

Timing Calibration-Corrections

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Tokyo Analysis Workshop
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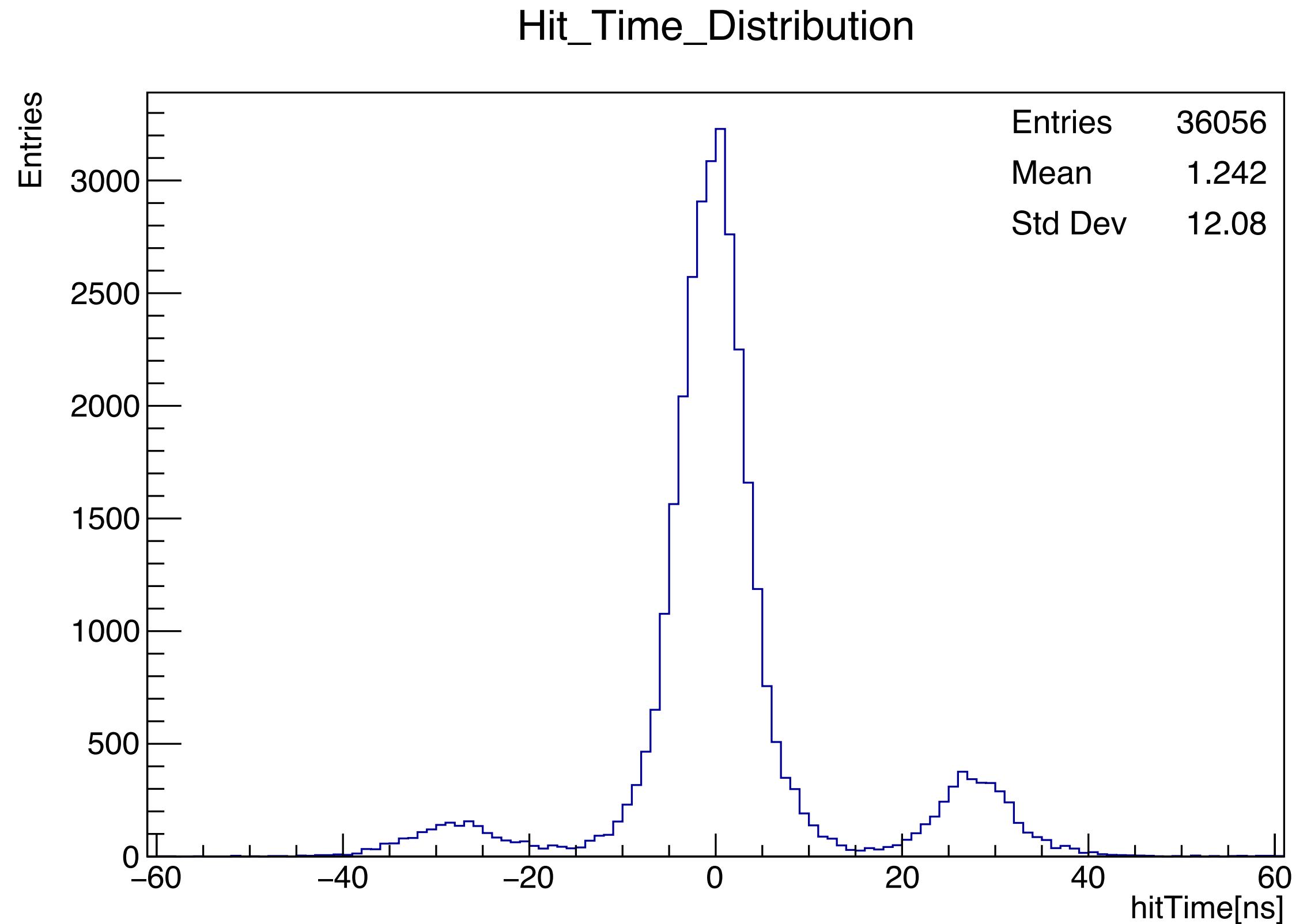
Max-Planck-Institut für Physik
(Werner-Heisenberg-Institut)



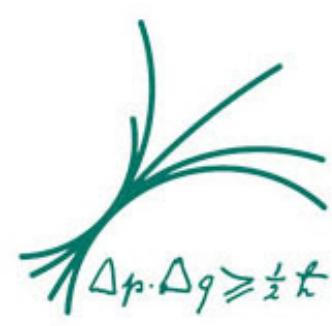


Problem

Only even bxID

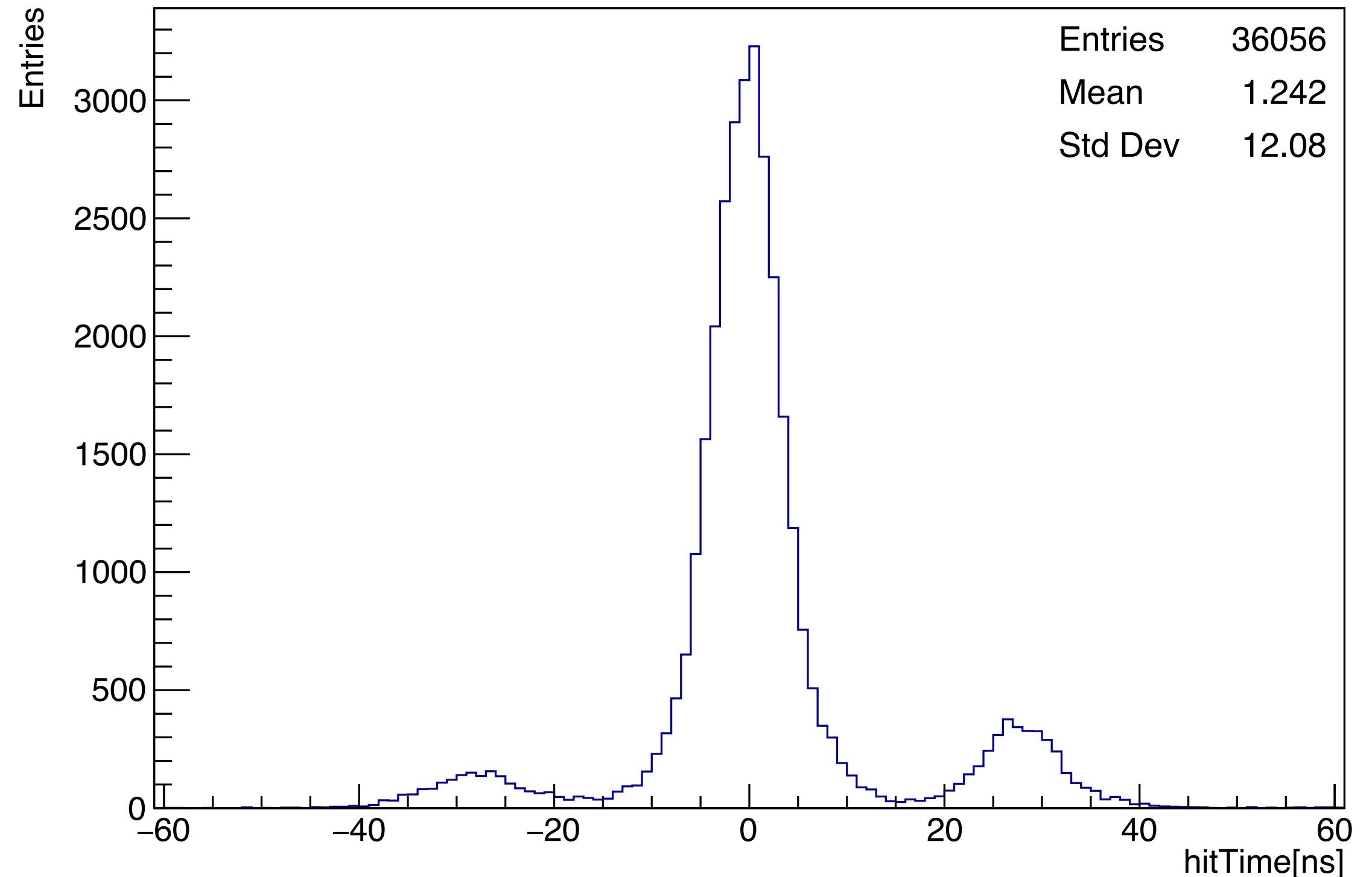


Correction Muons @120GeV



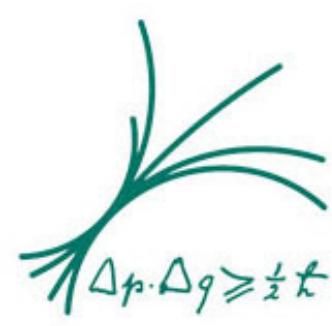
Only even bxID

Hit_Time_Distribution



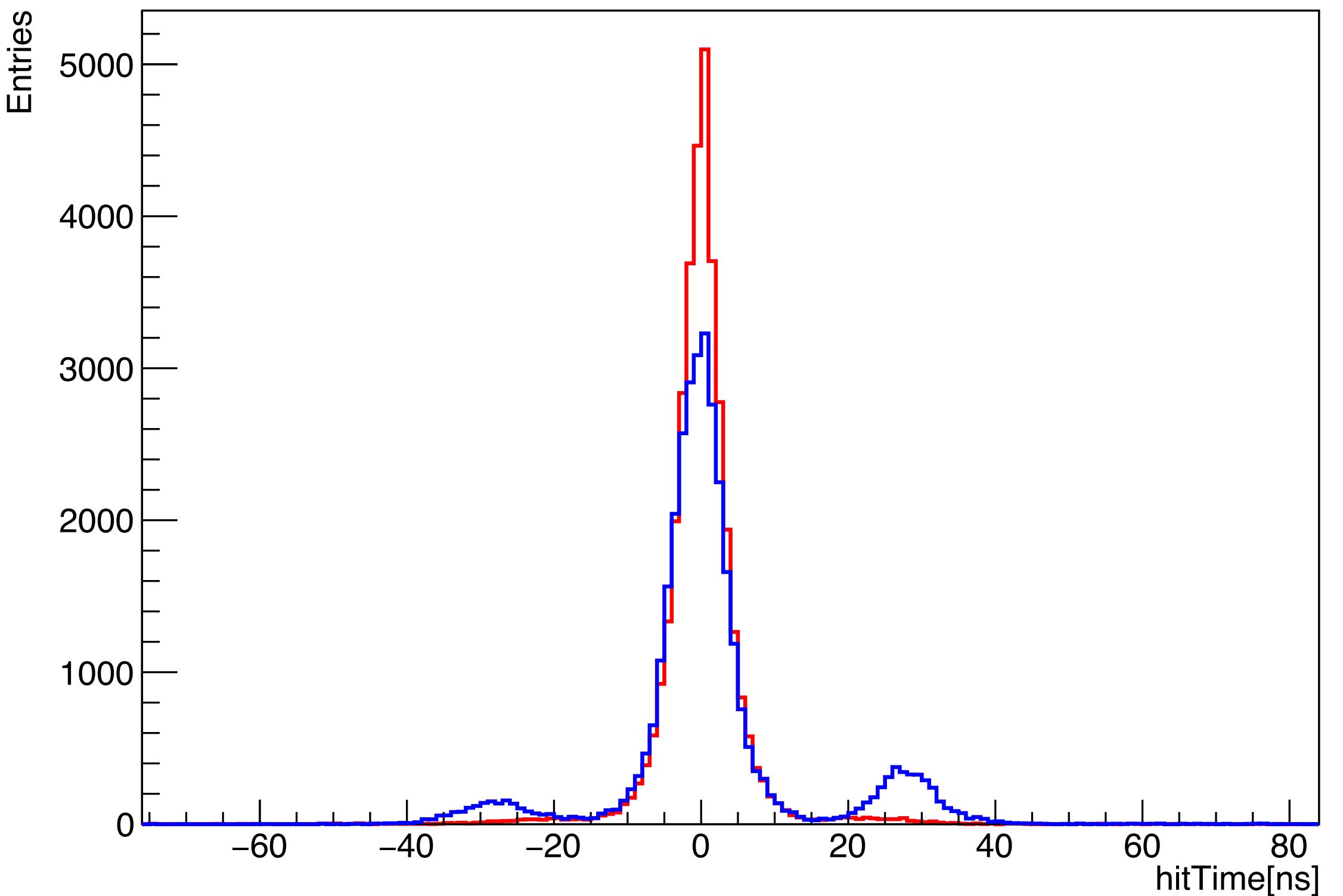
Correction 1: Shift mean hit time per event to 0

Correction Muons @120GeV



Only even bxID

Hit_Time_Distribution



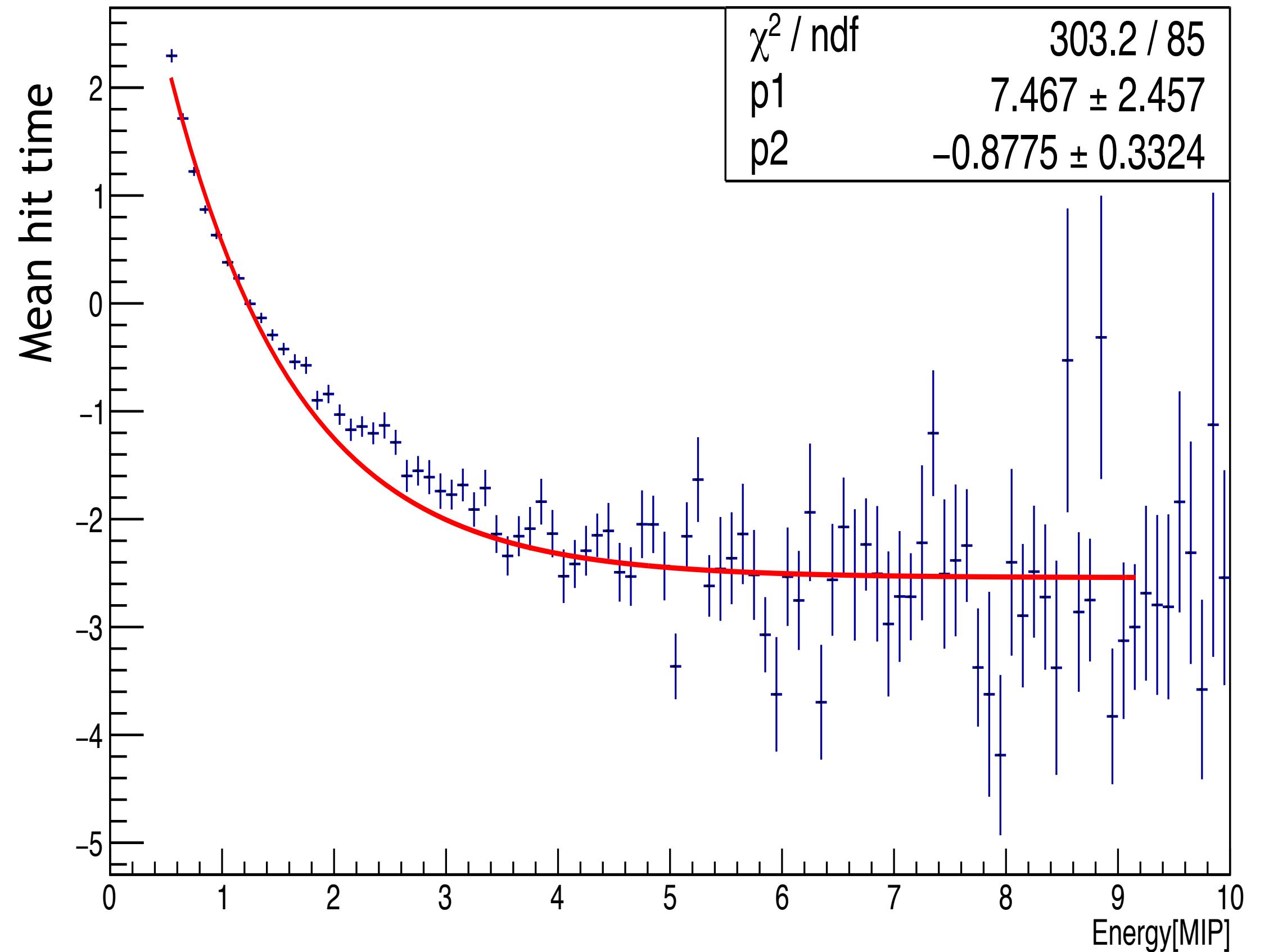
Correction 1: Shift mean hit time per event to 0

Correction 2: Time walk correction



Correction Muons @120GeV

Only even bxID



Correction 1: Shift mean hit time per event to 0

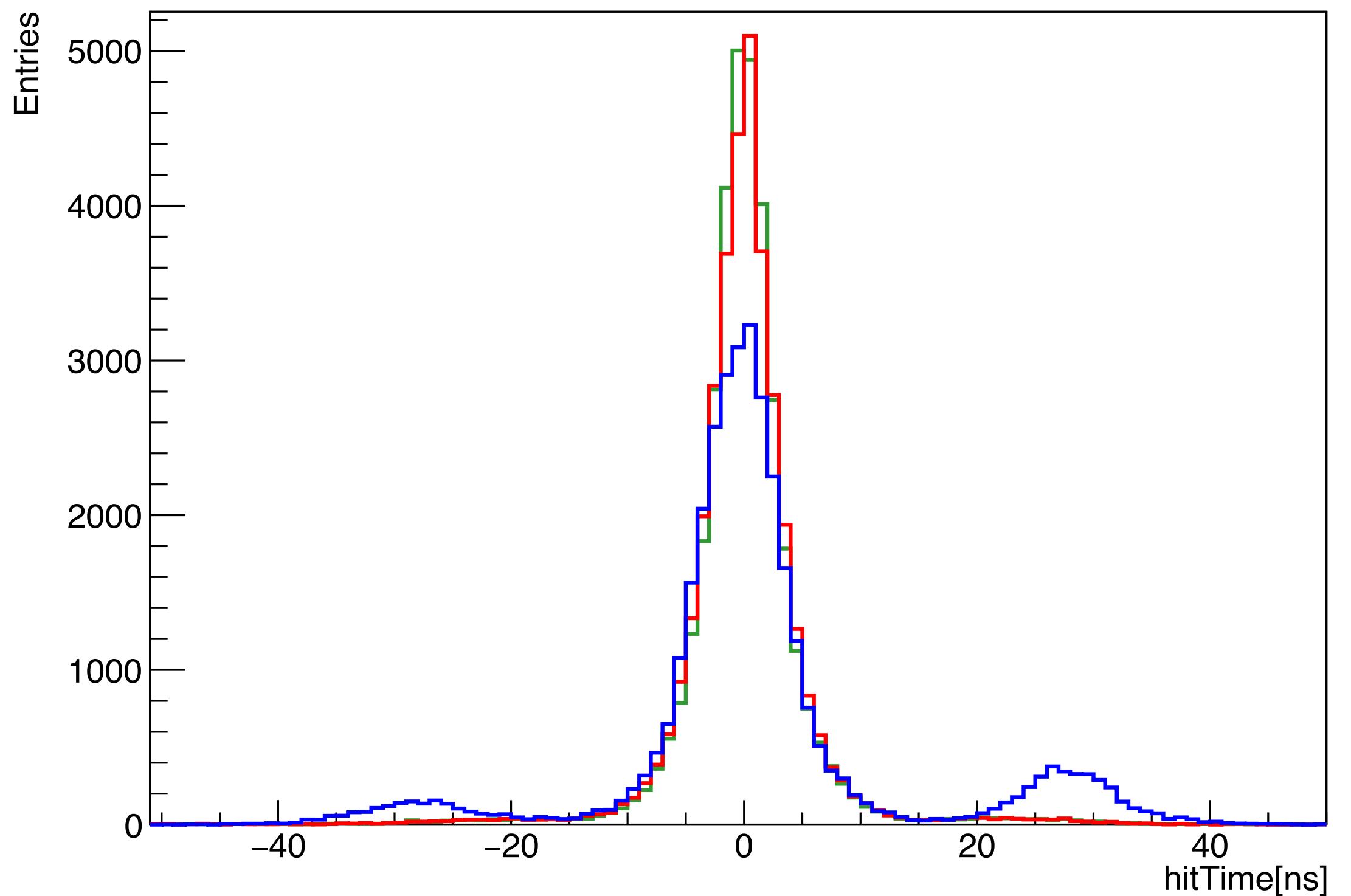
Correction 2: Time walk correction

Correction Muons @120GeV



Only even bxID

Hit_Time_Distribution

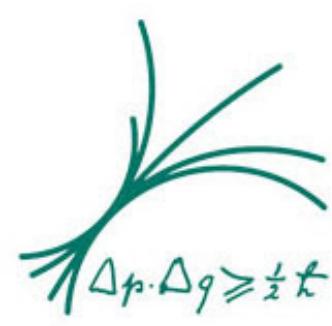


Correction 1: Shift mean hit time per event to 0

Correction 2: Time walk correction

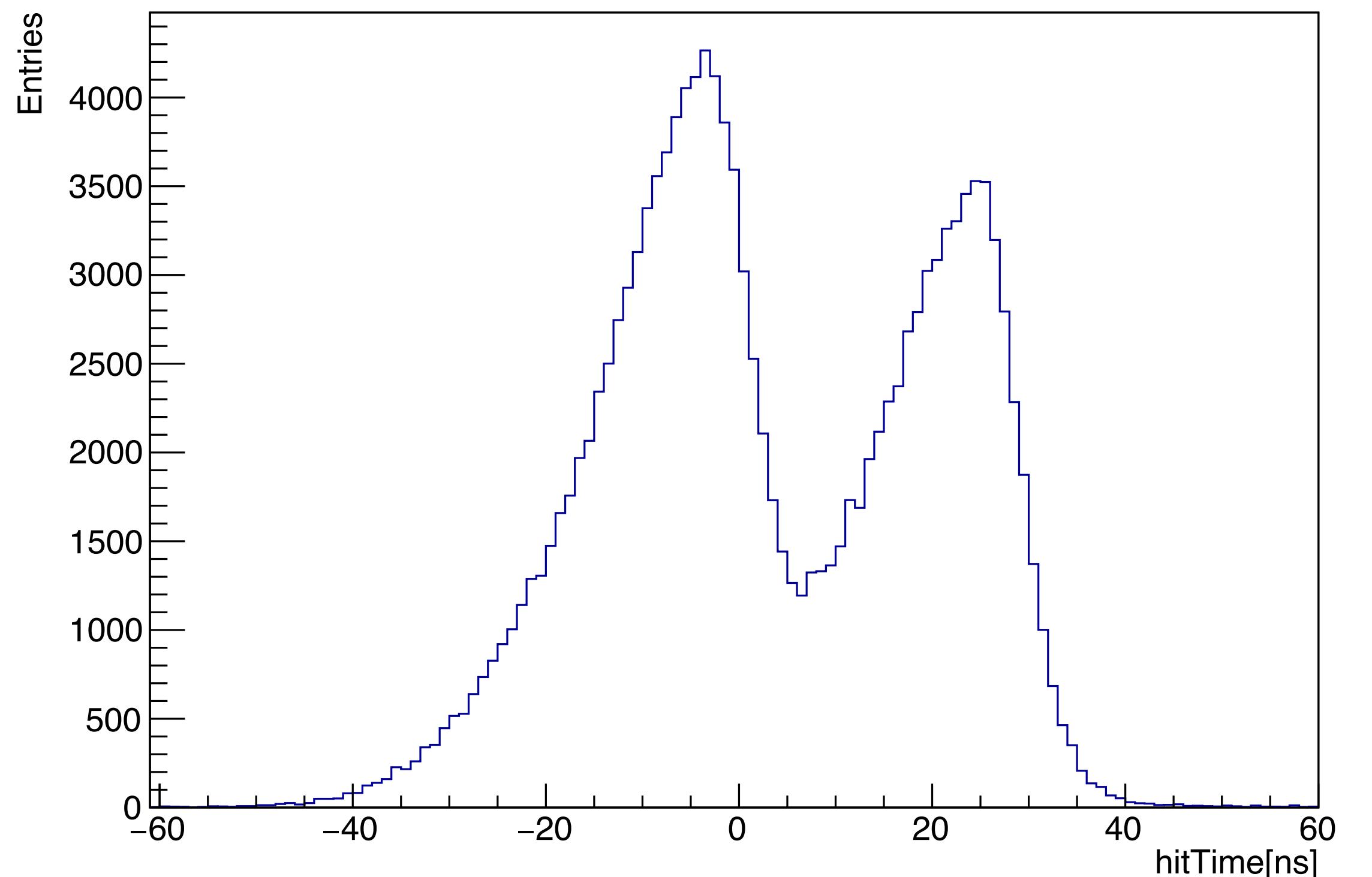
Std Dev: 5.6ns

Correction Electrons @ 50GeV

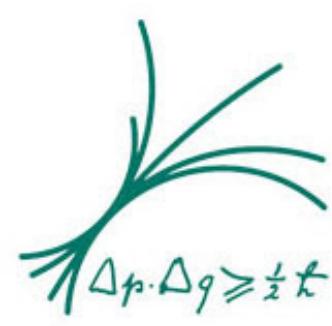


Only even bxID

Hit_Time_Distribution

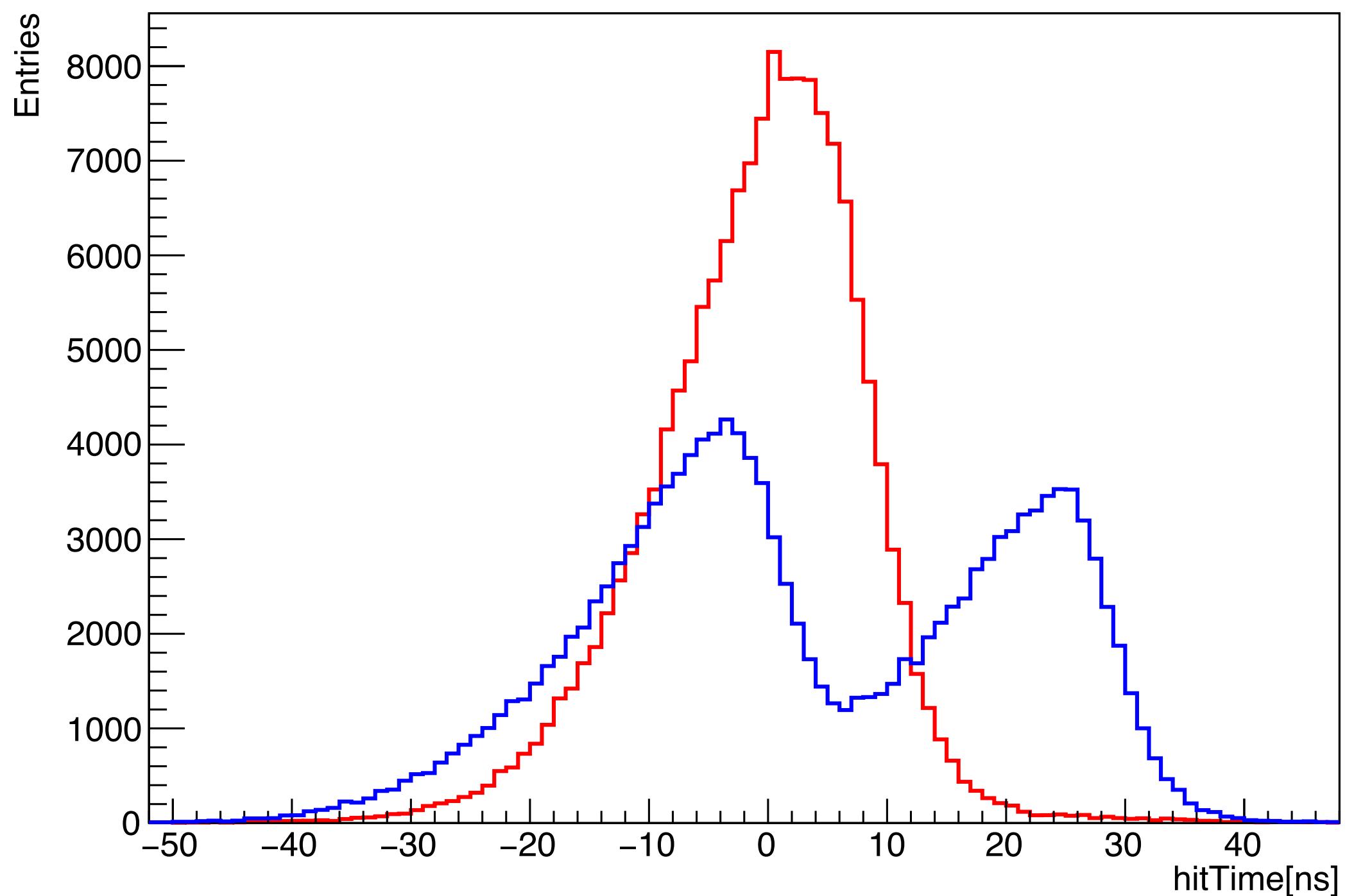


Correction Electrons @ 50GeV



Only even bxID

Hit_Time_Distribution

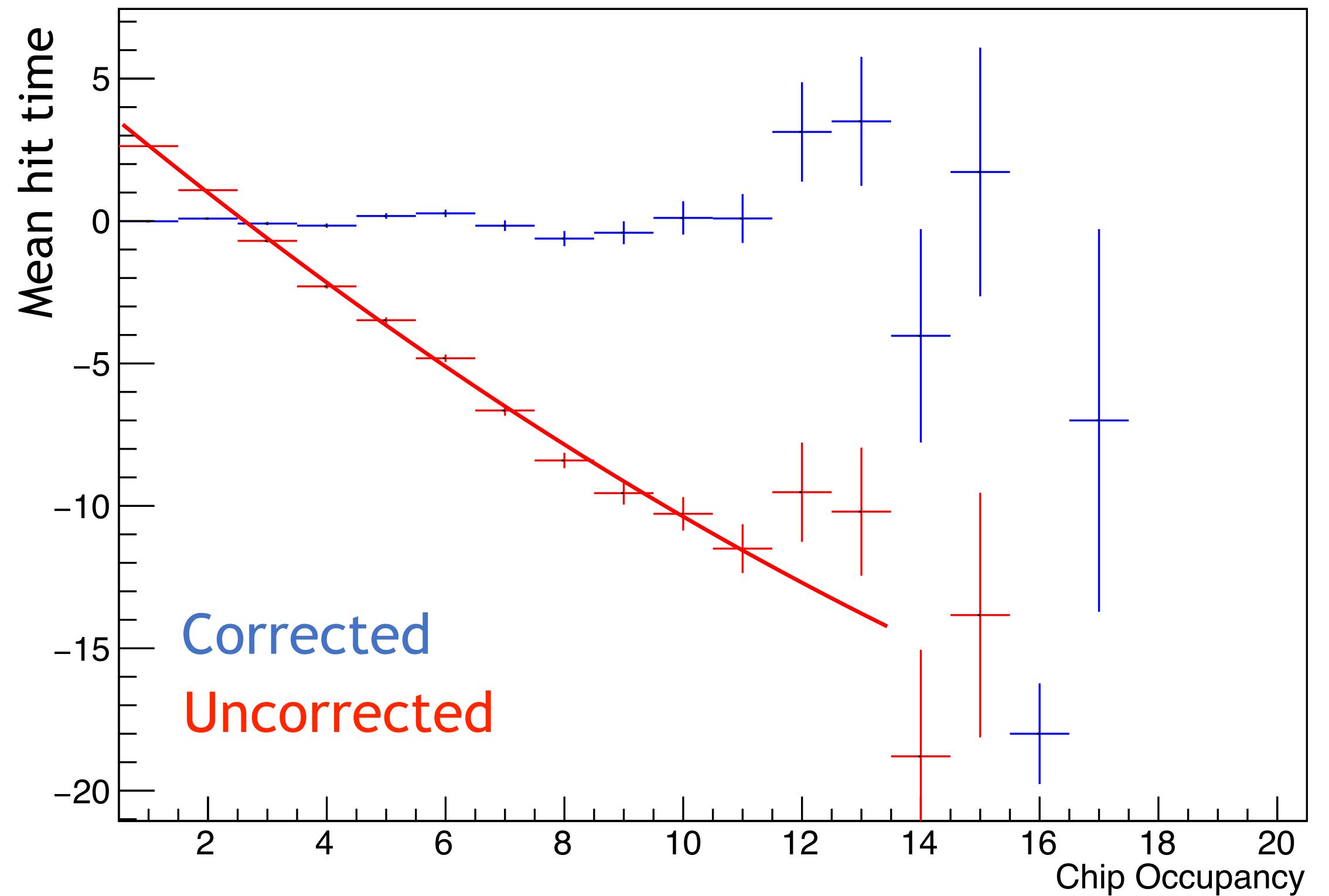


Correction 1: Shift mean hit time per event to 0

Correction Electrons @ 50GeV



Only even bxID



Correction 1: Shift mean hit time per event to 0

Correction 2: Time walk correction (from Mouns)

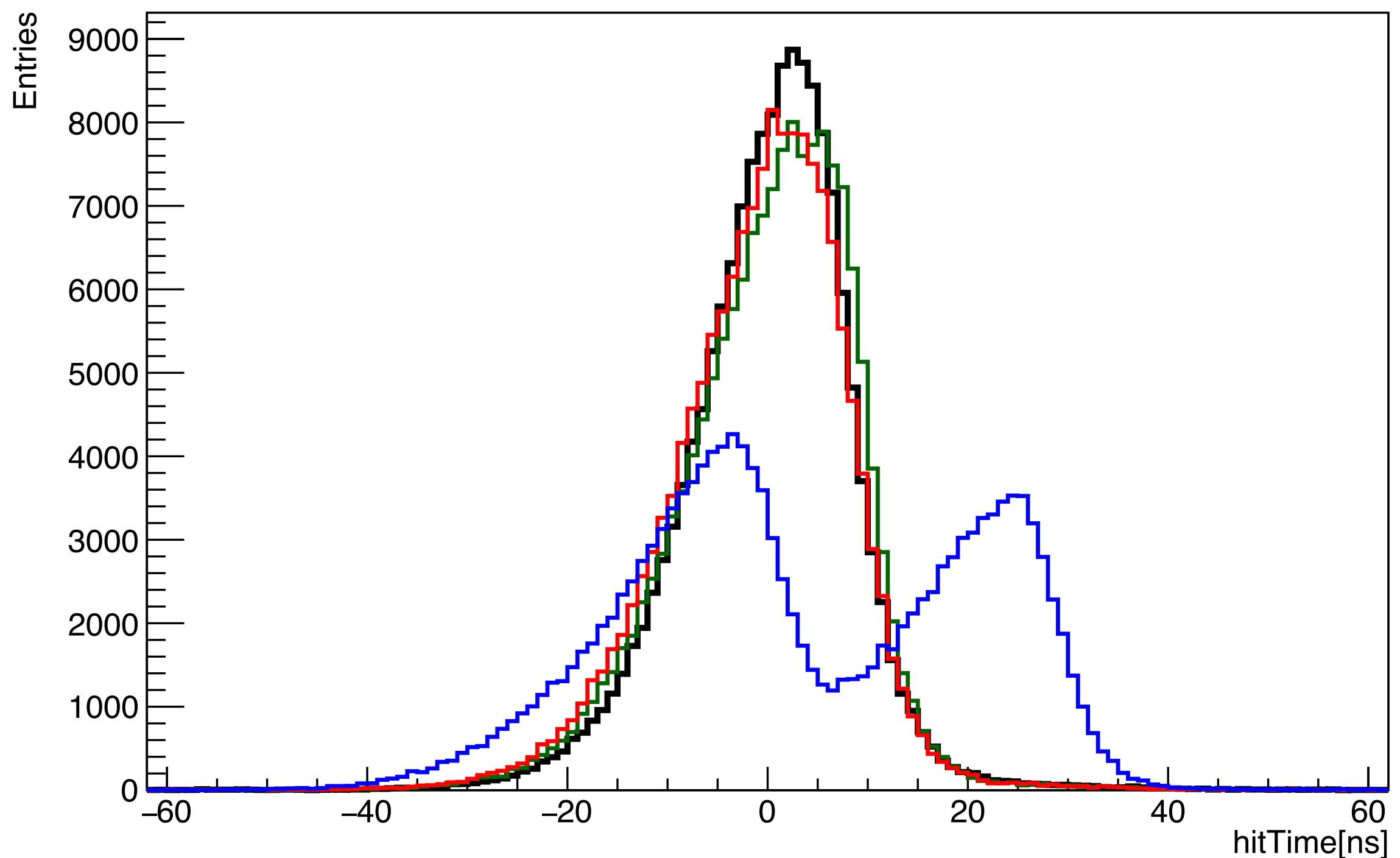
Correction 3: Chip occupancy correction

Correction Electrons @ 50GeV



Only even bxID

Hit_Time_Distribution

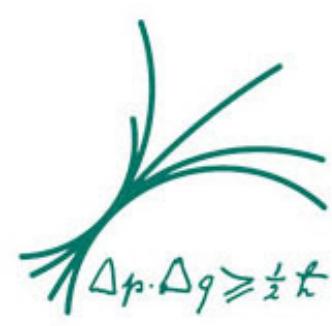


Correction 1: Shift mean hit time per event to 0

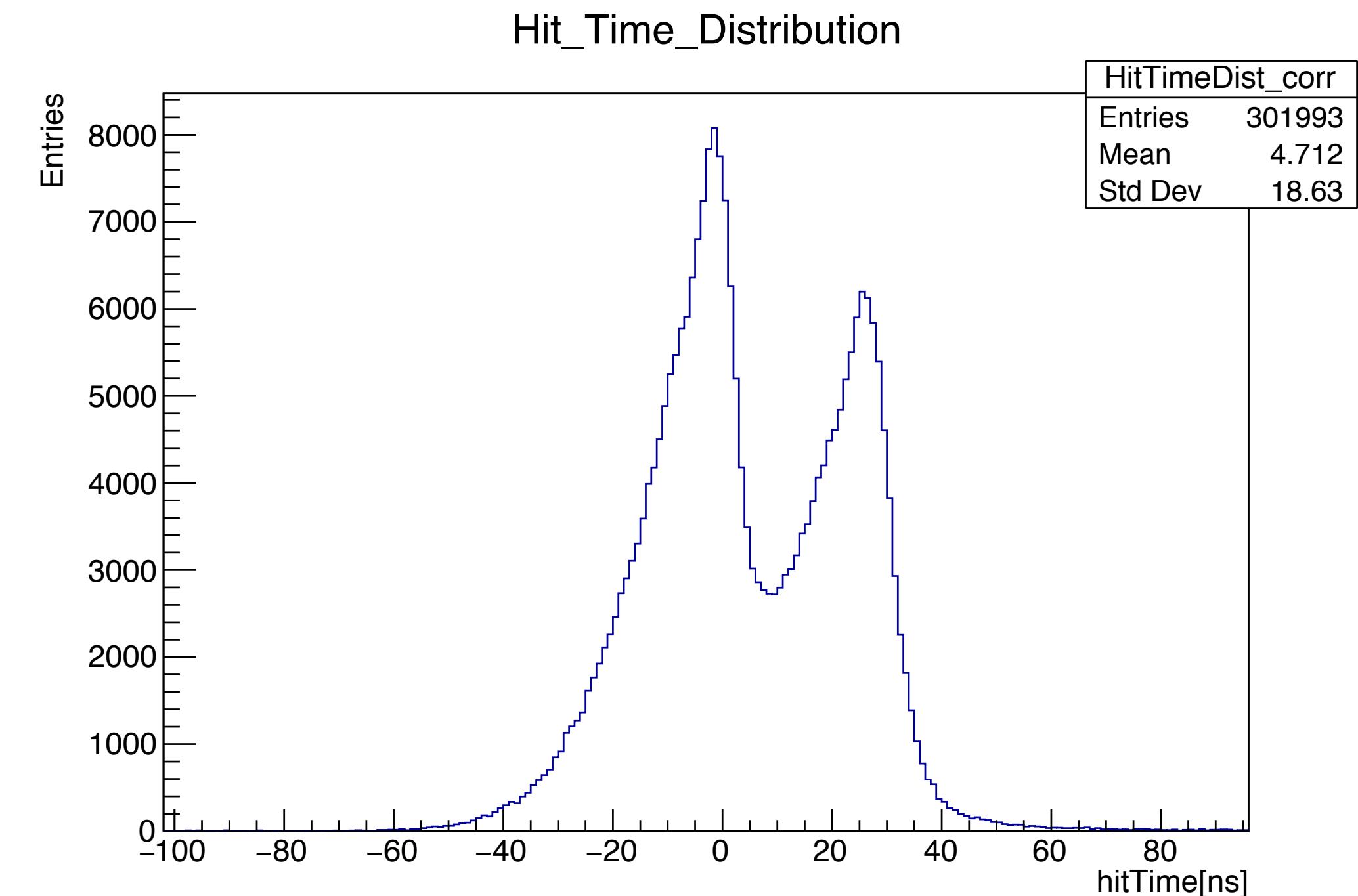
Correction 2: Time walk correction (from Mouns)

Correction 3: Chip occupancy correction
Std Dev: 8.4ns

Correction Pions @ 60GeV



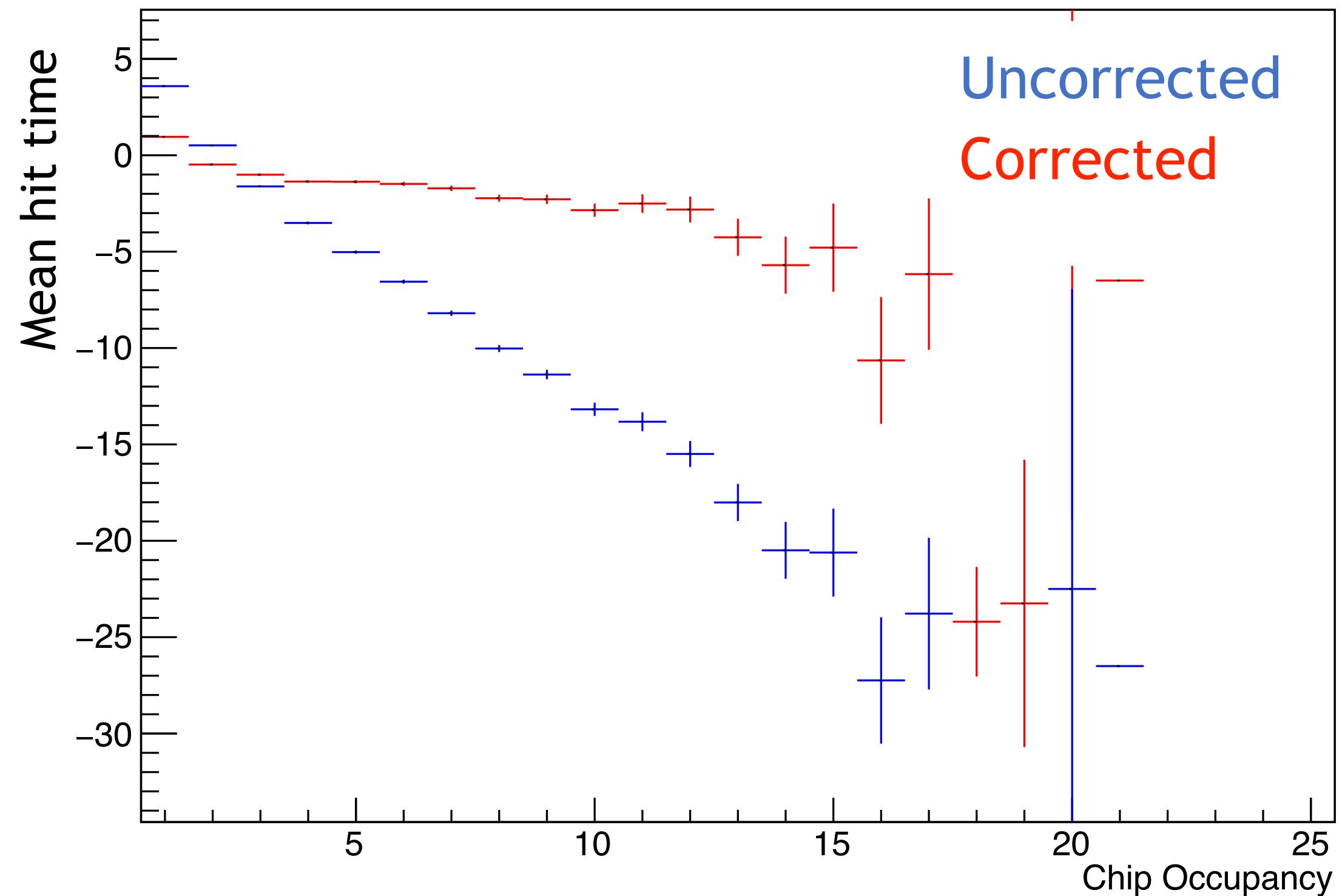
Only even bxID



Correction Pions @ 60GeV



Only even bxID



Correction 1: Shift mean hit time per event to 0

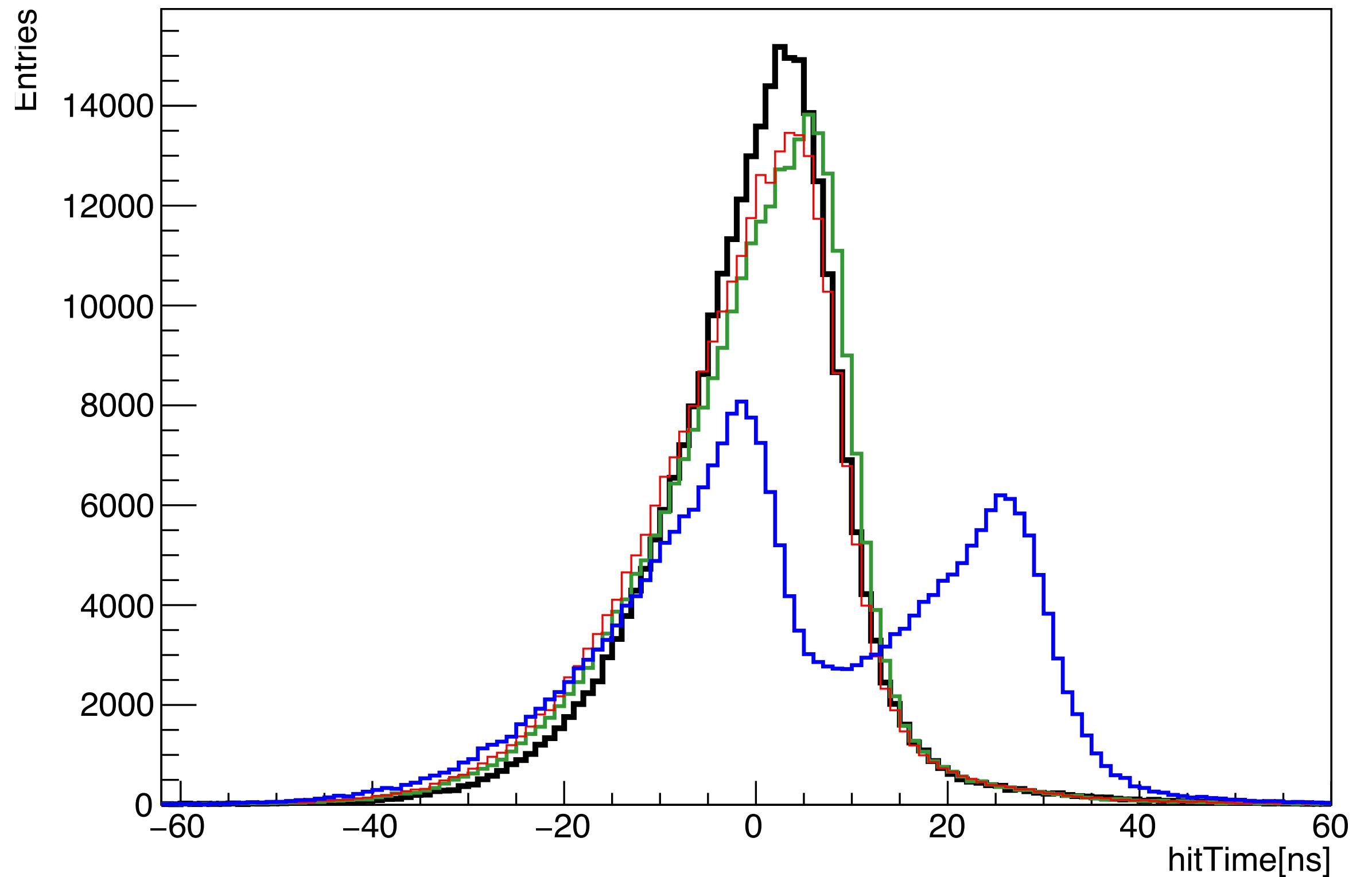
Correction 2: Time walk correction (from Mouns)

Correction 3: Chip occupancy correction (from Electrons)

Correction Pions @ 60GeV



Hit_Time_Distribution



Only even bxID

Correction 1: Shift mean hit time per event to 0

Correction 2: Time walk correction (from Mouns)

Correction 3: Chip occupancy correction (from Electrons)
Std Dev: 10.53ns

Conclusion: left flank of the corrected distribution not yet understood