	magnetic Field	Injection scheme
254227	2015.08.13	1h. 18 min.	3.800 T	25ns 26b 26 10 14 12bpi4inj
251883	2015.07.16	2h. 57 min.	3.800 T	50ns 298b 256 38 246 36bpi13inj

- CMSSW_7_4_8_patch1 is used.
- HLT_L1SingleMu16_v1
- Energy Cuts: 2 GeV.
- Time < 15 ns.

Run number	Trigger	Number of Events
254227	HLT_L1SingleMu16_v1	2357
254883	HLT_L1SingleMu16_v1	50

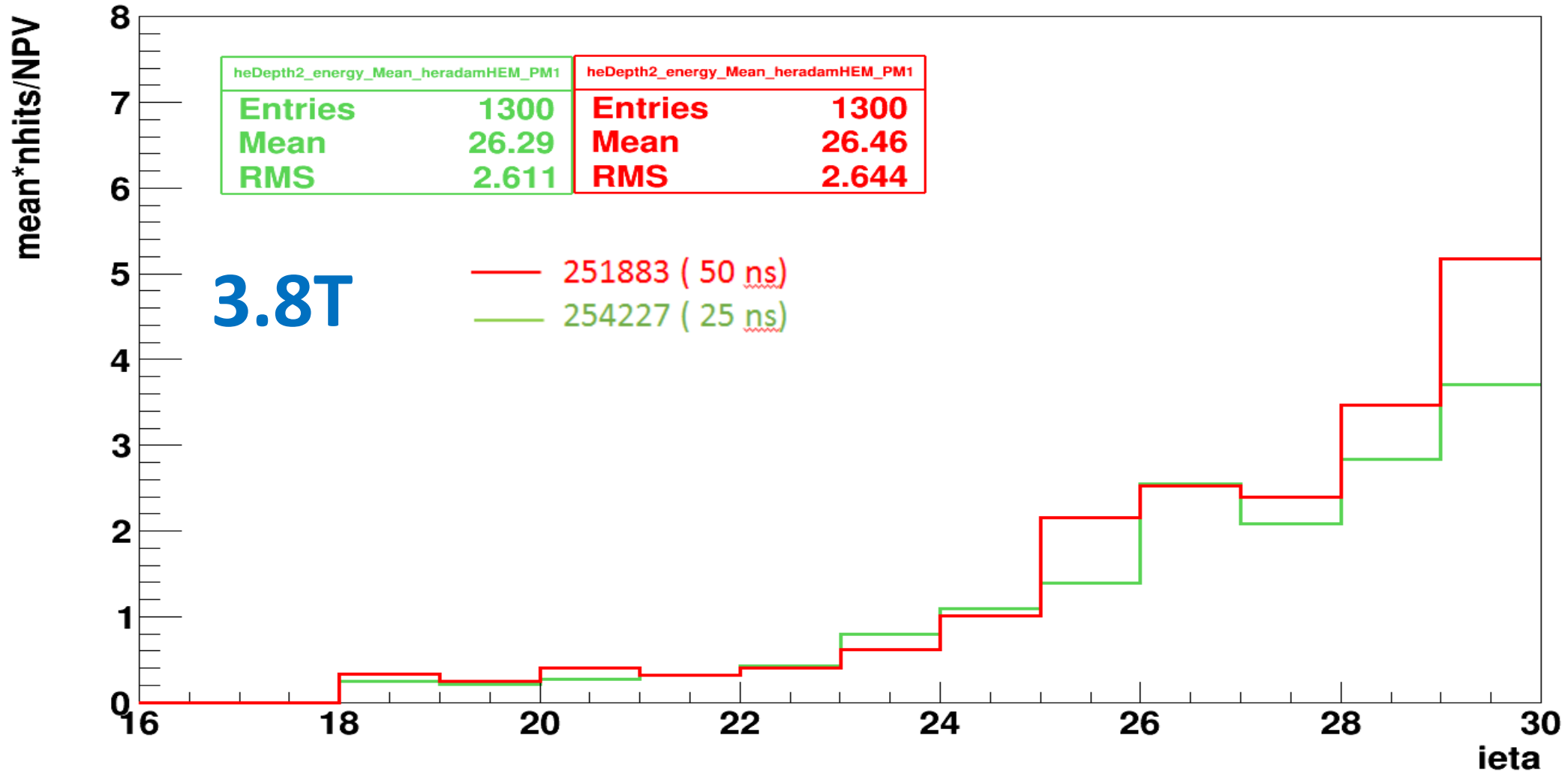
HE_Depth1_Minus (25ns vs 50ns)

heDepth1_energy_Mean_heradamHEM_PM1



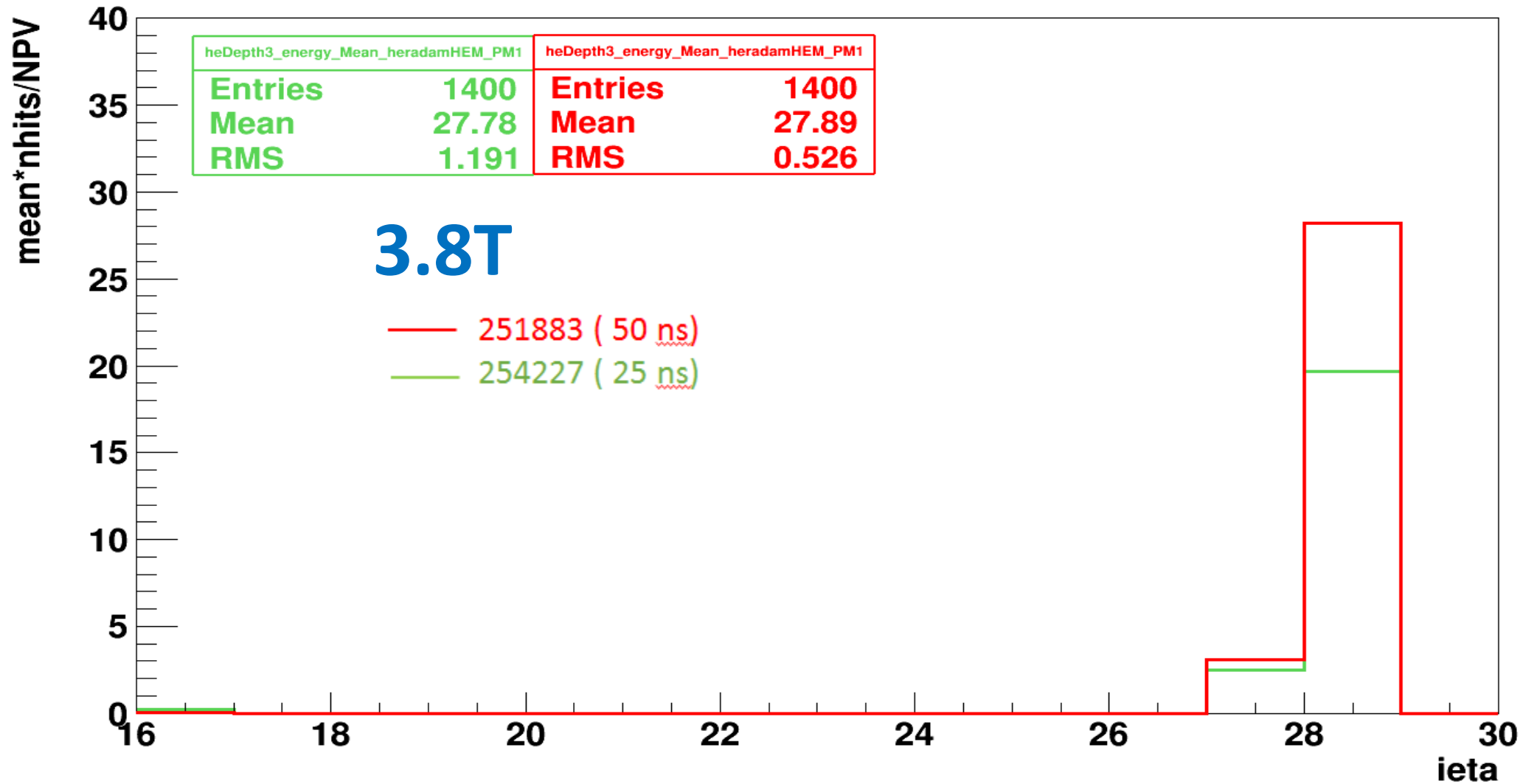
HE_Depth2_Minus(25ns vs 50ns)

heDepth2_energy_Mean_heradamHEM_PM1



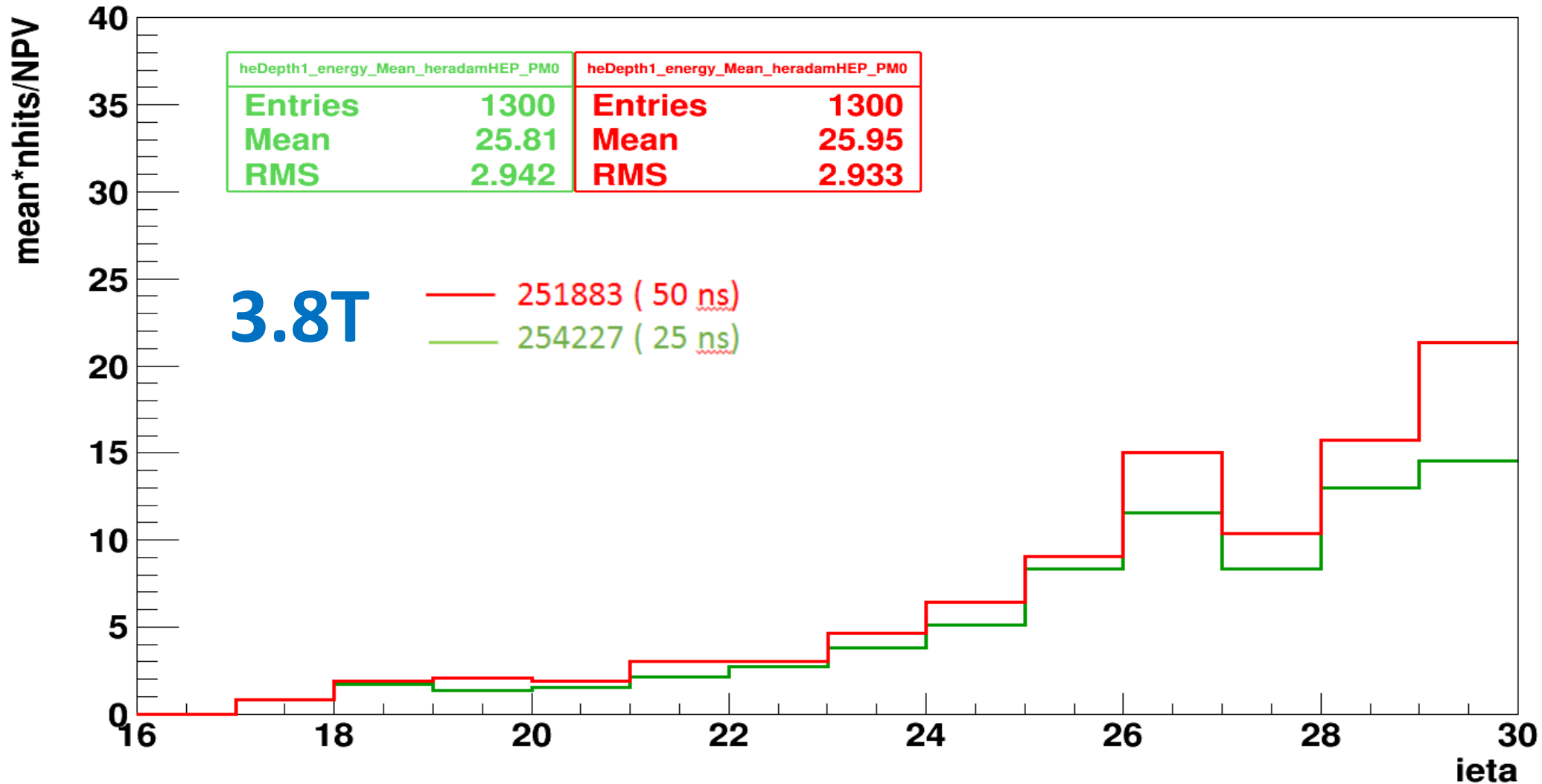
HE_Depth3_Minus(25ns vs 50ns)

heDepth3_energy_Mean_heradamHEM_PM1



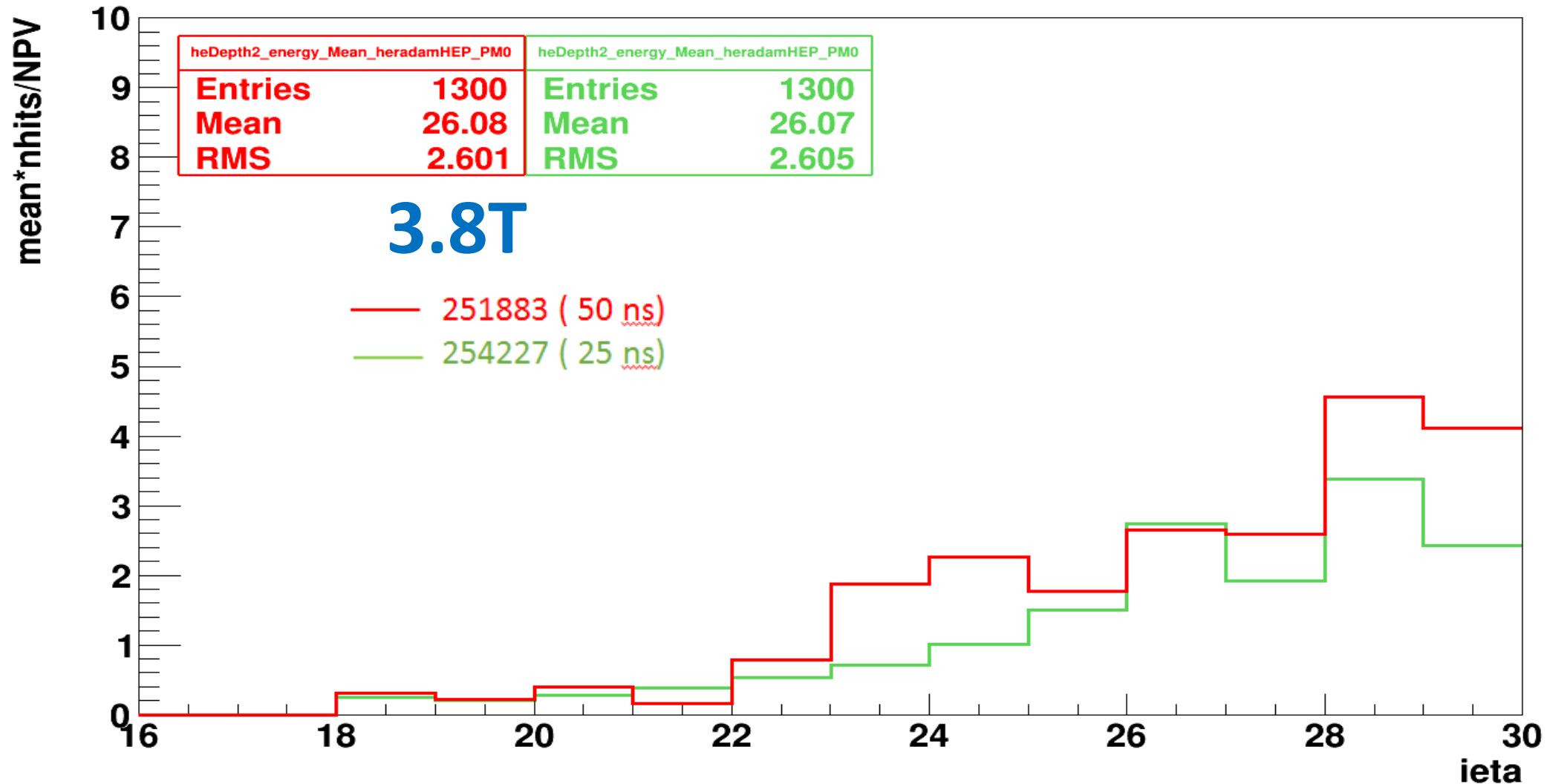
HE_Depth1_Plus (25ns vs 50ns)

heDepth1_energy_Mean_heradamHEP_PM0



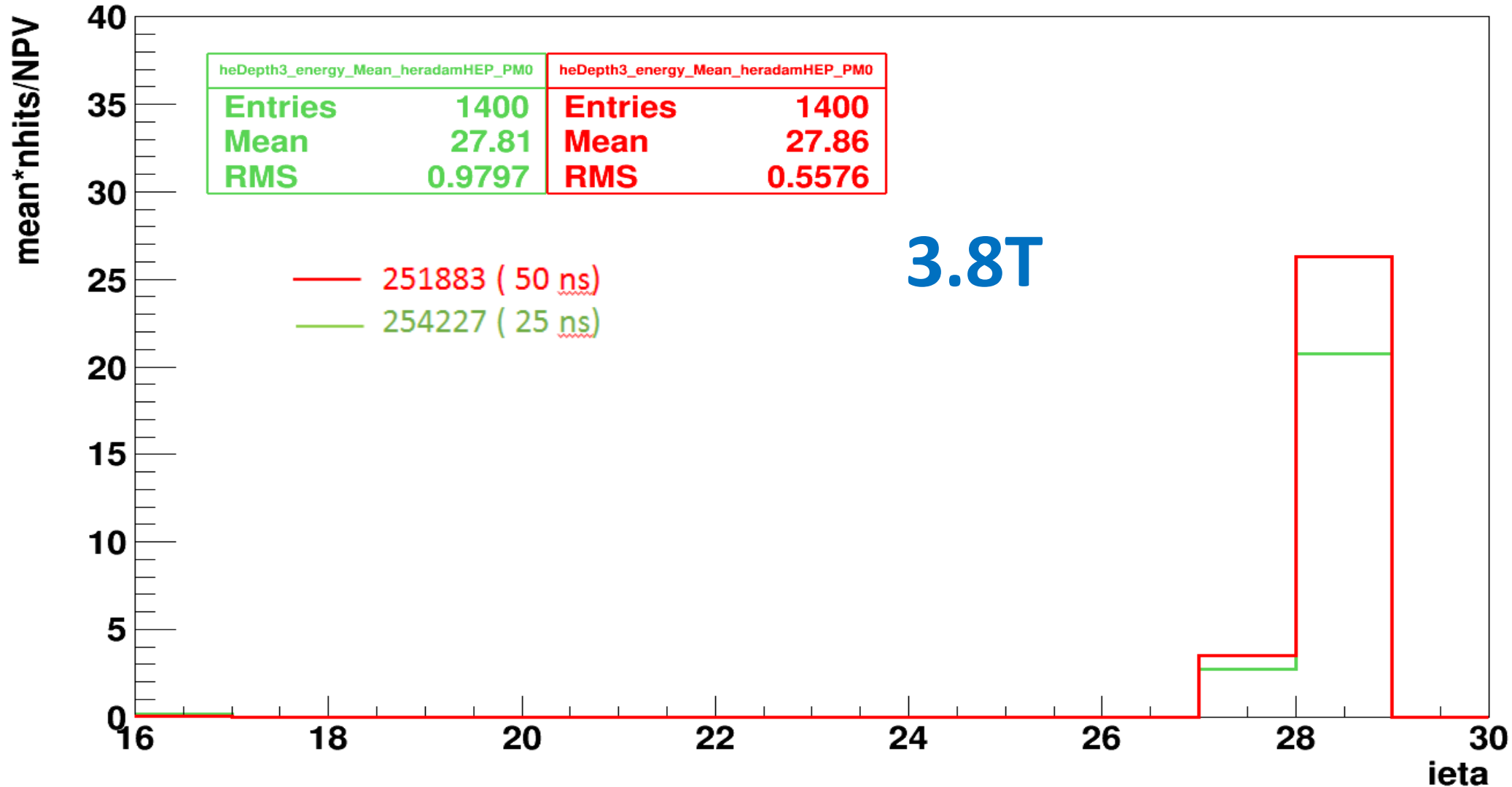
HE_Depth2_Plus (25ns vs 50ns)

heDepth2_energy_Mean_heradamHEP_PM0



HE_Depth3_Plus (25ns vs 50ns)

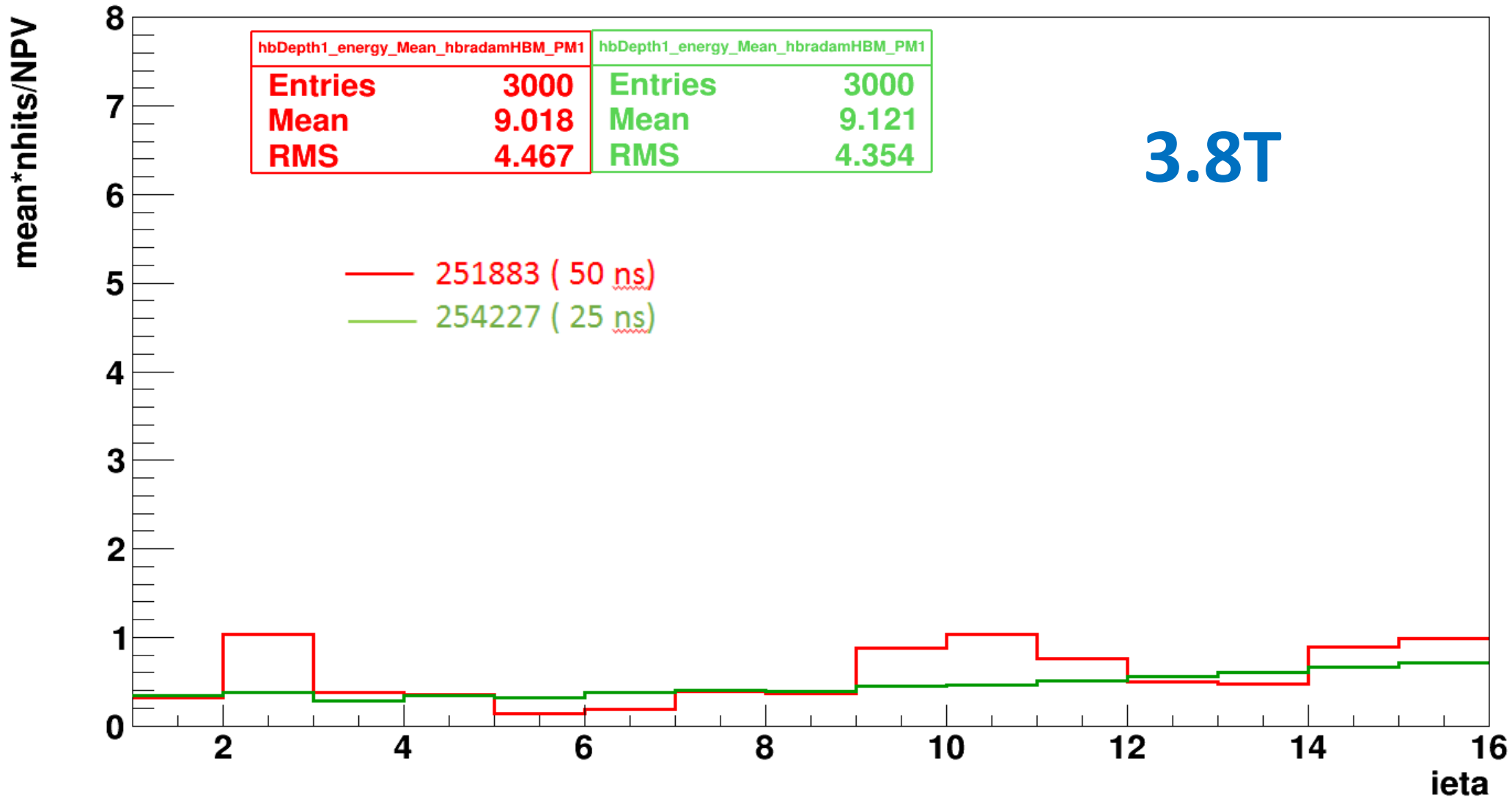
heDepth3_energy_Mean_heradamHEP_PM0



3.8 Tesla (25 ns vs 50ns) HB Raddam Results

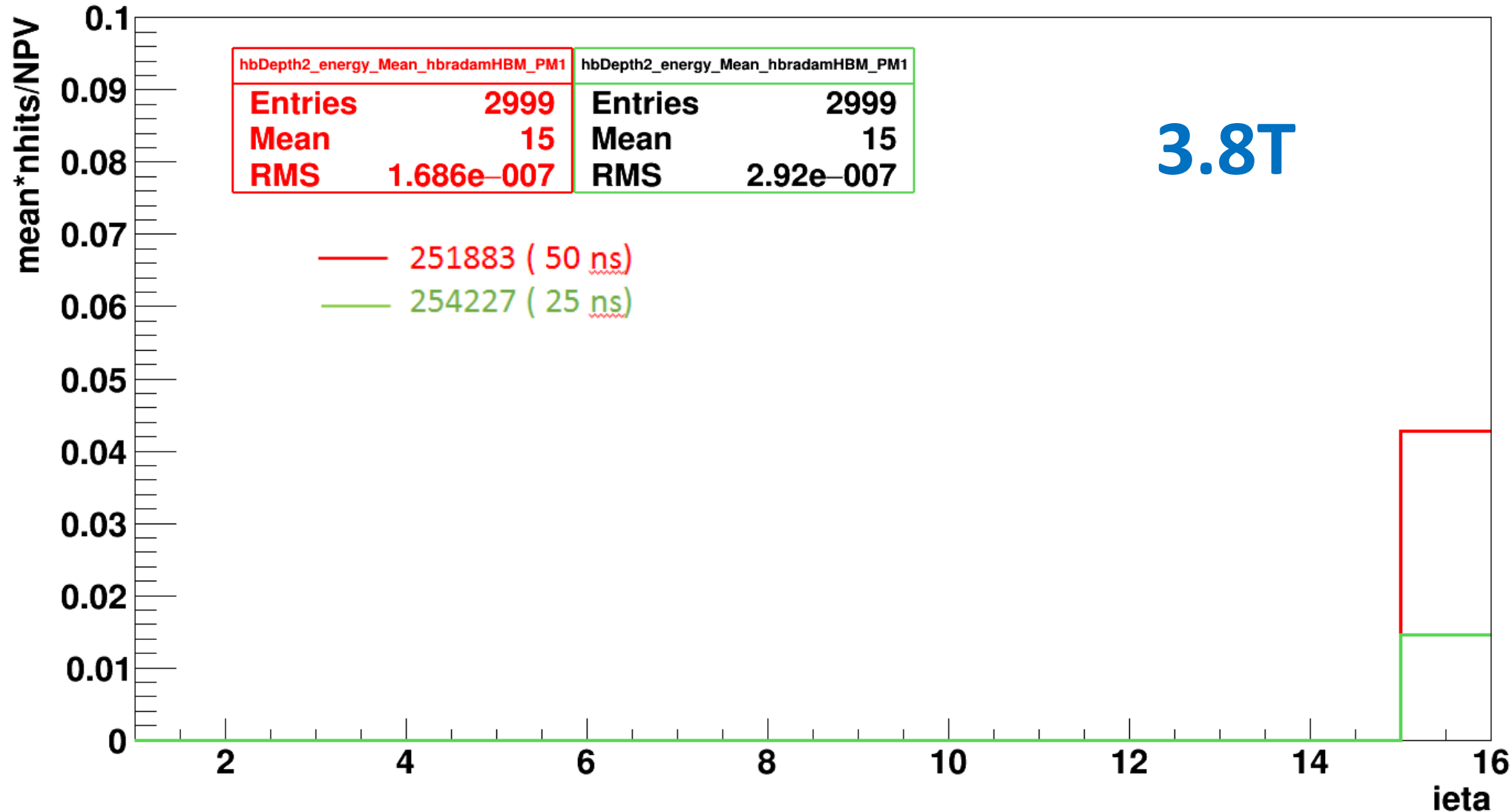
HB_Depth1_Minus (25ns vs 50ns)

hbDepth1_energy_Mean_hbradamHBM_PM1



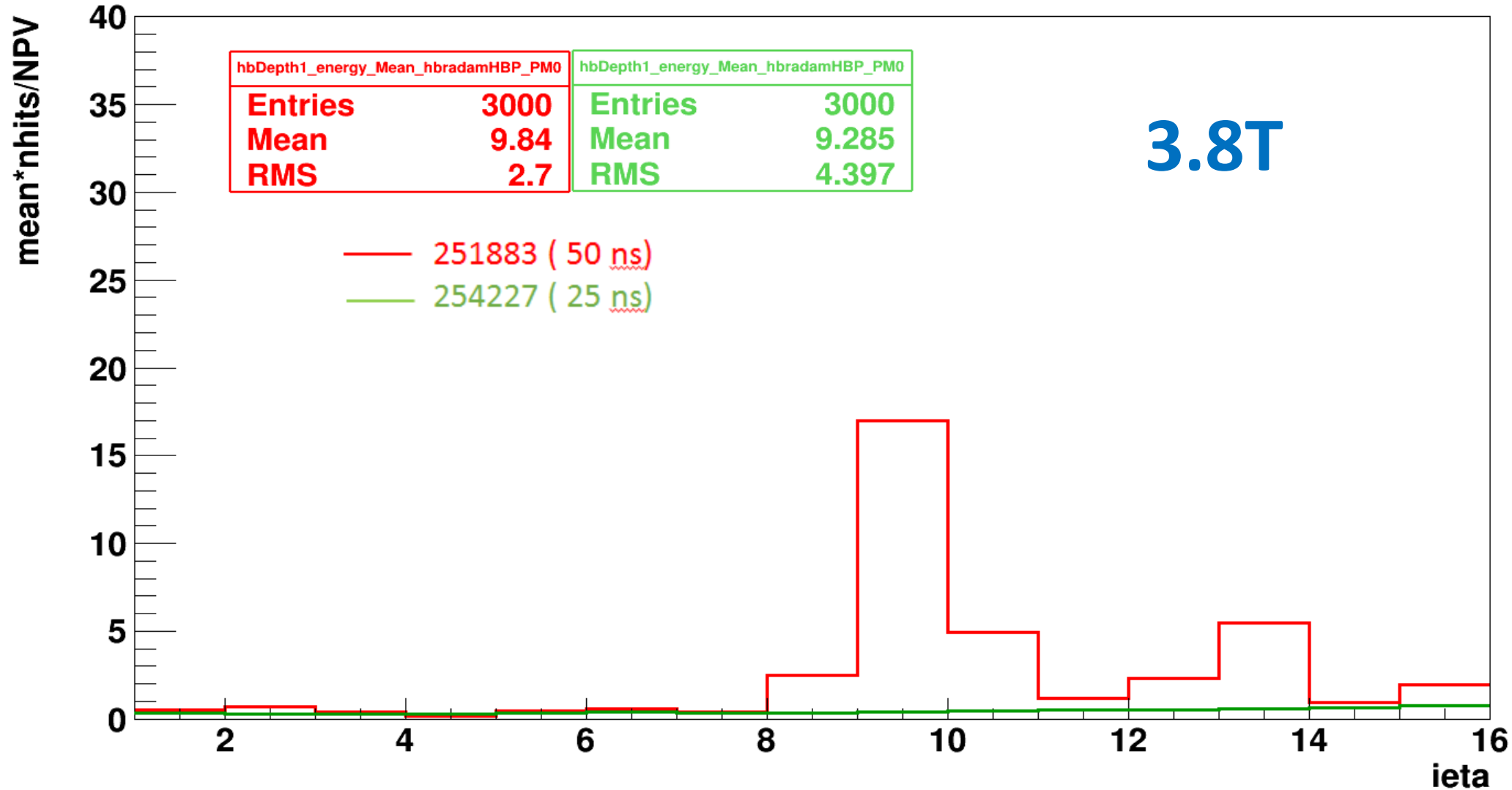
HB_Depth2_Minus (25ns vs 50ns)

hbDepth2_energy_Mean_hbradamHBM_PM1



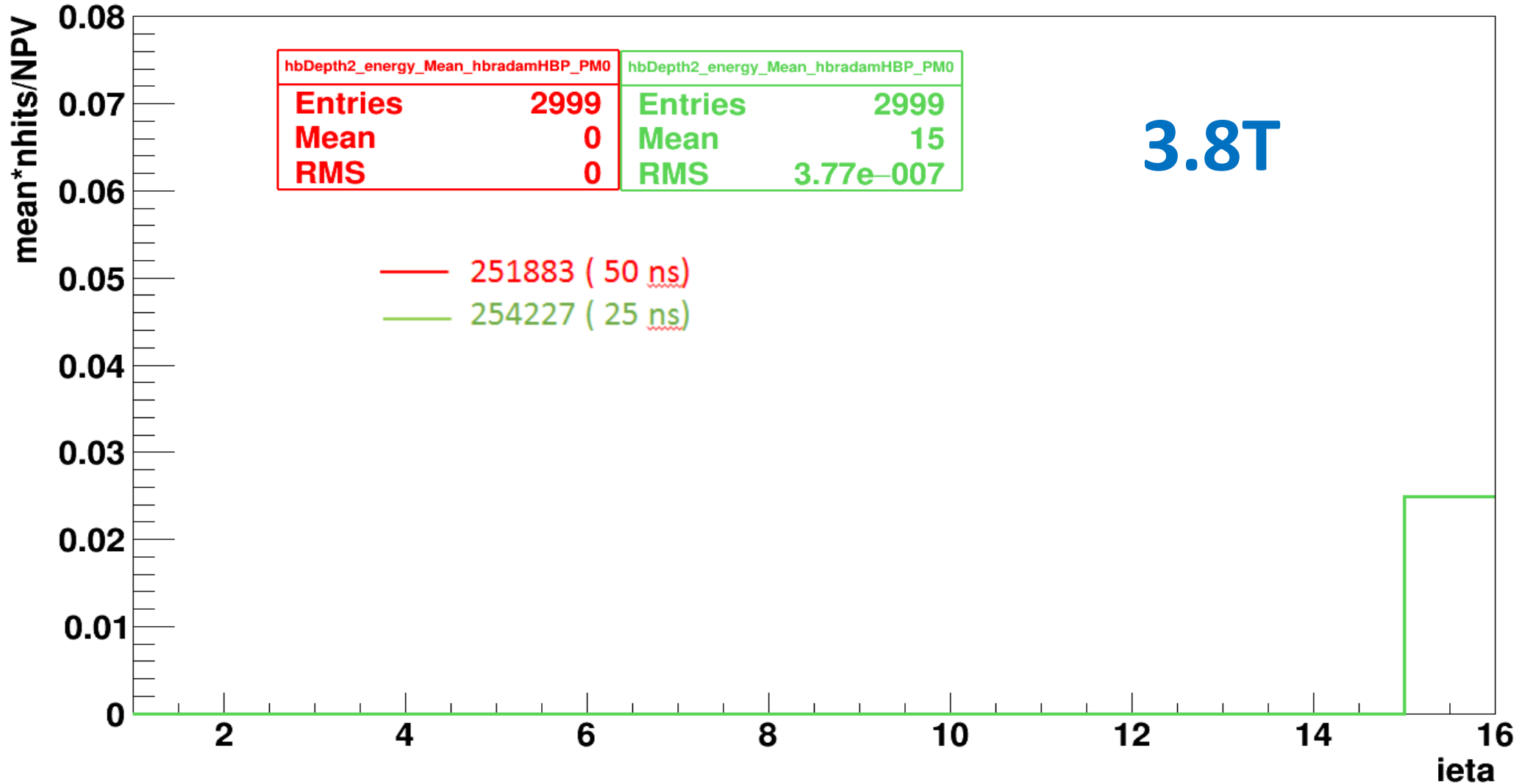
HB_Depth1_Plus (25ns vs 50ns)

hbDepth1_energy_Mean_hbradamHBP_PM0



HB_Depth2_Plus (25ns vs 50ns)

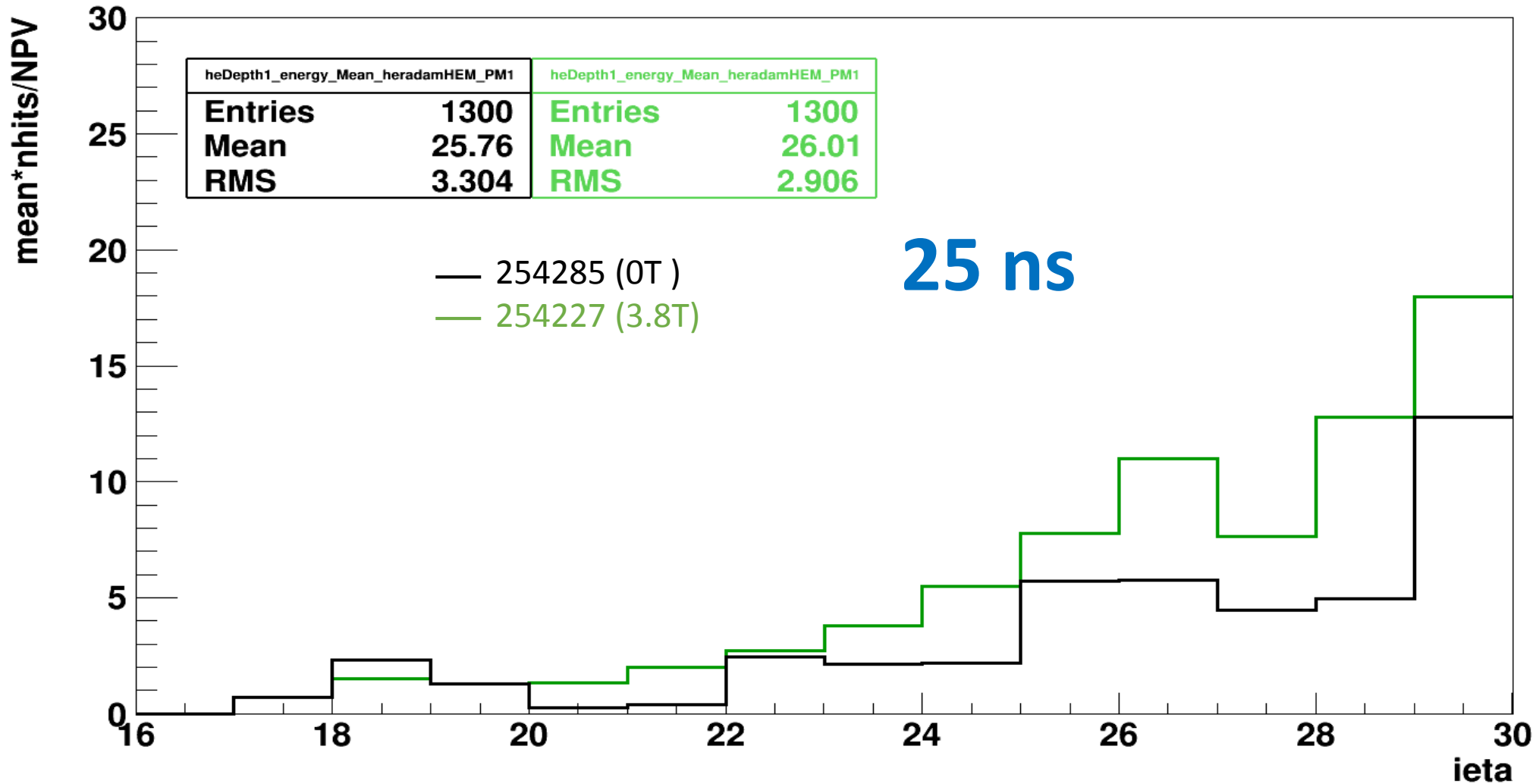
hbDepth2_energy_Mean_hbradamHBP_PM0



3.8 Tesla vs 0Tesla (25 ns) HE Raddam Results

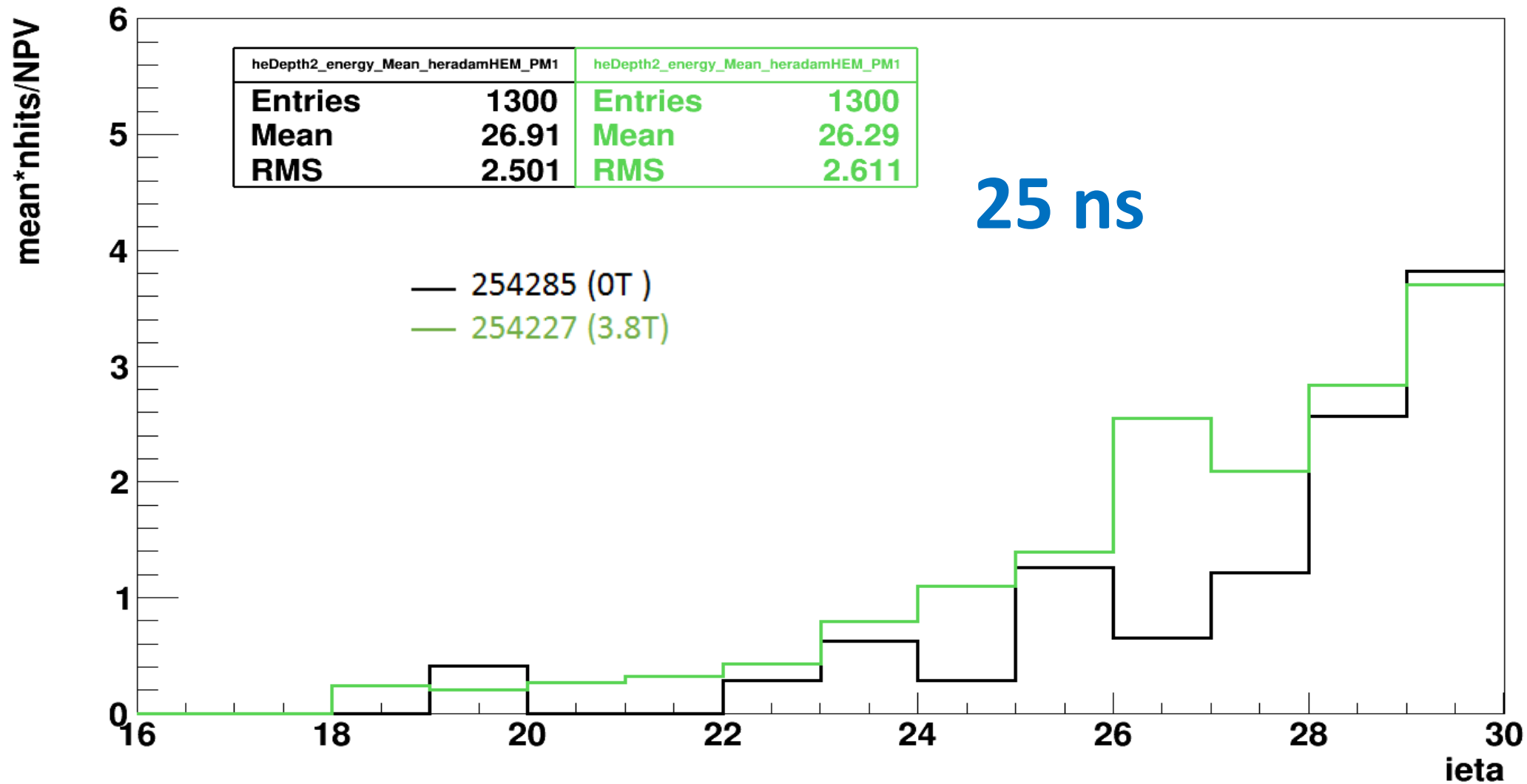
HE_Depth1_Minus (0 T vs 3.8 T)

heDepth1_energy_Mean_heradamHEM_PM1



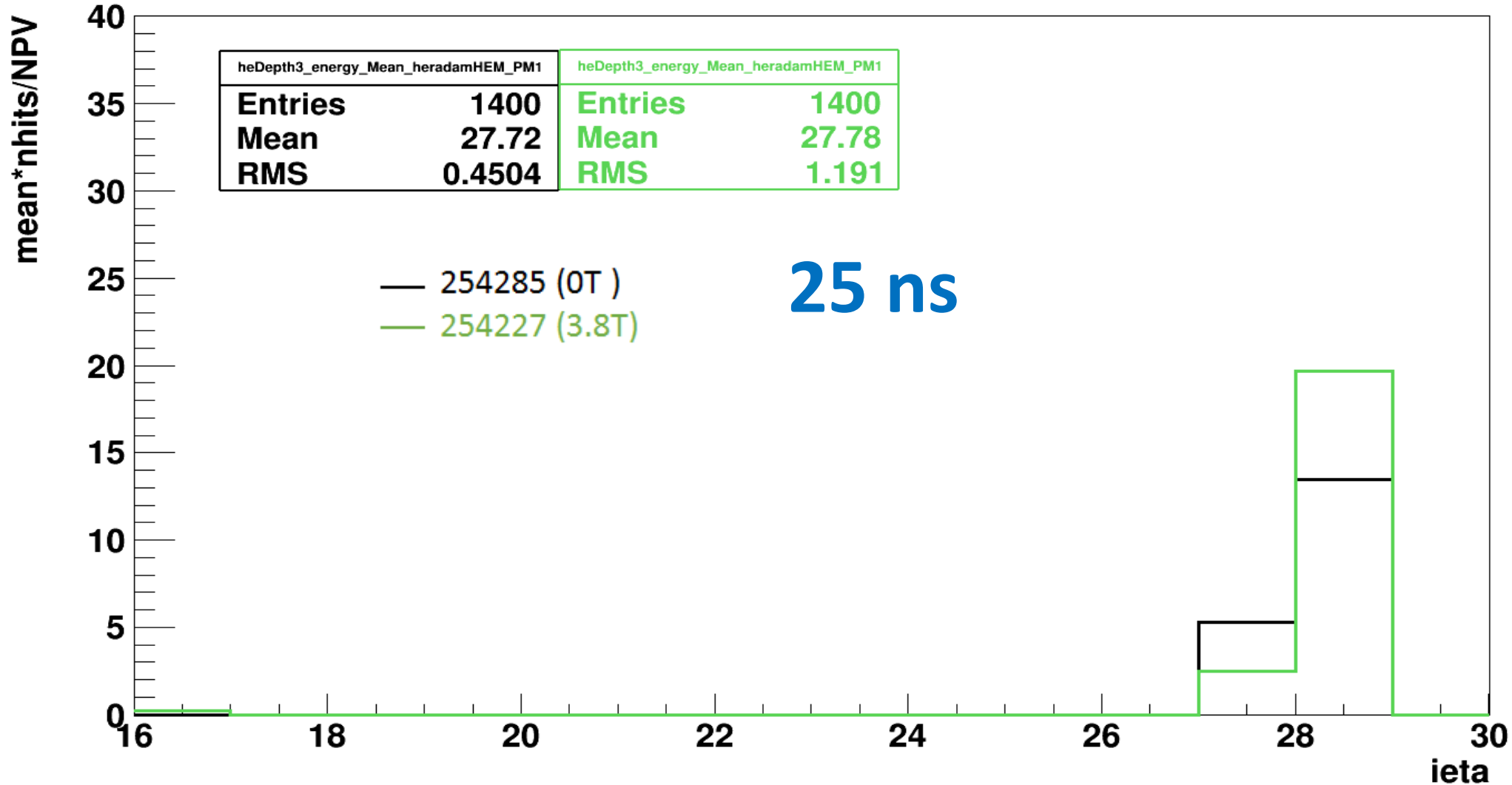
HE_Depth2_Minus (0 T vs 3.8 T)

heDepth2_energy_Mean_heradamHEM_PM1



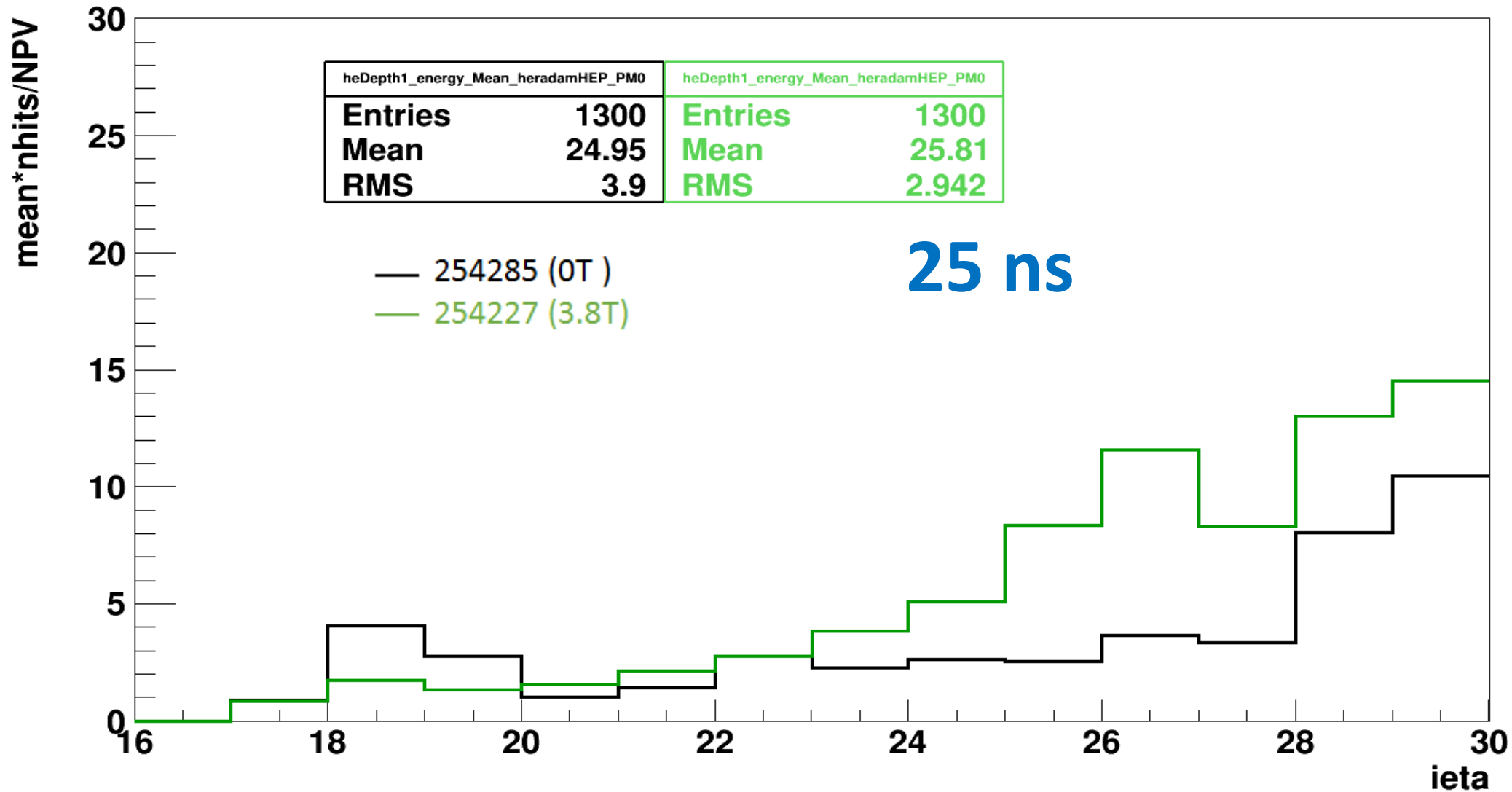
HE_Depth3_Minus (0 T vs 3.8 T)

heDepth3_energy_Mean_heradamHEM_PM1



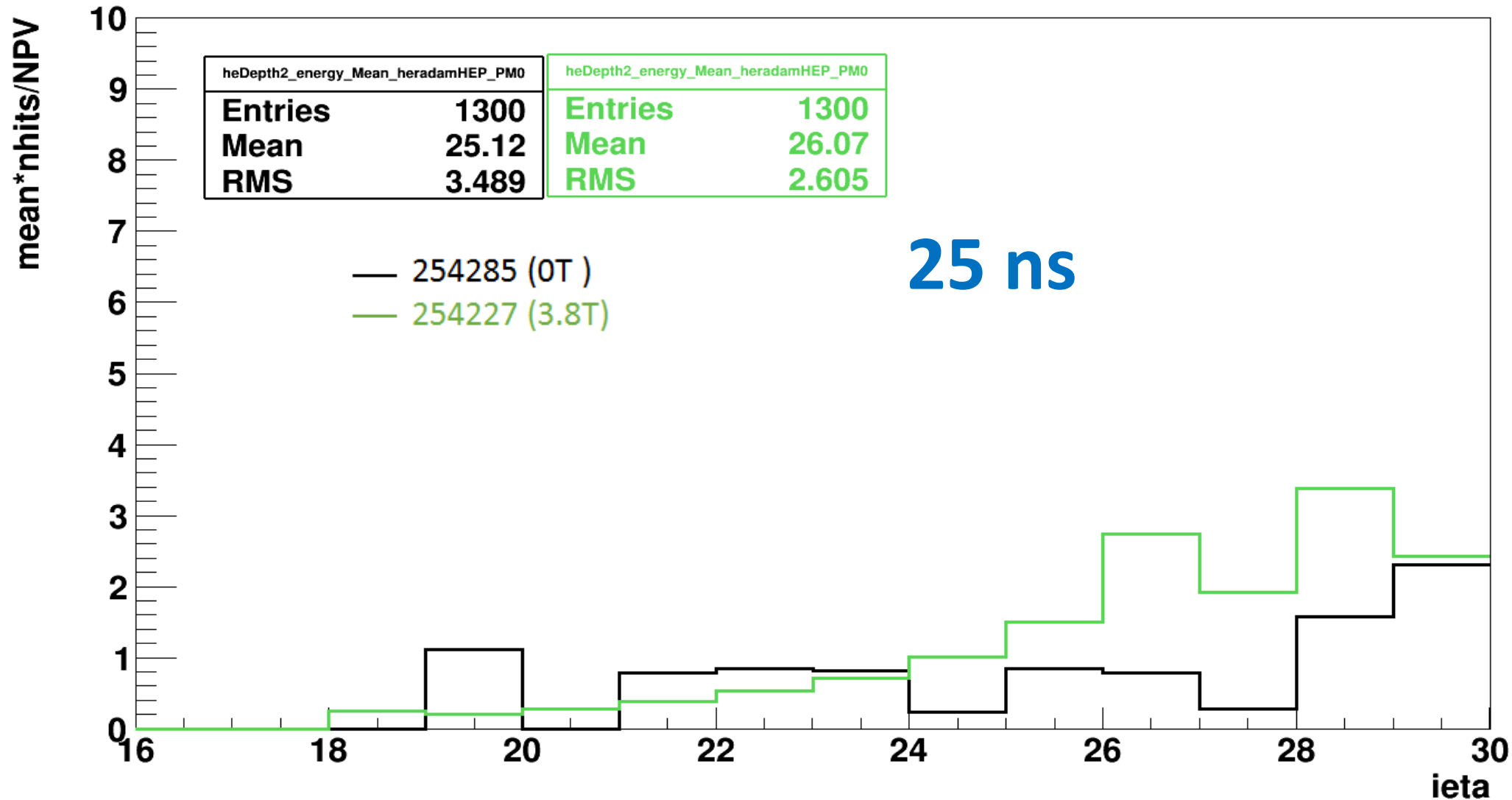
HE_Depth1_Plus (0 T vs 3.8 T)

heDepth1_energy_Mean_heradamHEP_PM0



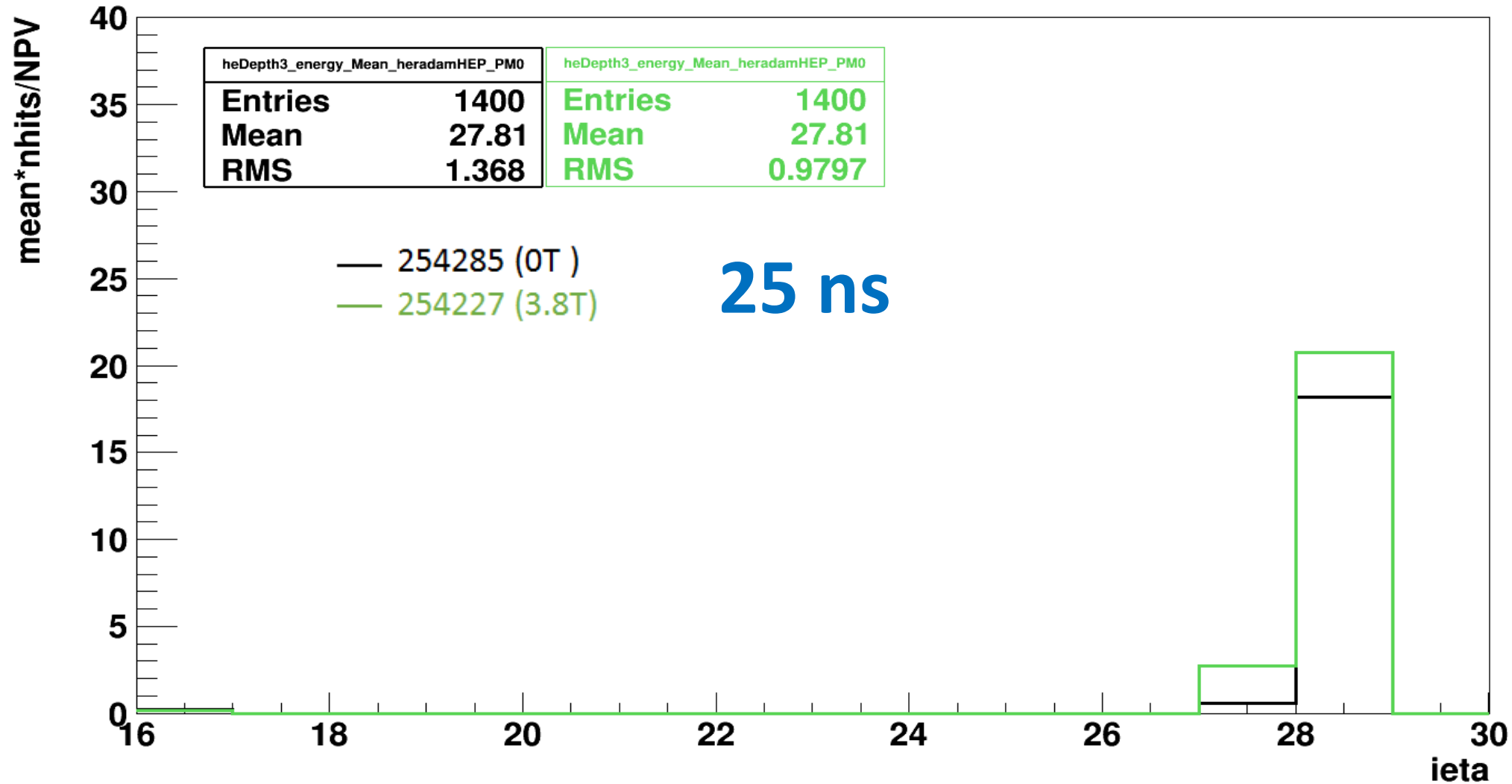
HE_Depth2_Plus (0 T vs 3.8 T)

heDepth2_energy_Mean_heradamHEP_PM0



HE_Depth3_Plus (0 T vs 3.8 T)

heDepth3_energy_Mean_heradamHEP_PM0



3.8 Tesla vs 0Tesla (25 ns) HB Raddam Results

Run Information

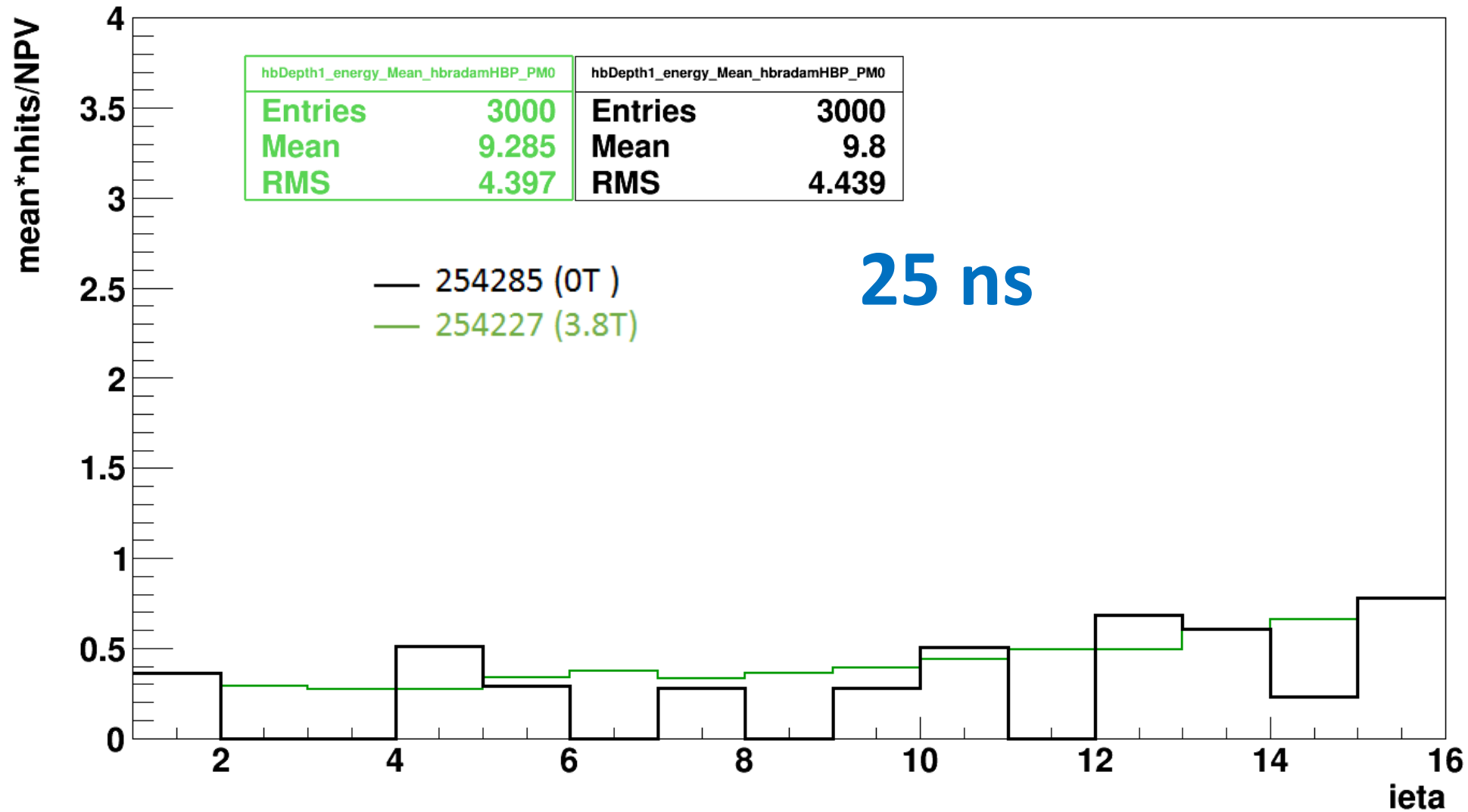
Run Number	Date	Time	magnetic Field	Injection scheme
254227	2015.08.13	1h. 18 min.	3.800 T	25ns 26b 26 10 14 12bpi4inj
254285	2015.08.13	1 h. 56 min.	0.122 T	25ns 86b 74 53 54 24bpi7inj

- CMSSW_7_4_8_patch1 is used.
- HLT_L1SingleMu16_v1
- Energy Cuts: 2 GeV.
- Time < 15 ns.

Run number	Trigger	Number of events
254227	HLT_L1SingleMu16_v1	2357
254285	HLT_L1SingleMu16_v1	9

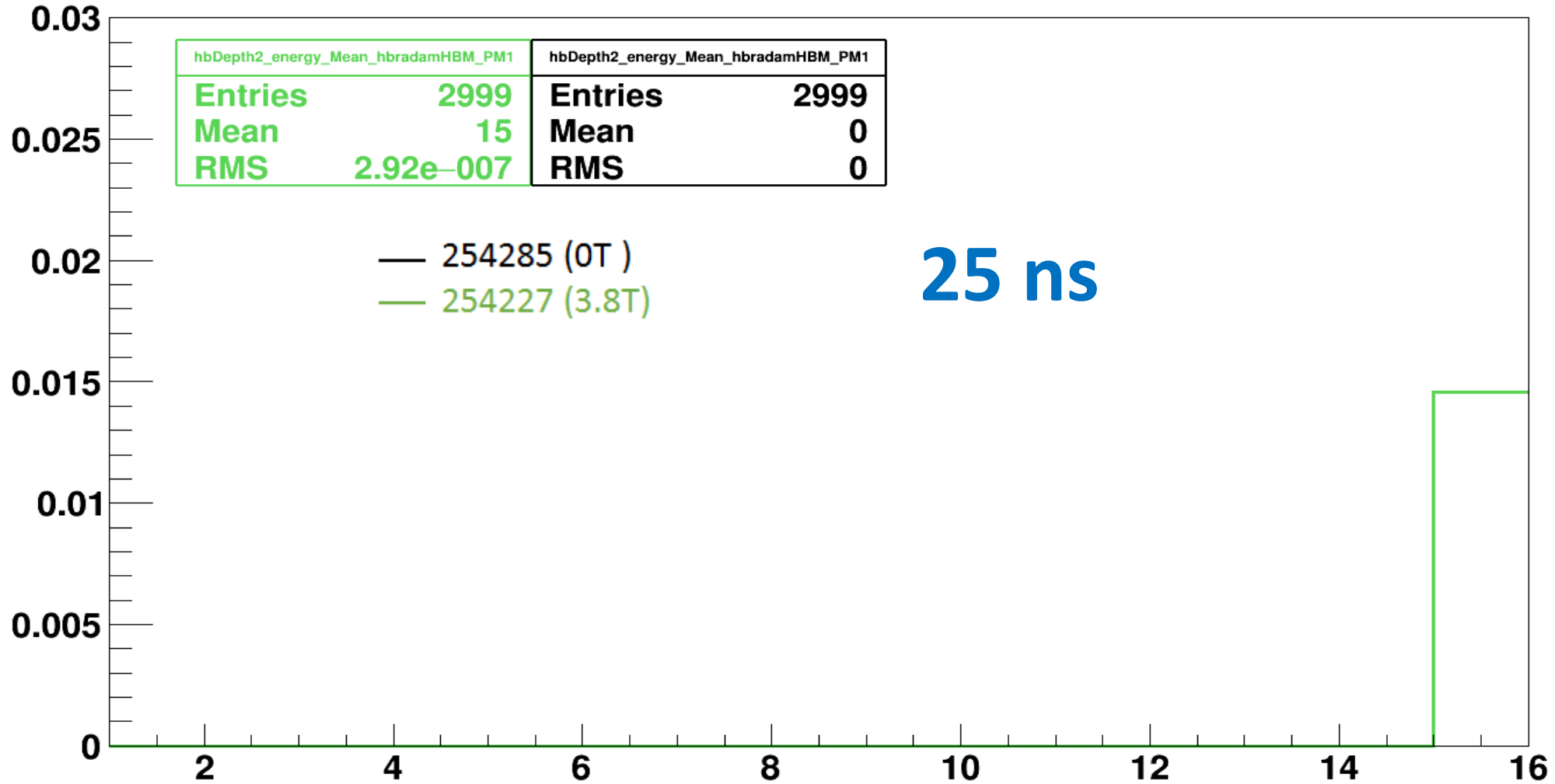
HB_Depth1_Minus (0 T vs 3.8 T)

hbDepth1_energy_Mean_hbradamHBP_PM0



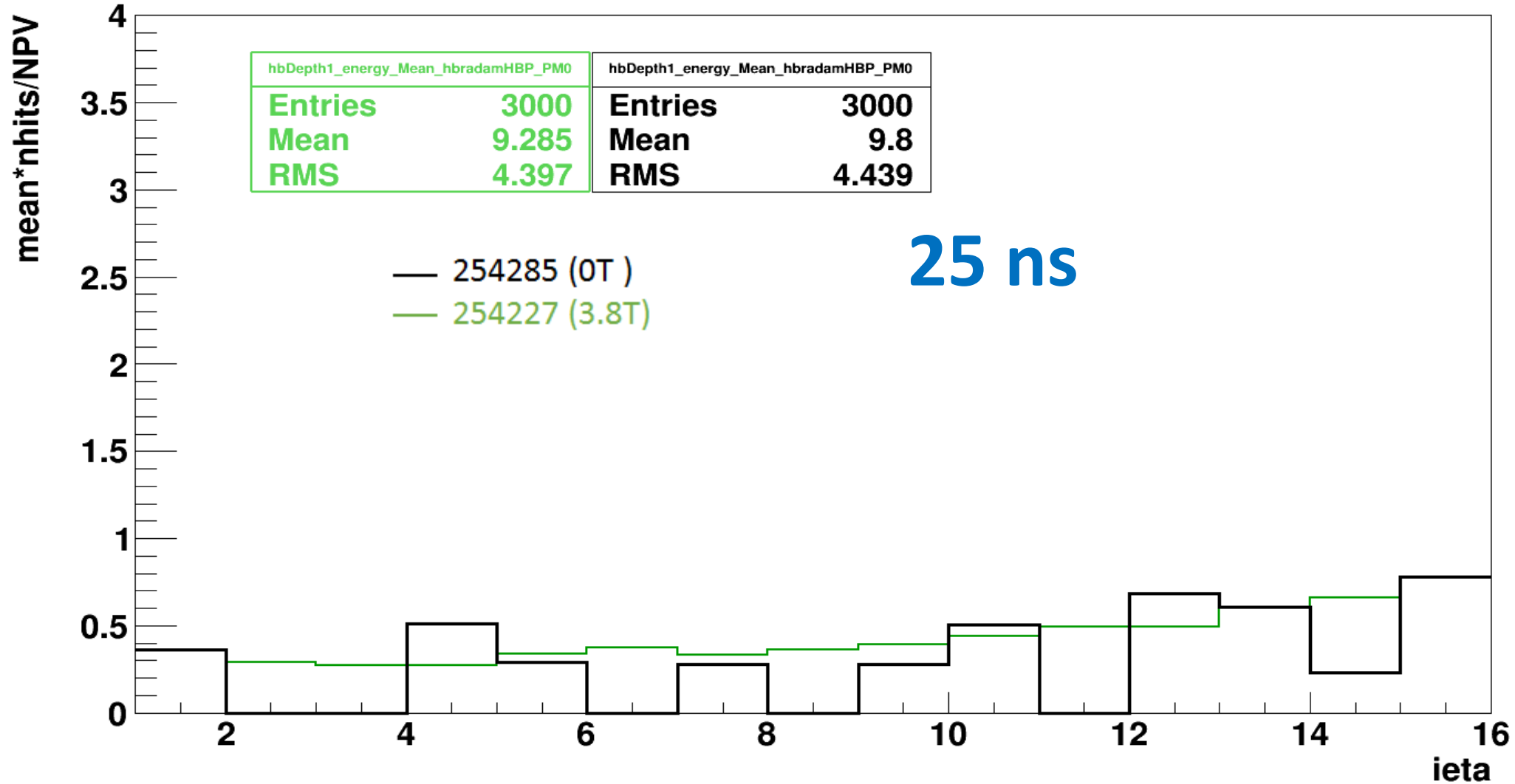
HB_Depth2_Minus (0 T vs 3.8 T)

hbDepth2_energy_Mean_hbradamHBM_PM1



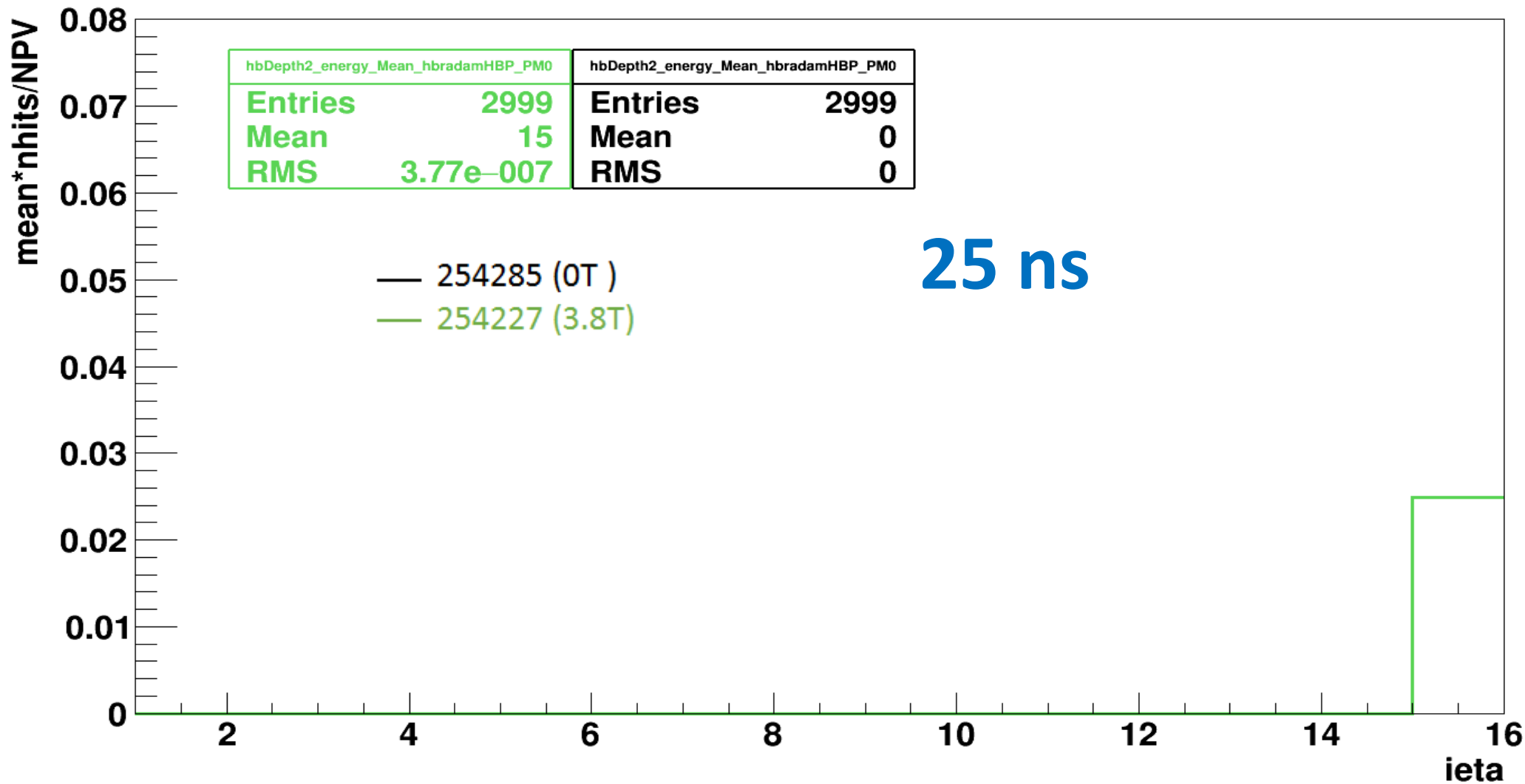
HB_Depth1_Plus (0 T vs 3.8 T)

hbDepth1_energy_Mean_hbradamHBP_PM0



HB_Depth2_Plus (0 T vs 3.8 T)

hbDepth2_energy_Mean_hbradamHBP_PM0



Summary and Next Plans

- This week we analysed some 2015 runs which are taken at **3.8 T and 0 T for 25ns and 50 ns** using **HLT_L1SingleMu16_v1** trigger and tried to understand the differences between runs.
- Energy vs ieta histograms are shown for **HE and HB** sub detectors for minus and plus sides, for each depths.
- Results seem as we expected.

THANK YOU !