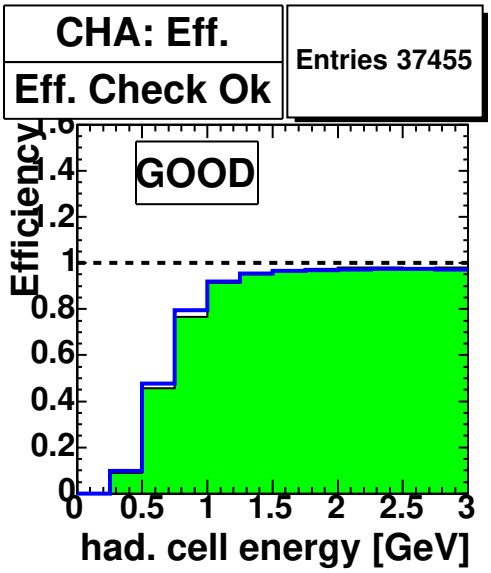
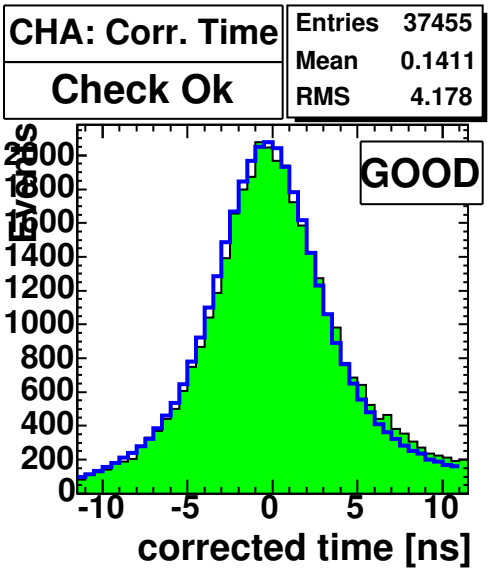
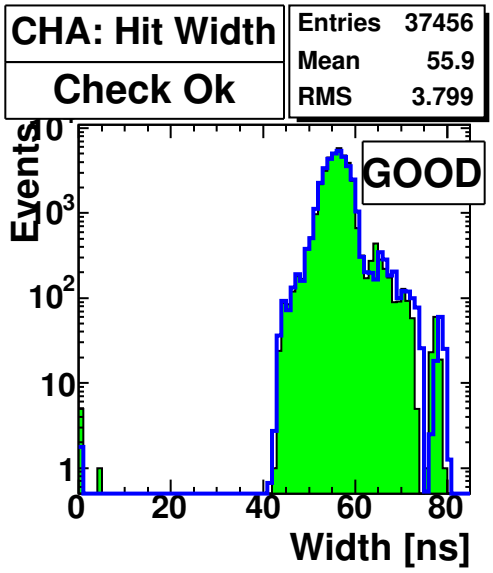
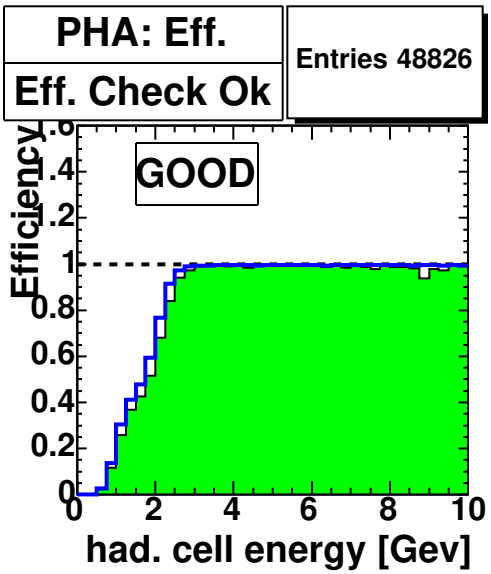
ObjectMon #2 TimeMonitor HADTDC Timing

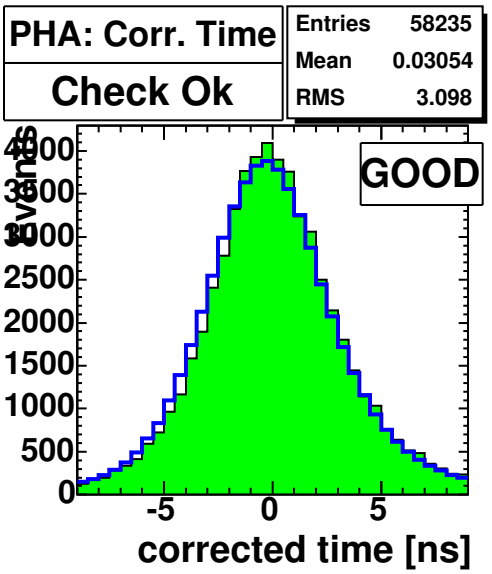
Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

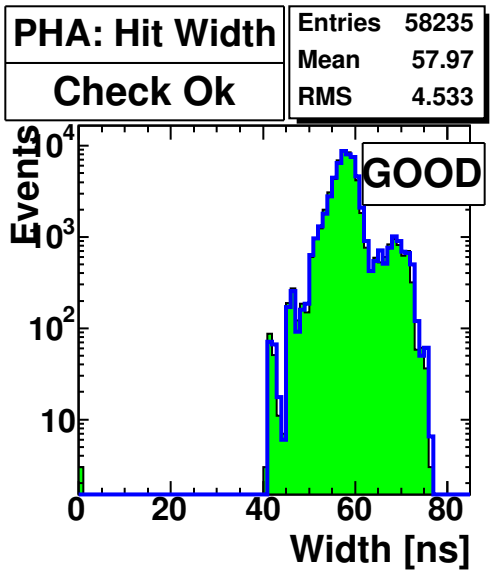


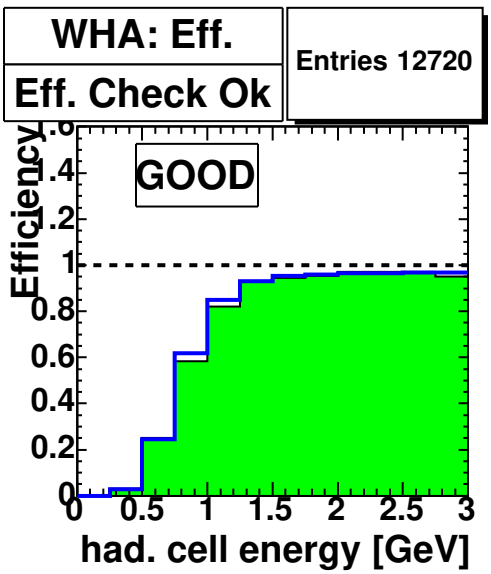


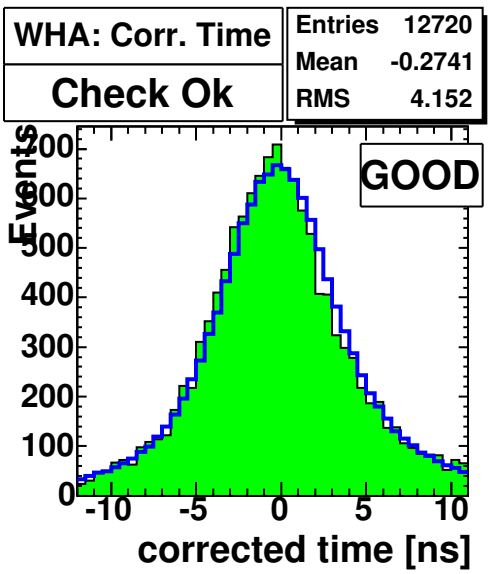


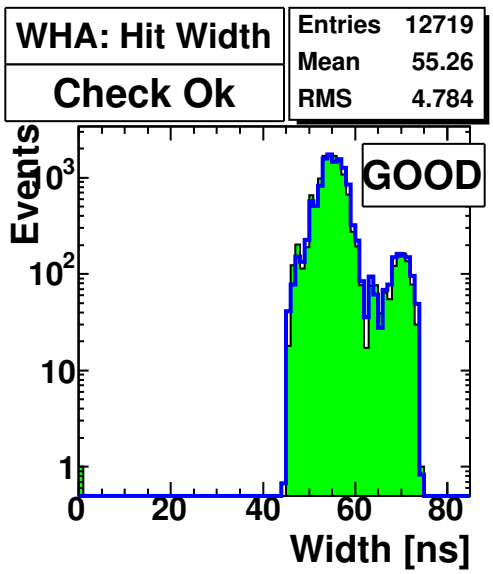






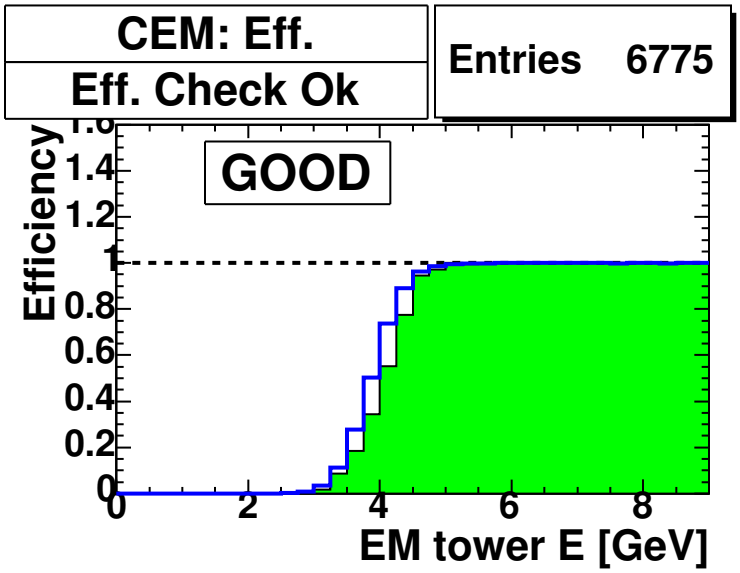


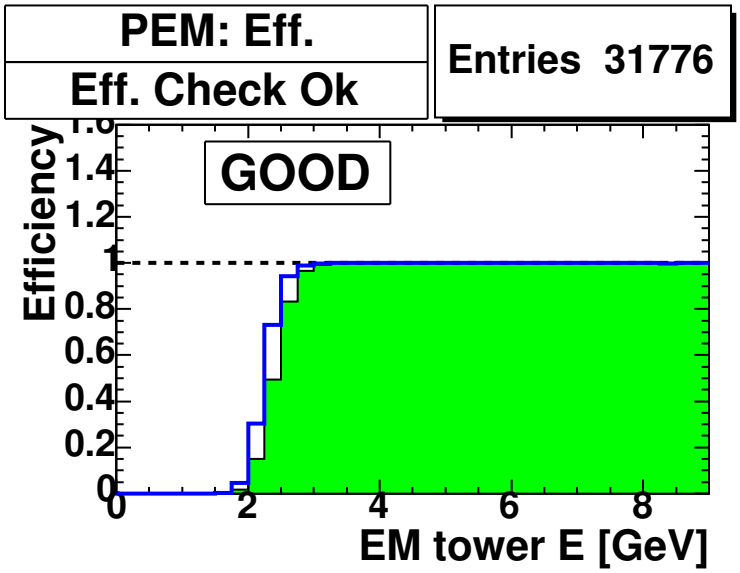


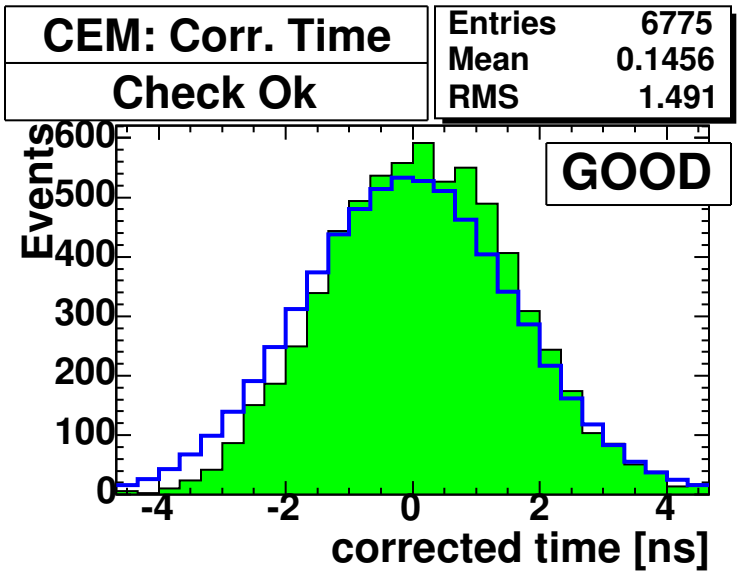


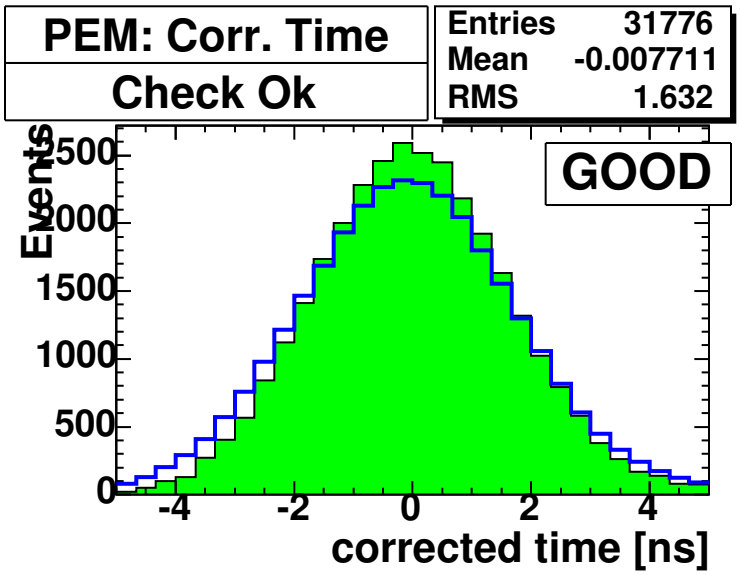
ObjectMon #4 TimeMonitor EMTDC Timing

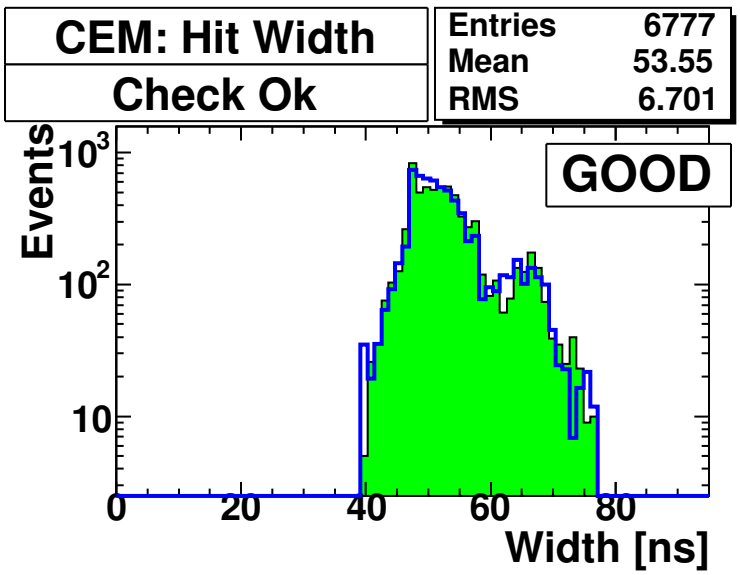
Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

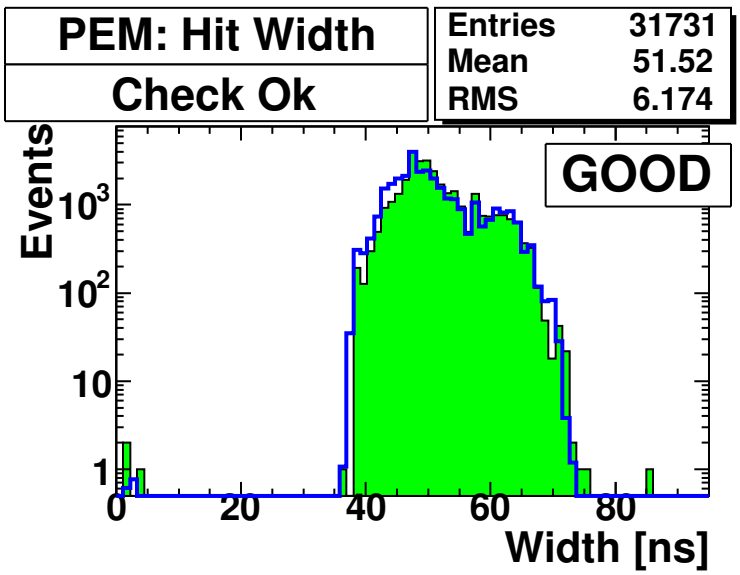












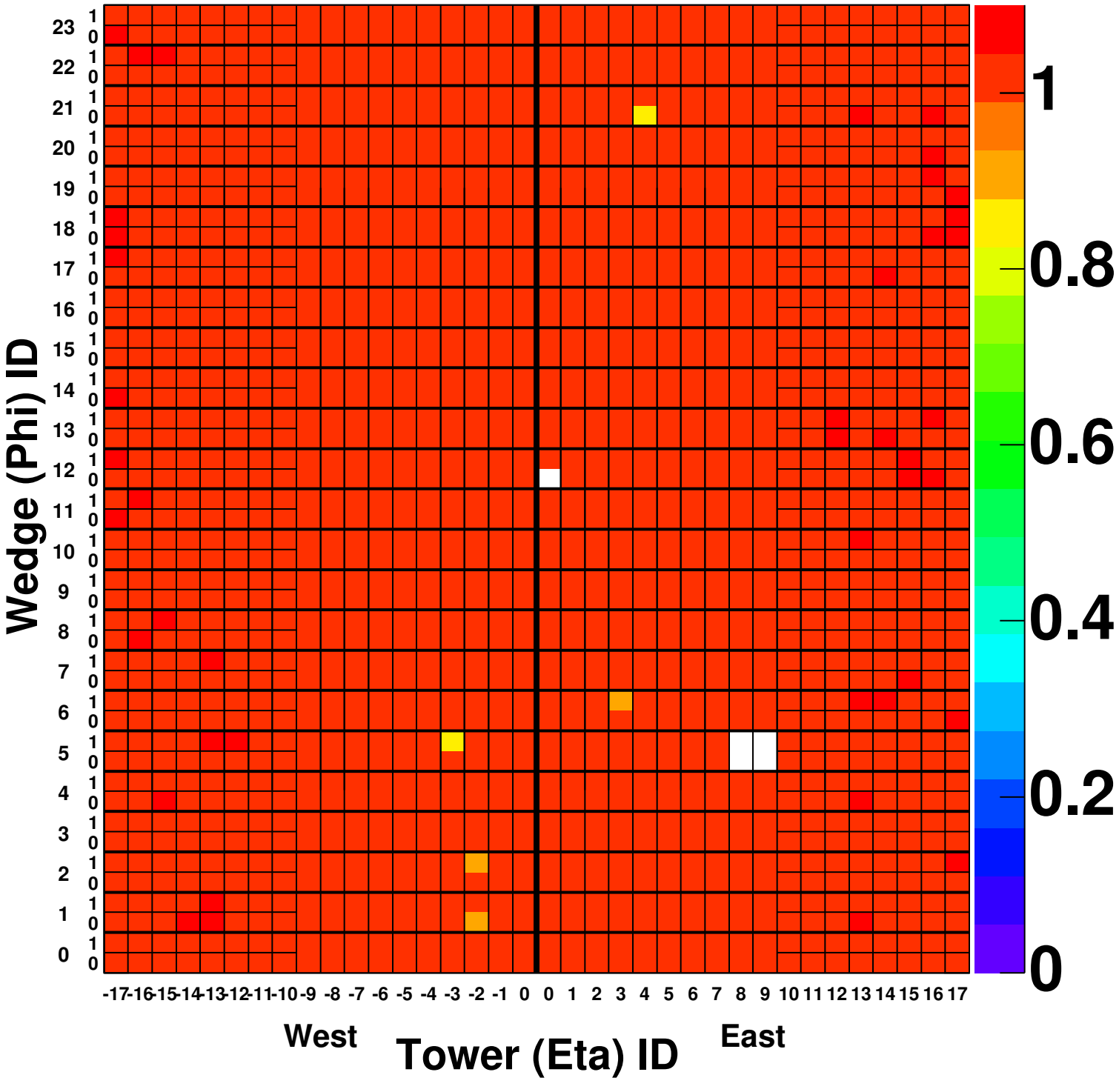
ObjectMon #8 TimeMonitor EMTD: 100% Eff 2D

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Eff. of EM Phototubes in 100% range

not red are BAD

100% Energy range [GeV]:
CEM: PMTE ≥ 6.25
PEM: PMTE ≥ 3.00

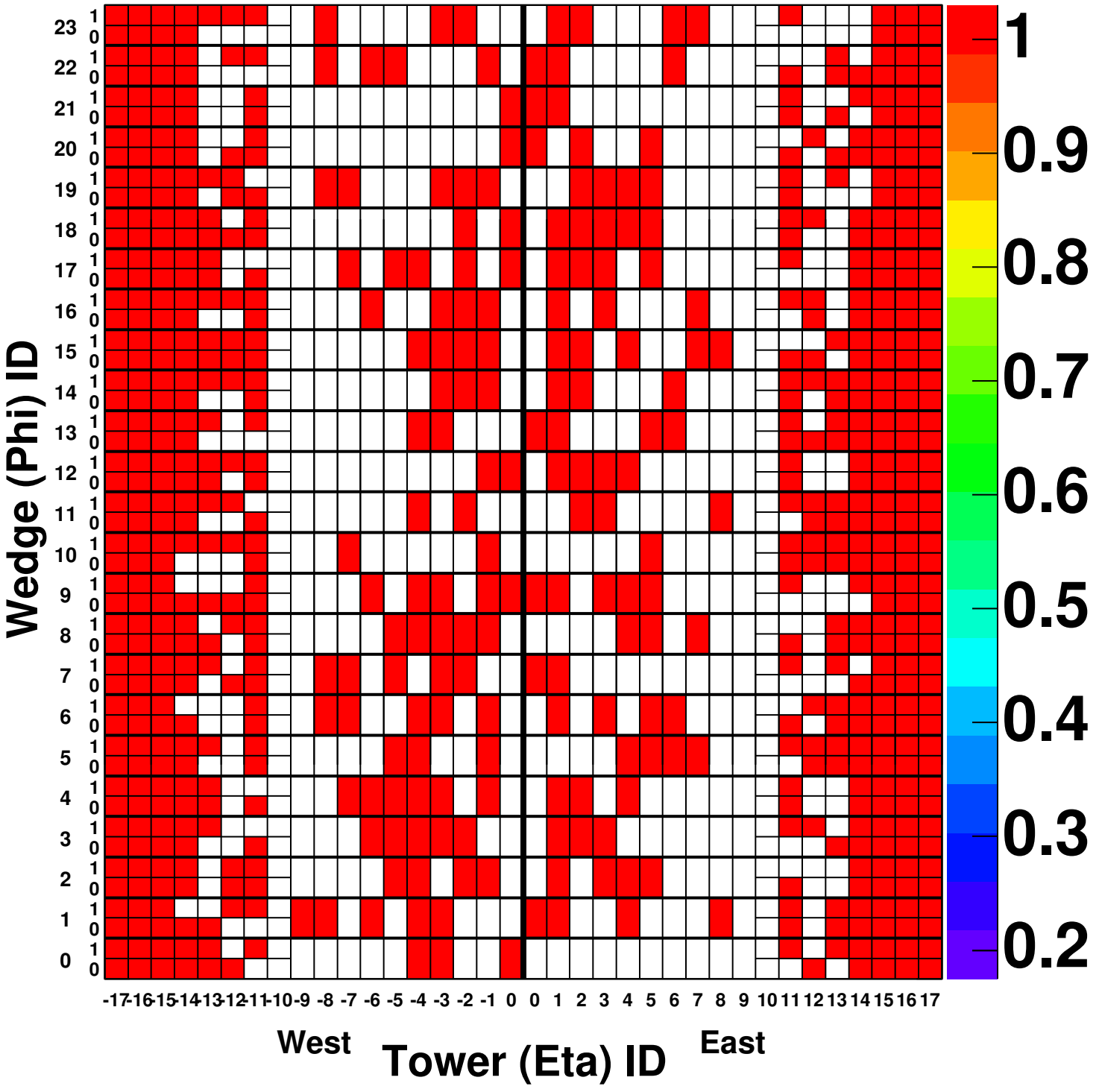


ObjectMon #27 TimeMonitor EMTD: Fit Efficiency

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Eff. Fit Plateau
not red are BAD

ASD Time Window is
520 ns < t_0 < 660 ns

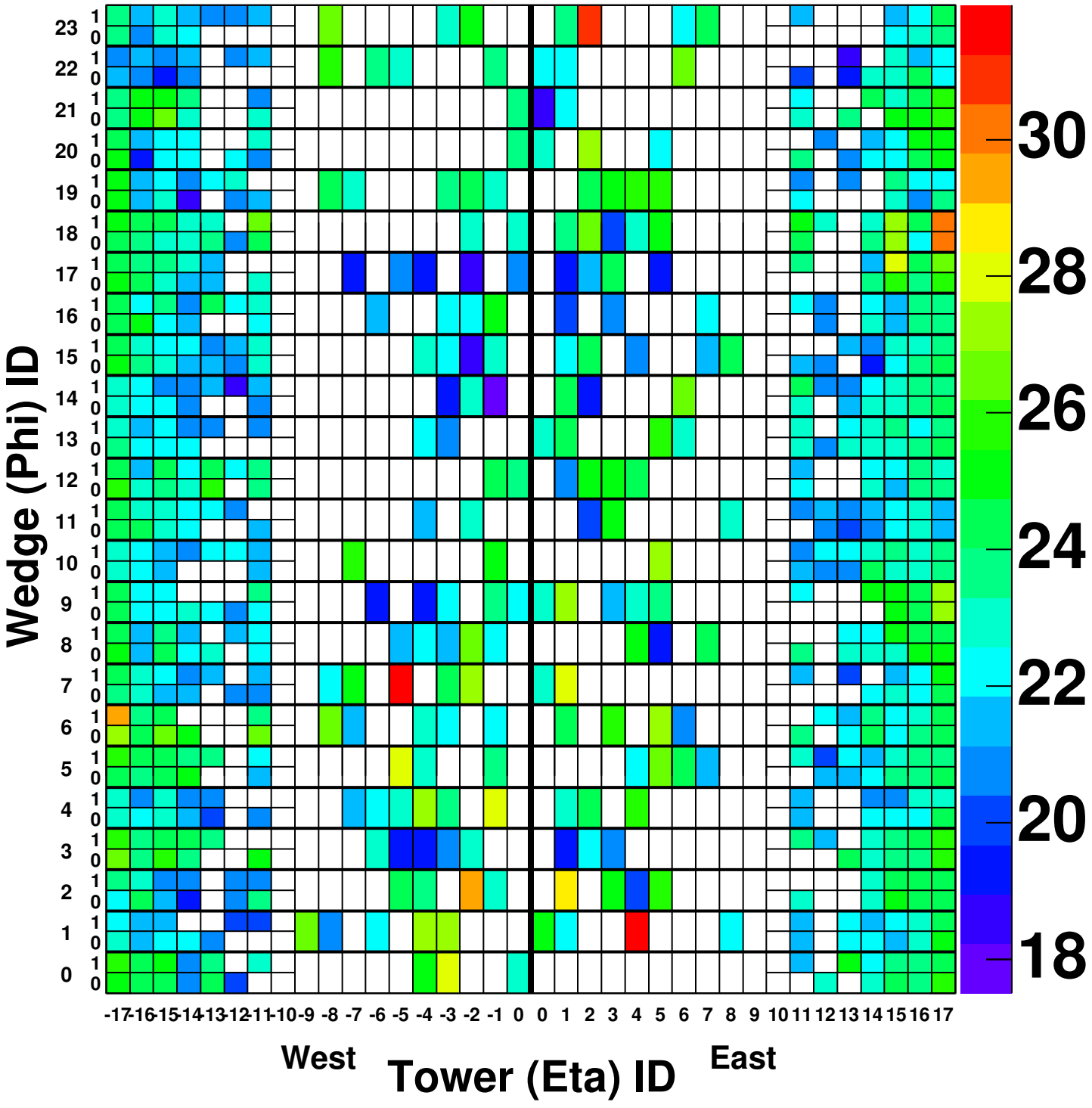


ObjectMon #25 TimeMonitor EMTD: Thresholds

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: 50% Thresholds
red - BAD

ASD Time Window is
520 ns < t_0 < 660 ns
units for CEM: ADC counts * 0.01
units for PEM: ADC counts * 0.036



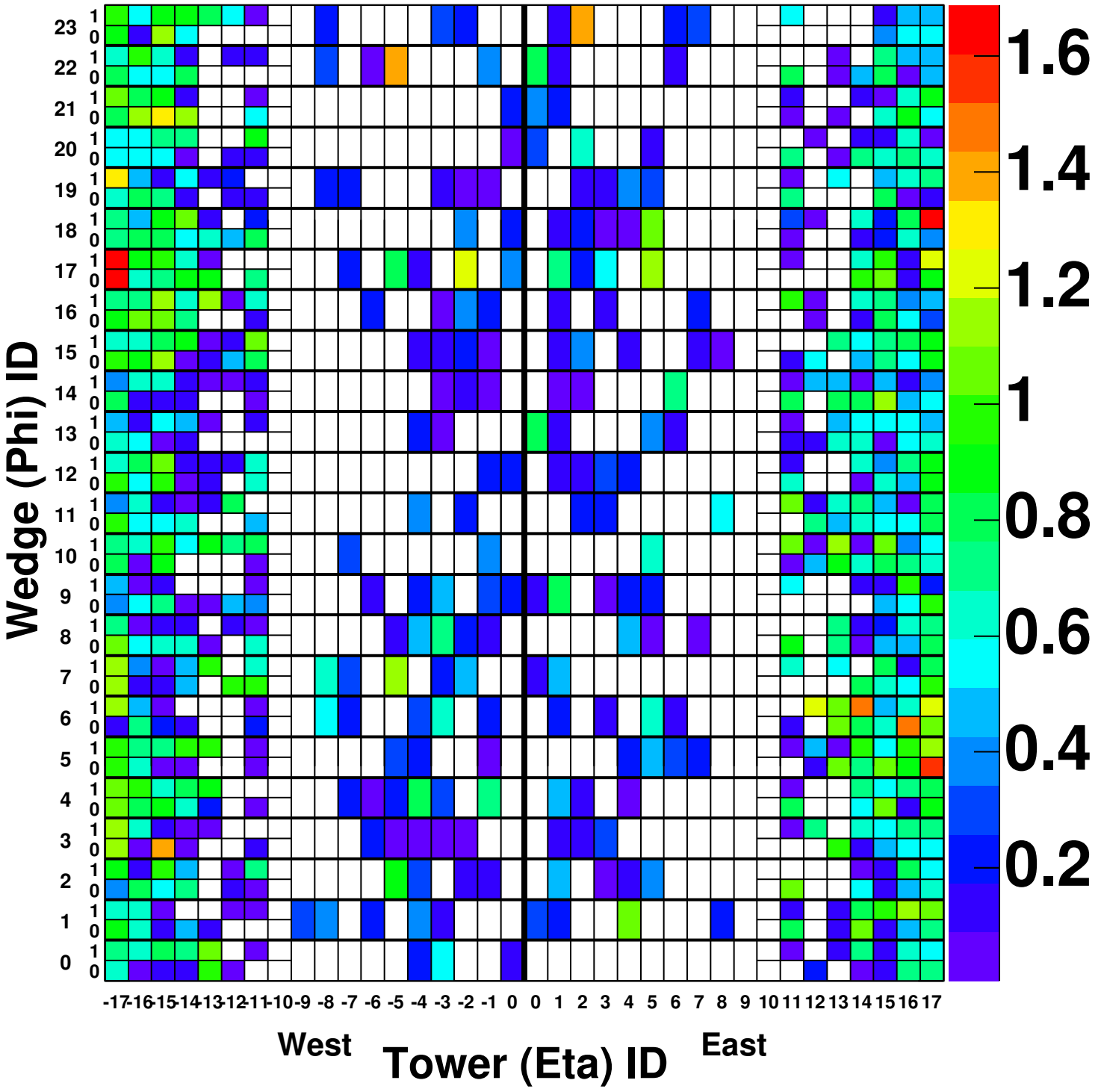
ObjectMon #26 TimeMonitor EMTD: Threshold Sigma

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Threshold Width

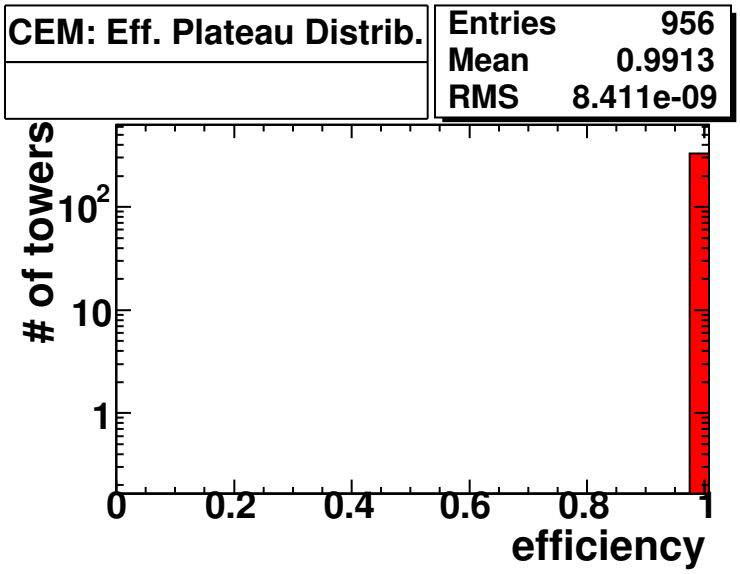
red - BAD

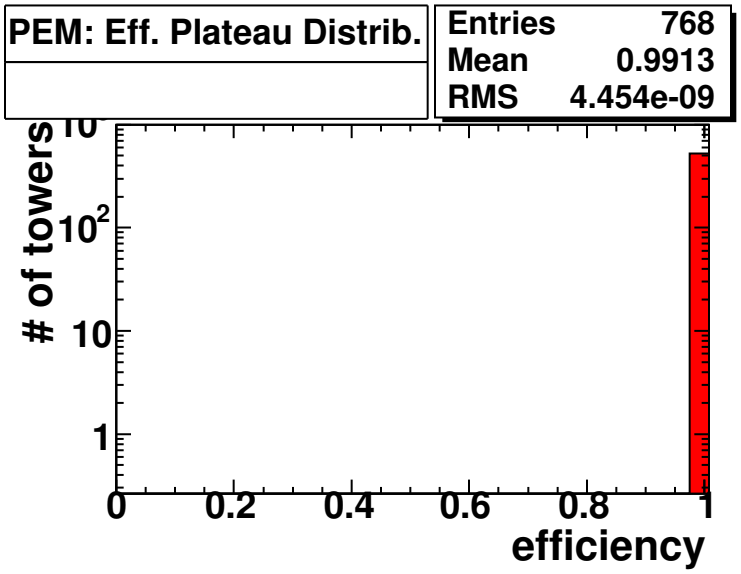
ASD Time Window is
520 ns < t_0 < 660 ns
units for CEM: ADC counts * 0.01
units for PEM: ADC counts * 0.036

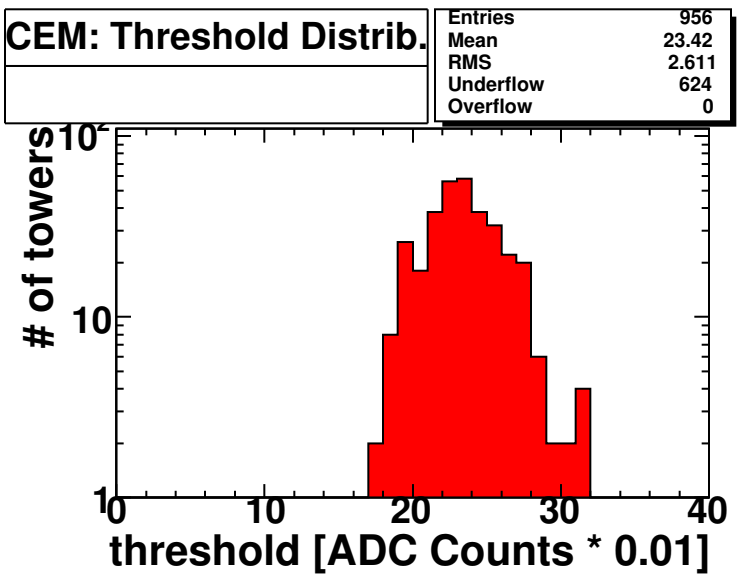


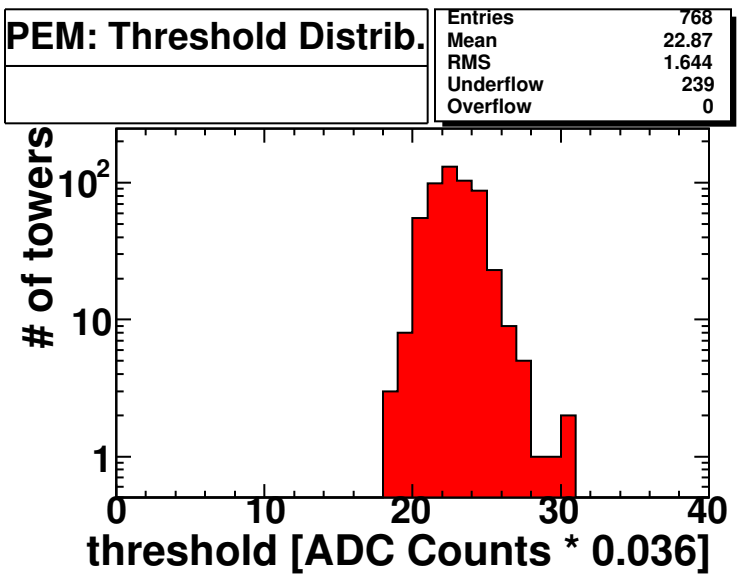
ObjectMon #9 TimeMonitor EMTD: Thresh., Eff. and Sigmas

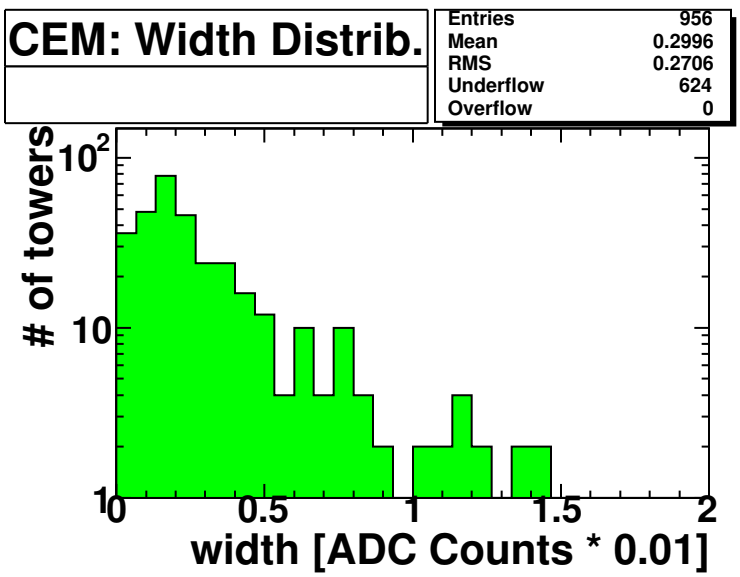
Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

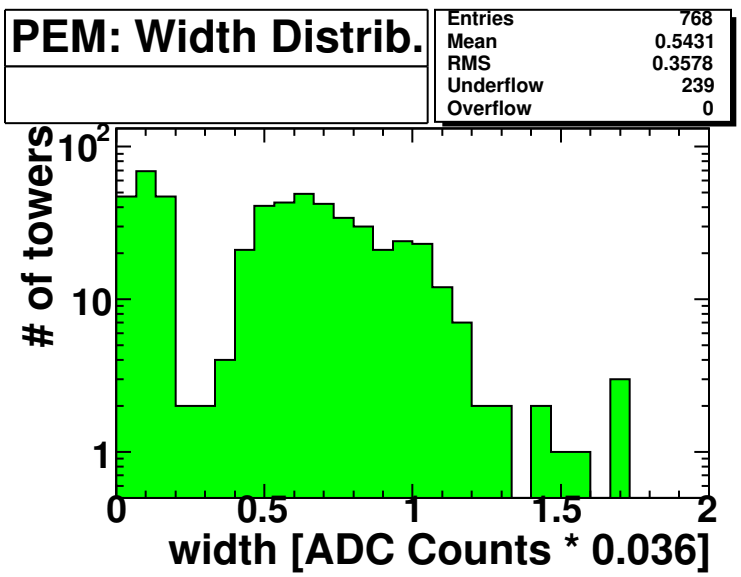












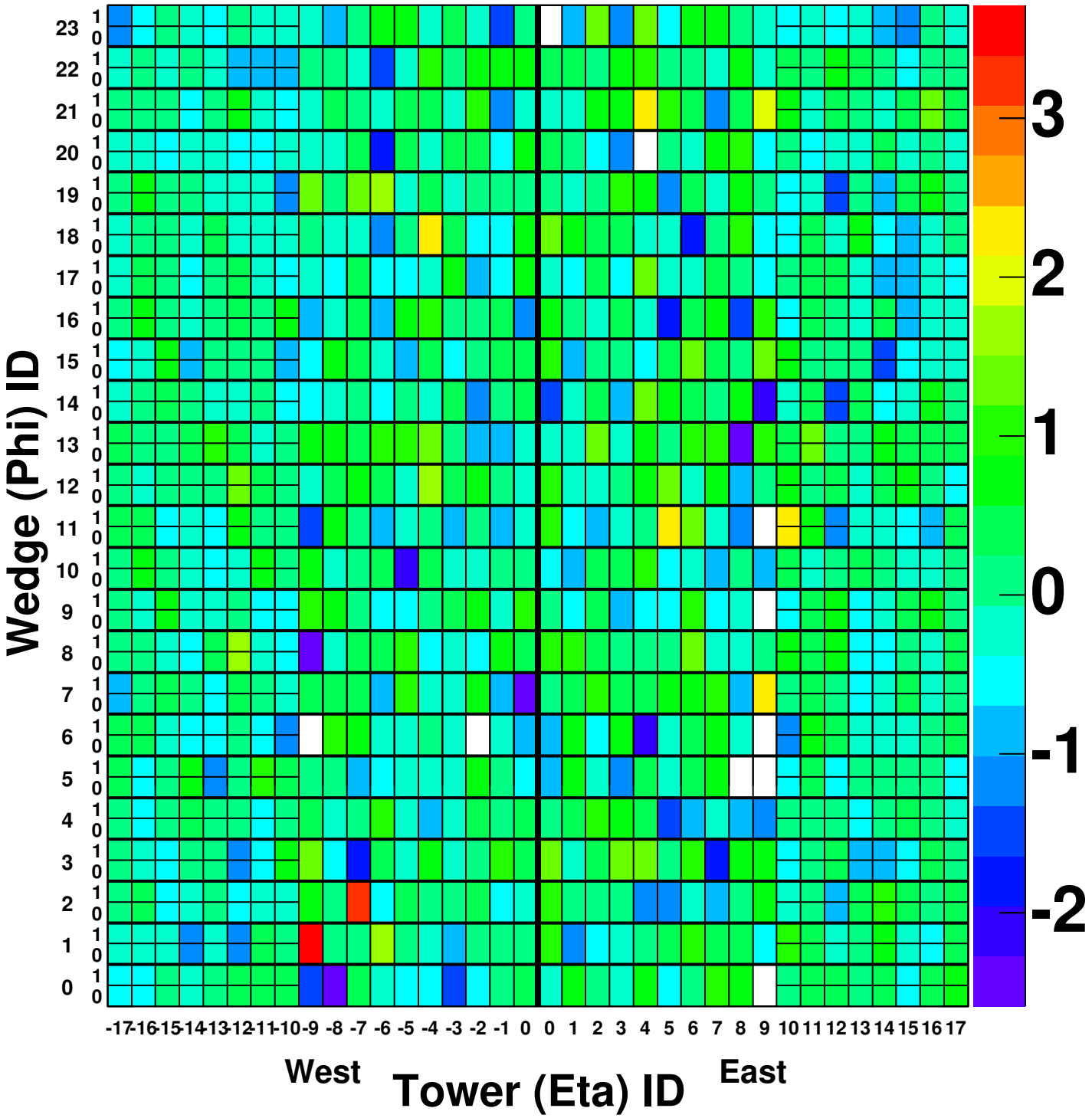
ObjectMon #12 TimeMonitor EMTD: Mean Corrected t0 - High Energy

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Mean Corrected t_0 - High Energy

purple or red - problems

ASD Time Window is
520 ns < t_0 < 660 ns
CEM(Eeven+Eodd) > 9000 ADC
PEM(Eeven+Eodd) > 2000 ADC
$|t_{0corr}|$<15.0 ns



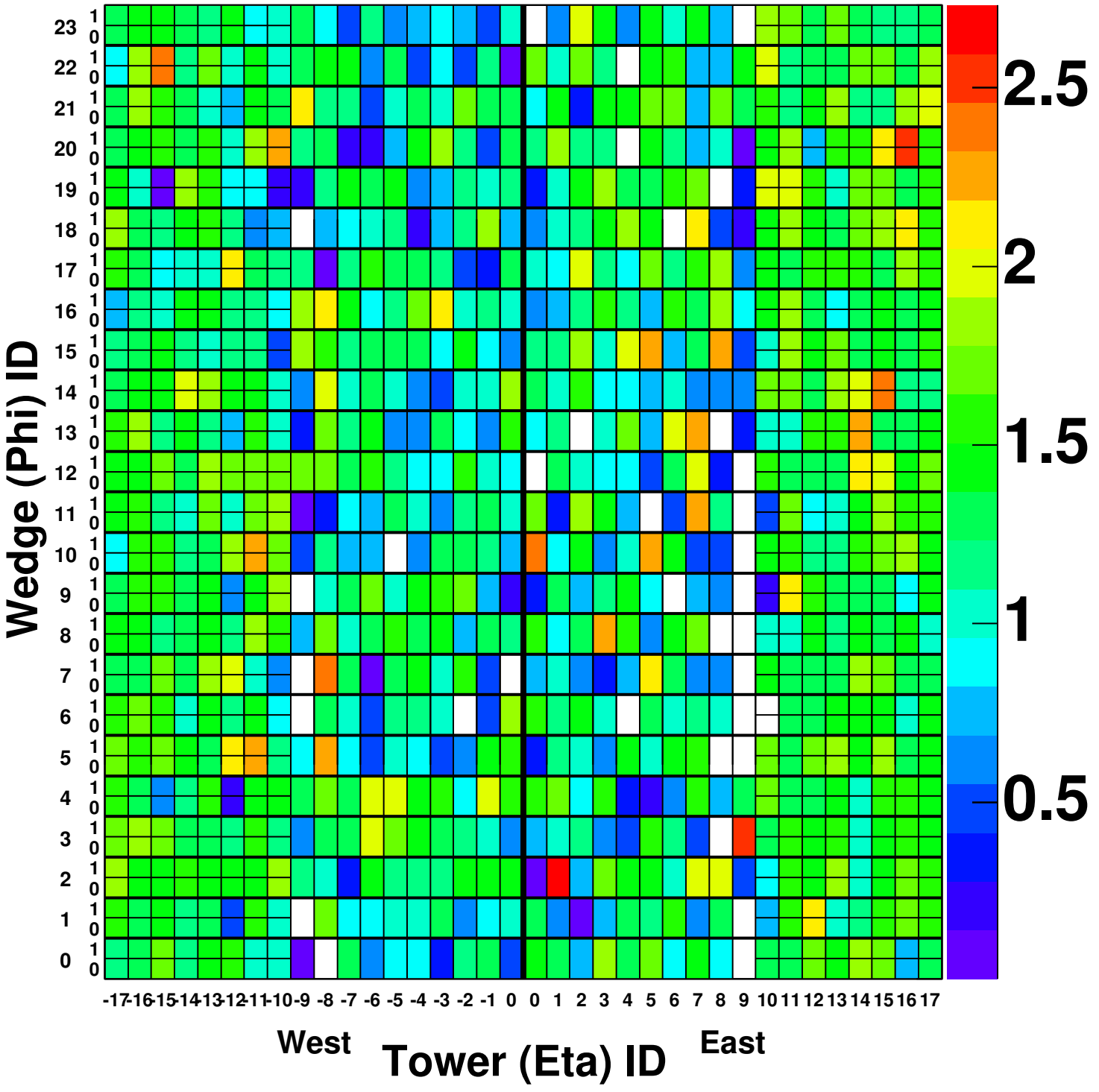
ObjectMon #14 TimeMonitor EMTD: RMS for Corrected t0 - High Energy

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Corrected t_0 RMS - High Energy

purple or red - problems

ASD Time Window is
520 ns < t_0 < 660 ns
CEM(Eeven+Eodd) > 9000 ADC
PEM(Eeven+Eodd) > 2000 ADC
$|t_{0corr}|$<15.0 ns



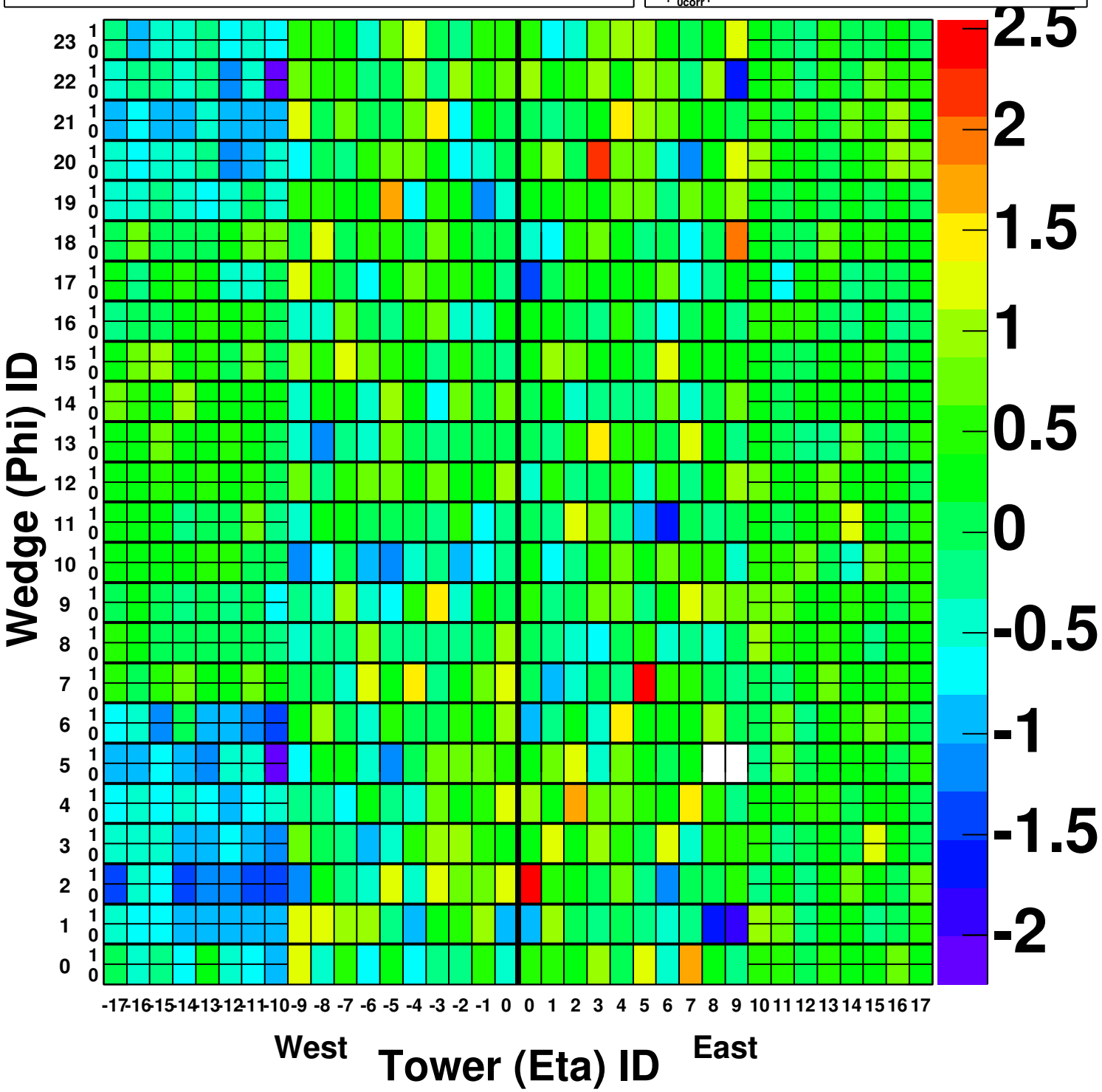
ObjectMon #13 TimeMonitor EMTD: Mean Corrected t0 - Low Energy

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Mean Corrected t_0 - Low Energy

purple or red - problems

ASD Time Window is
520 ns < t_0 < 660 ns
CEM(Eeven+Eodd) < 9000 ADC
PEM(Eeven+Eodd) < 2000 ADC
$|t_{0corr}|$<15.0 ns



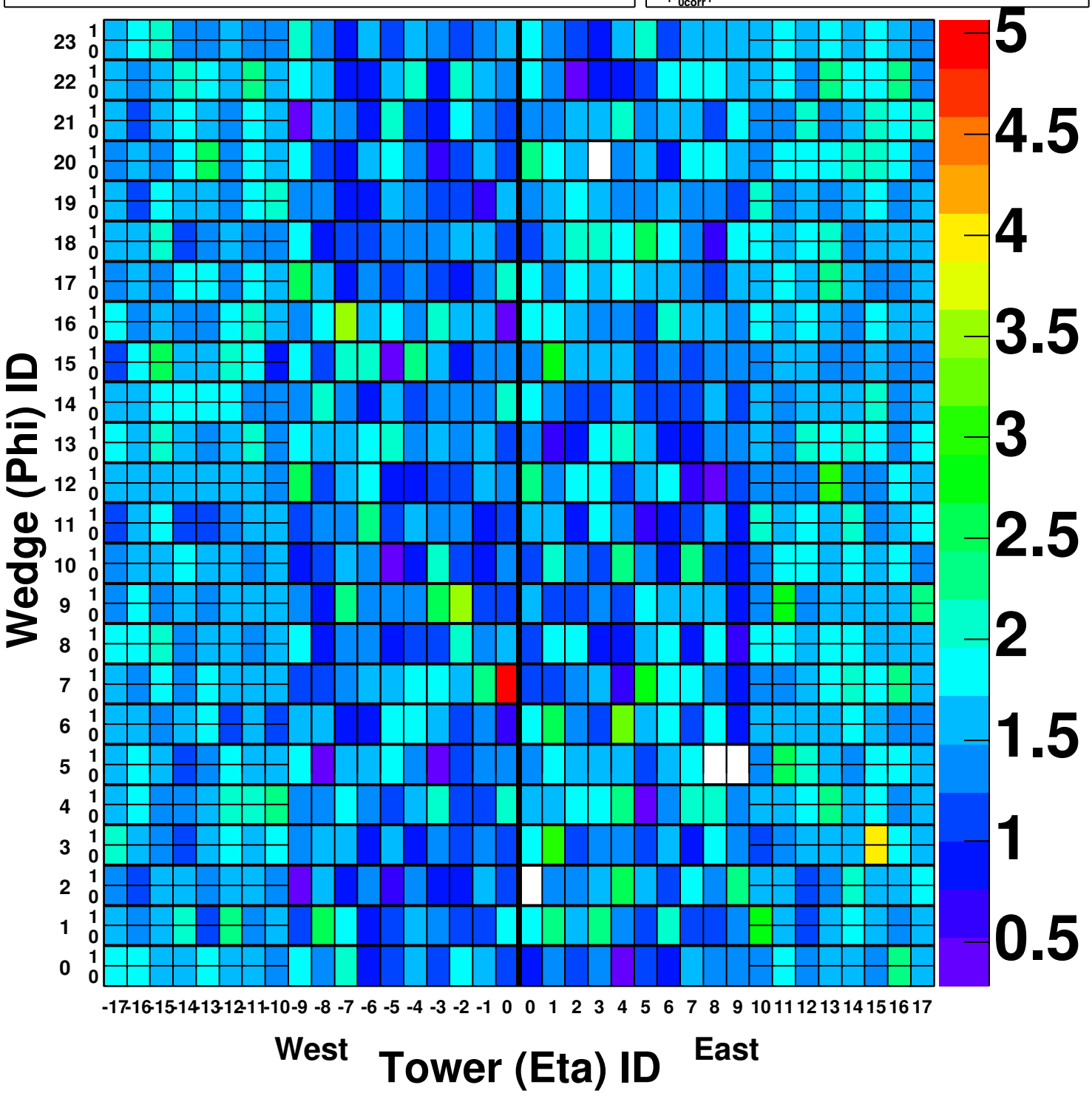
ObjectMon #15 TimeMonitor EMTD: RMS for Corrected t0 - Low Energy

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Corrected t_0 RMS - Low Energy

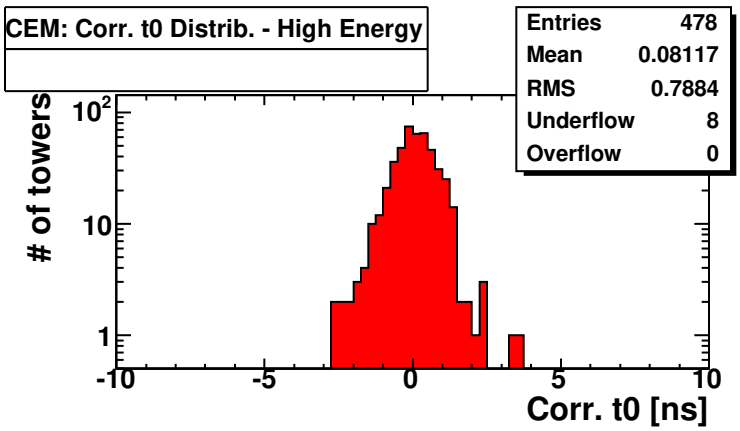
purple or red - problems

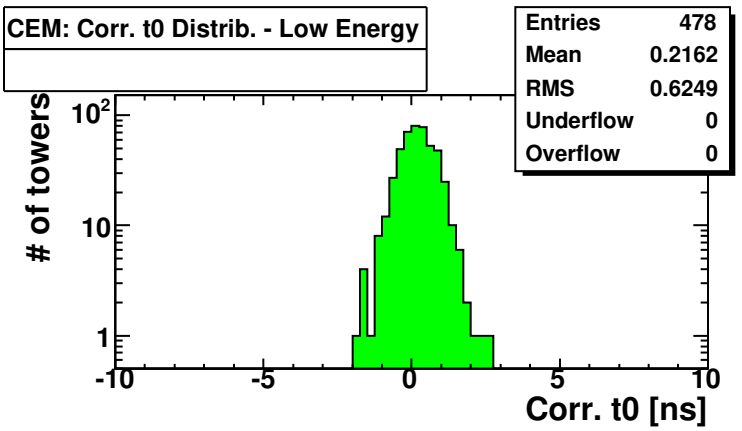
ASD Time Window is
520 ns < t_0 < 660 ns
CEM(Eeven+Eodd) < 9000 ADC
PEM(Eeven+Eodd) < 2000 ADC
$|t_{0corr}|$<15.0 ns

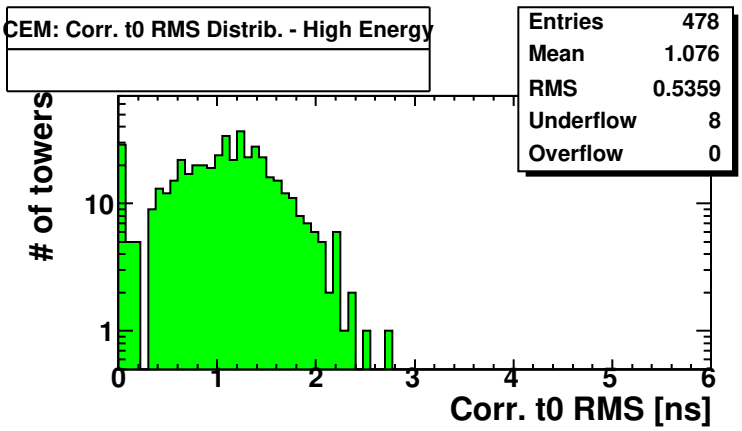


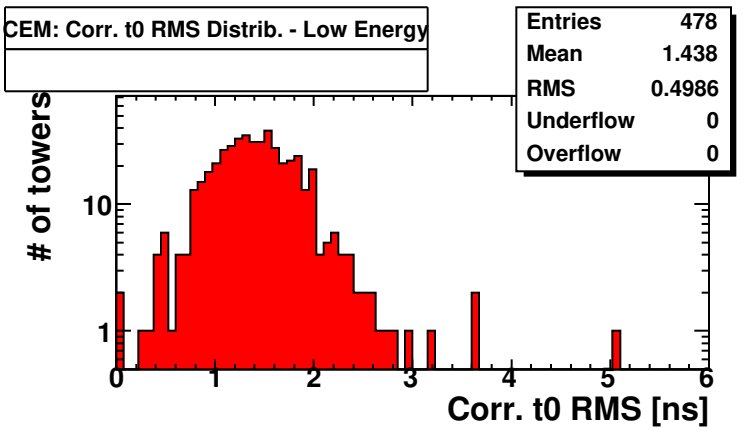
ObjectMon #16 TimeMonitor EMTD: Corrected t0 and RMS

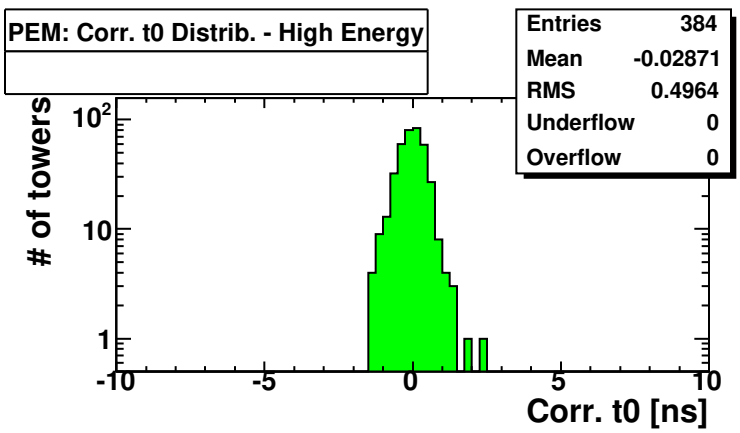
Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

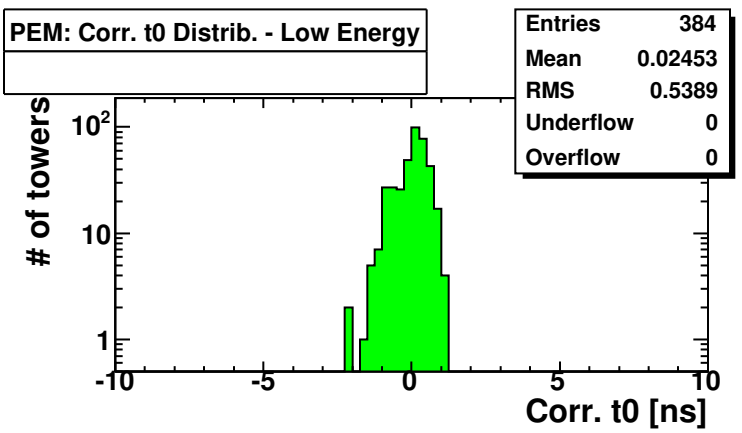


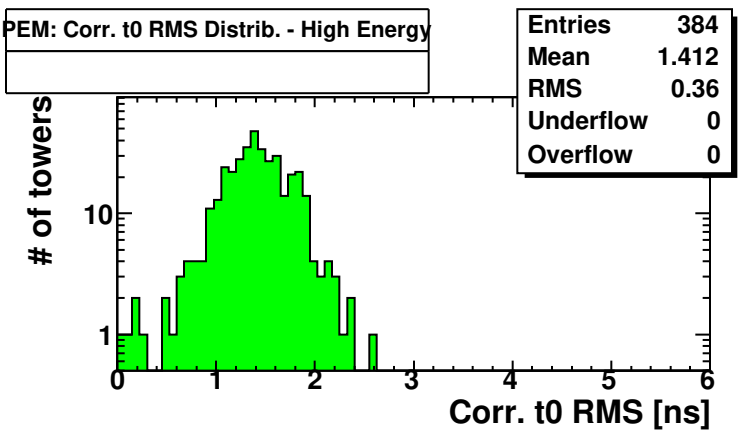


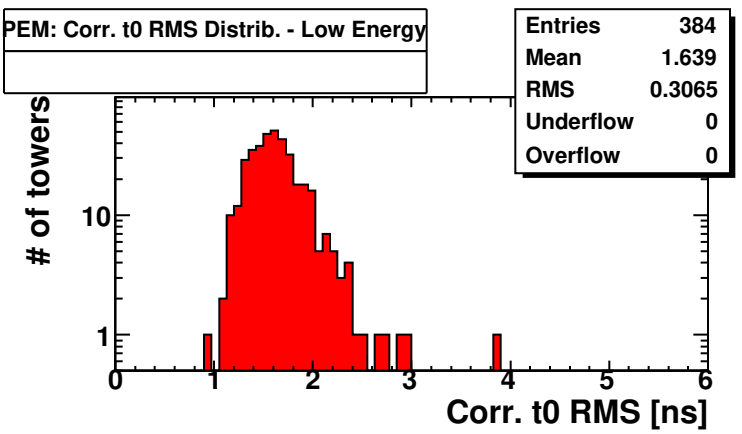












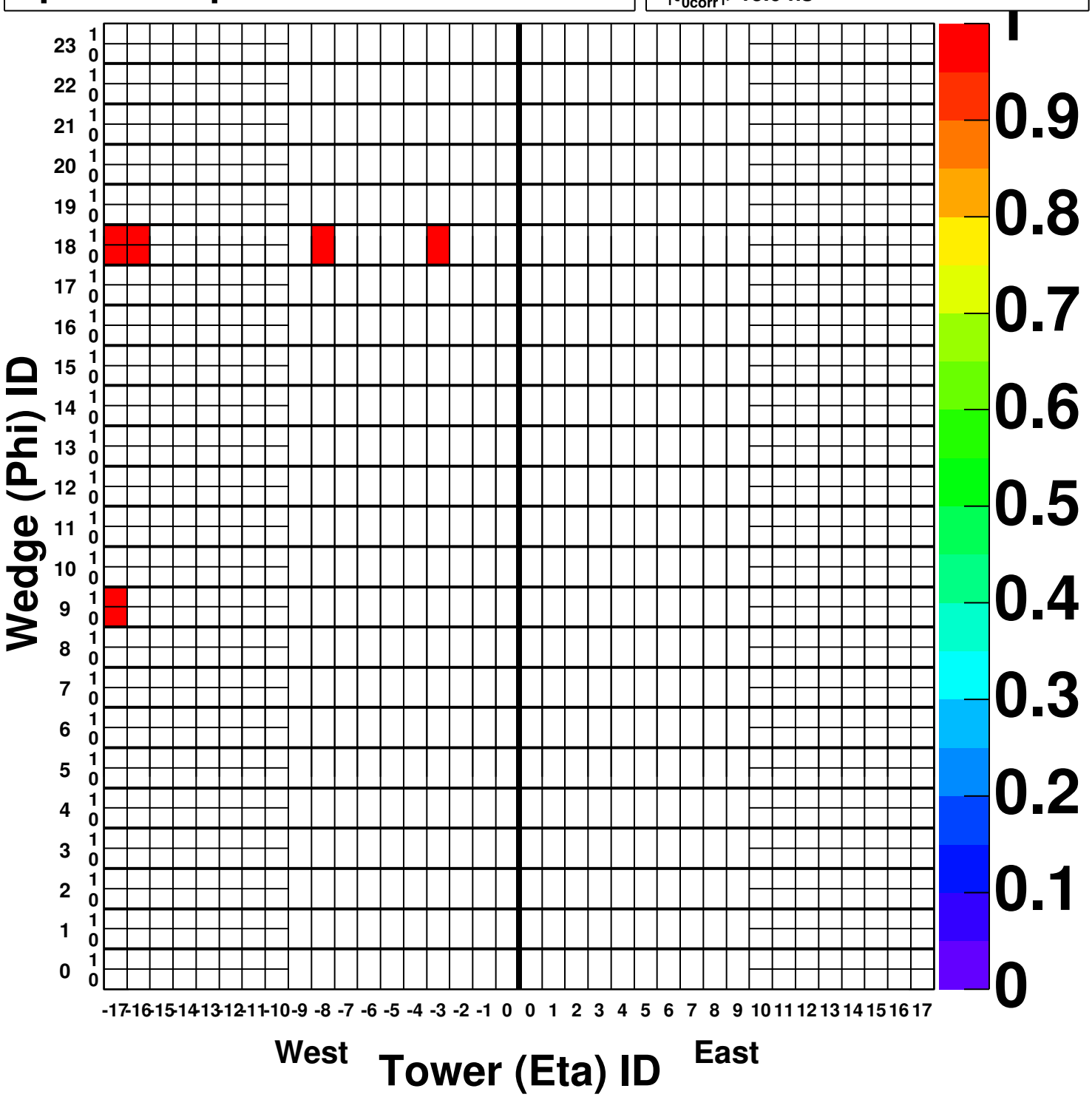
ObjectMon #20 TimeMonitor EMTD: Corr. t0 Far From Mean

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Hits Far From Corr. <t0>

potential problems are colored

ASD Time Window is
520 ns < t_0 < 660 ns
Eeven+Eodd > 0.2 GeV
$|t_{0corr}|$>15.0 ns



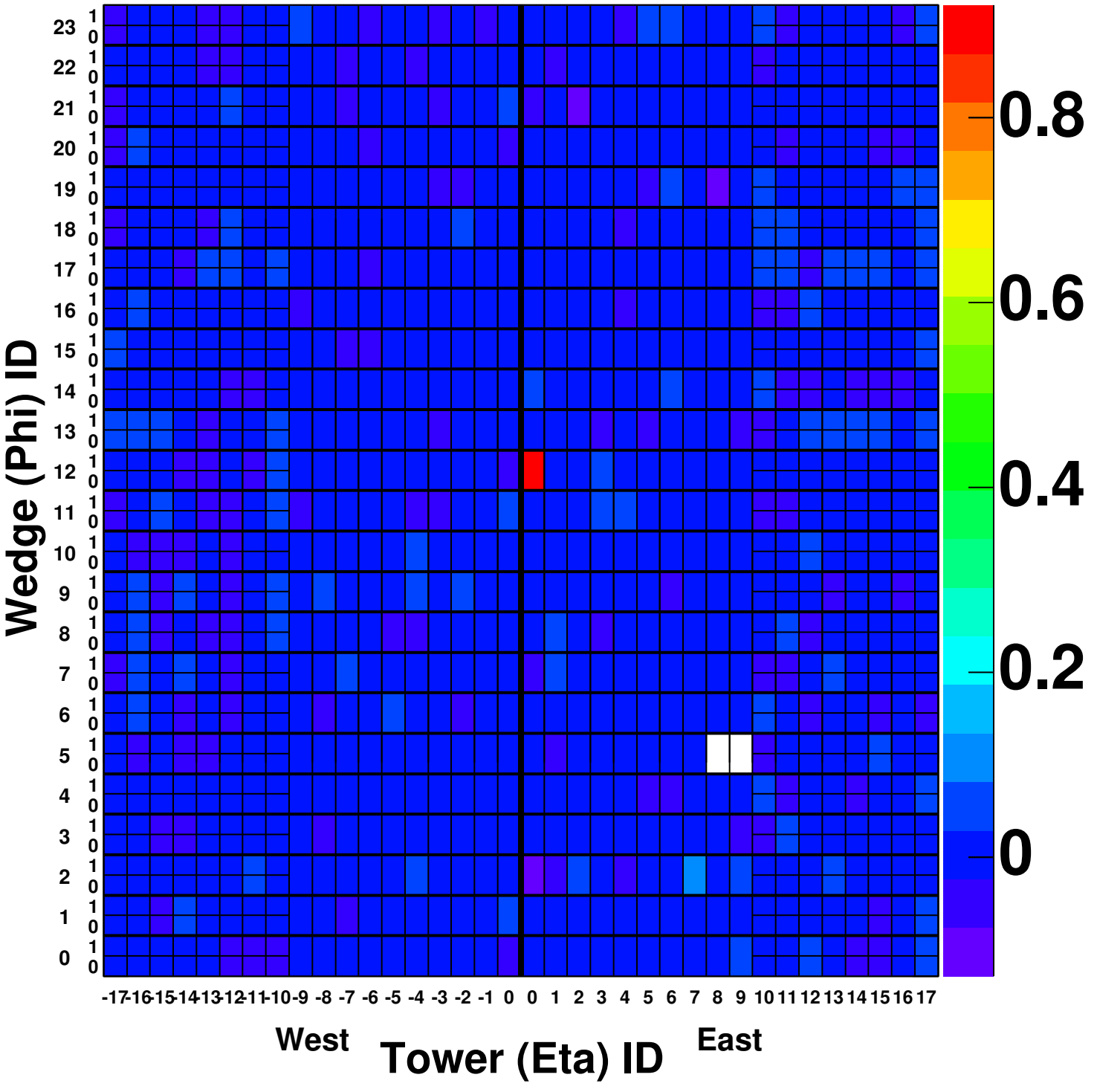
ObjectMon #23 TimeMonitor Mean PMT Asymmetry

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

Mean PMT Asymmetry

PMT Asymmetry = (Eeven-Eodd)/(Eeven+Eodd)

Eeven+Eodd > 0.20 GeV



ObjectMon #24 TimeMonitor PMT Asymmetry RMS

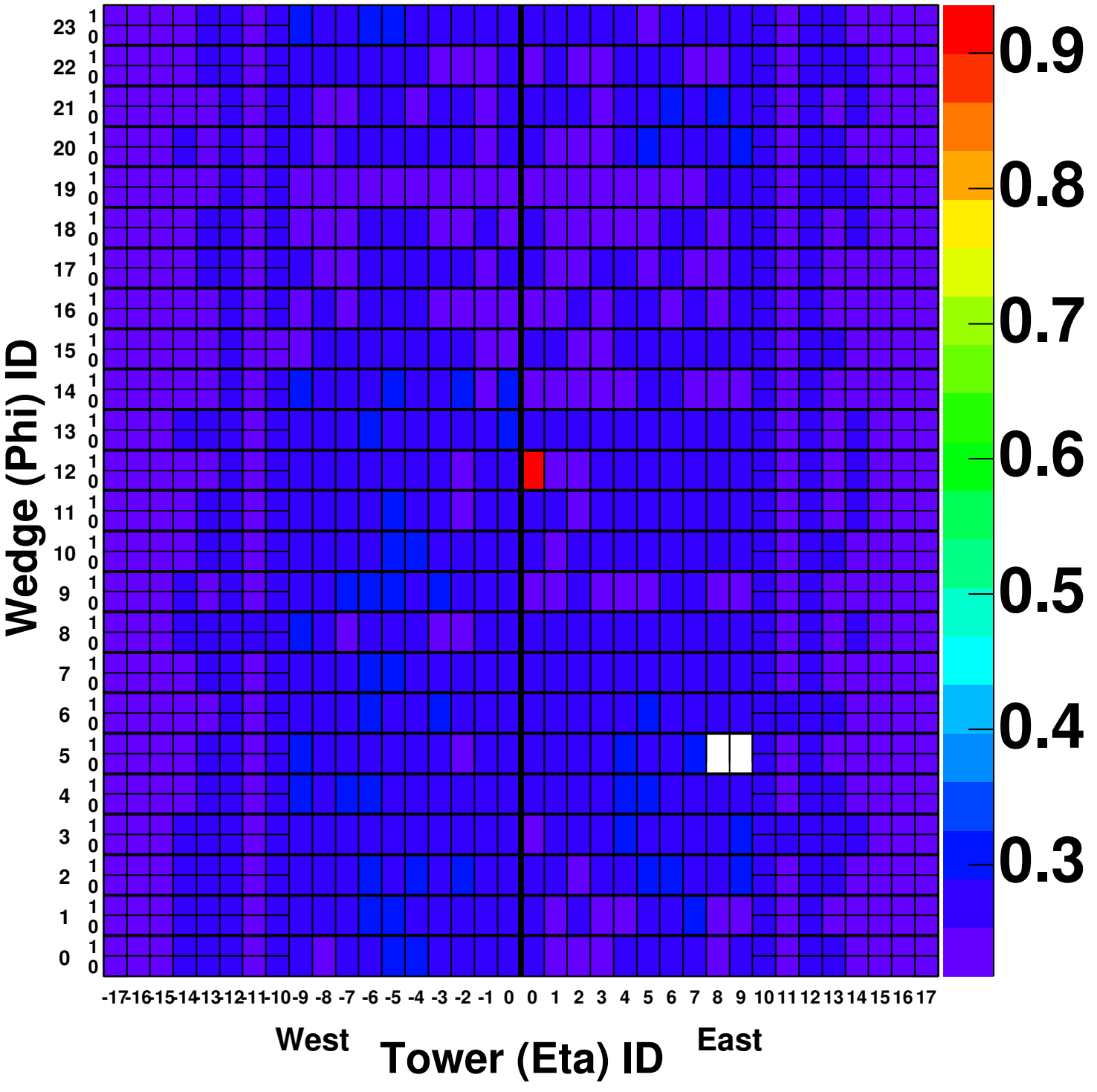
Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

PMT Asymmetry RMS

PMT Asymmetry = (Eeven-Eodd)/(Eeven+Eodd)

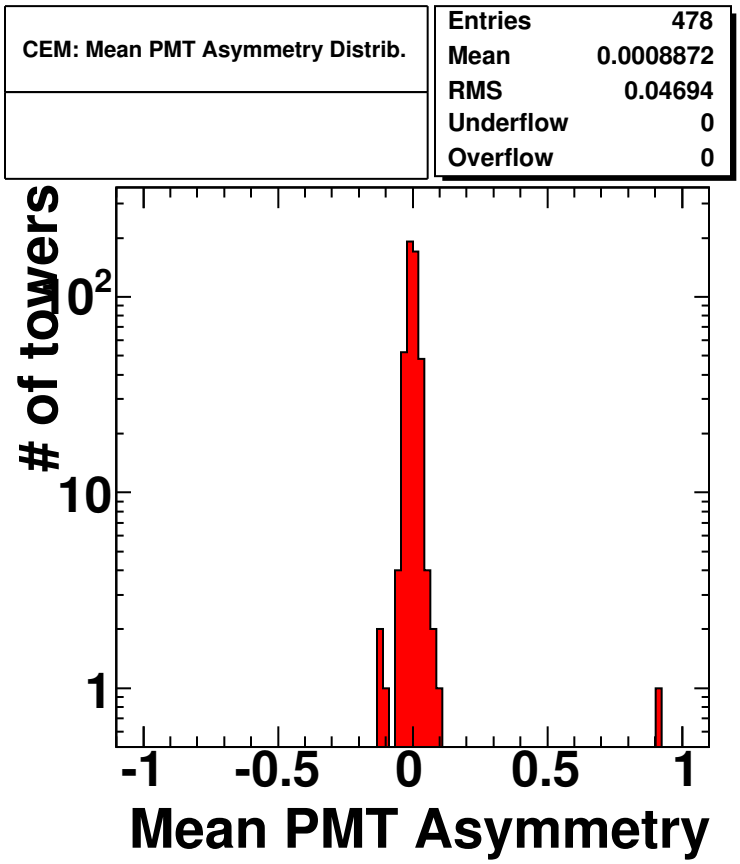
RMS Corrected for eta dep.

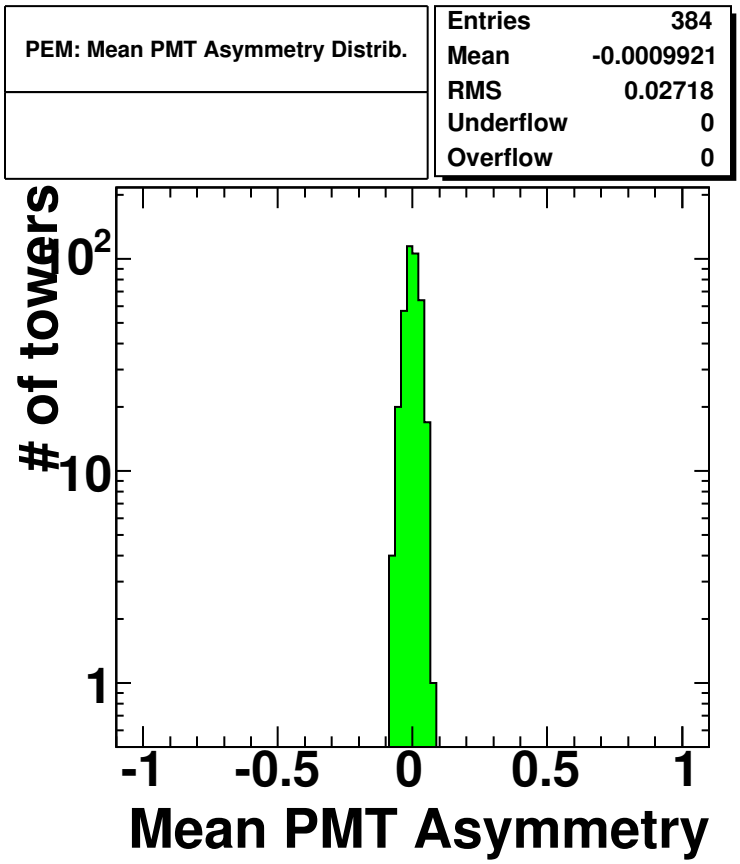
Eeven+Eodd > 0.20 GeV

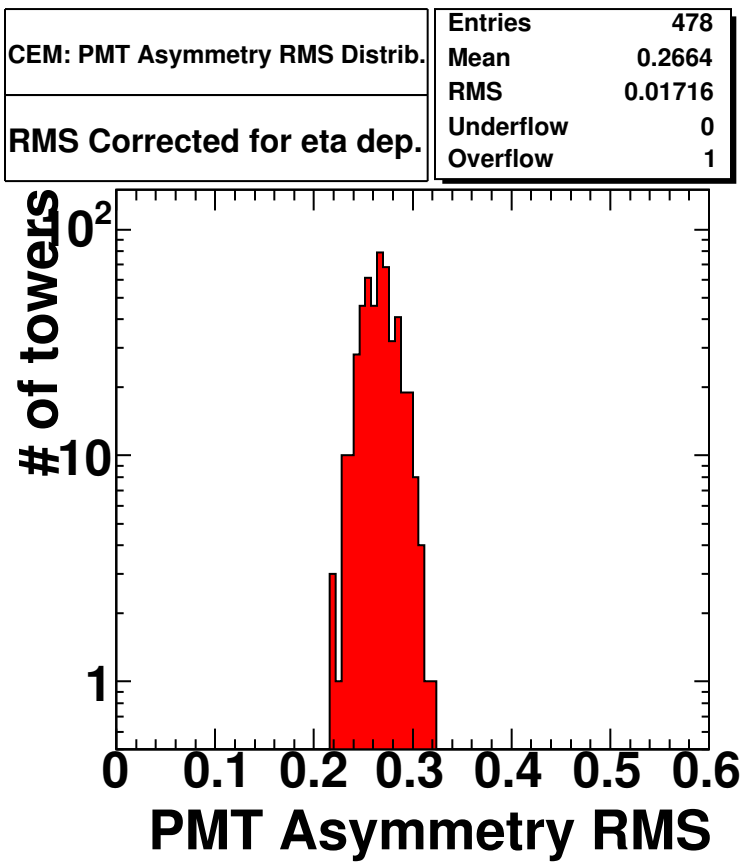


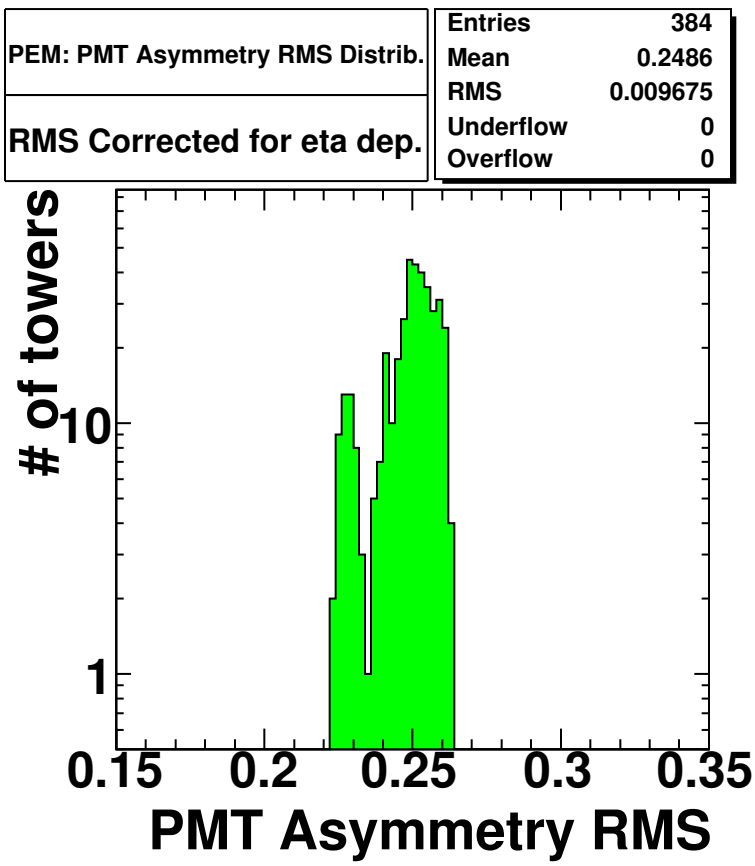
ObjectMon #22 TimeMonitor PMT Asymmetry Distributions

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070









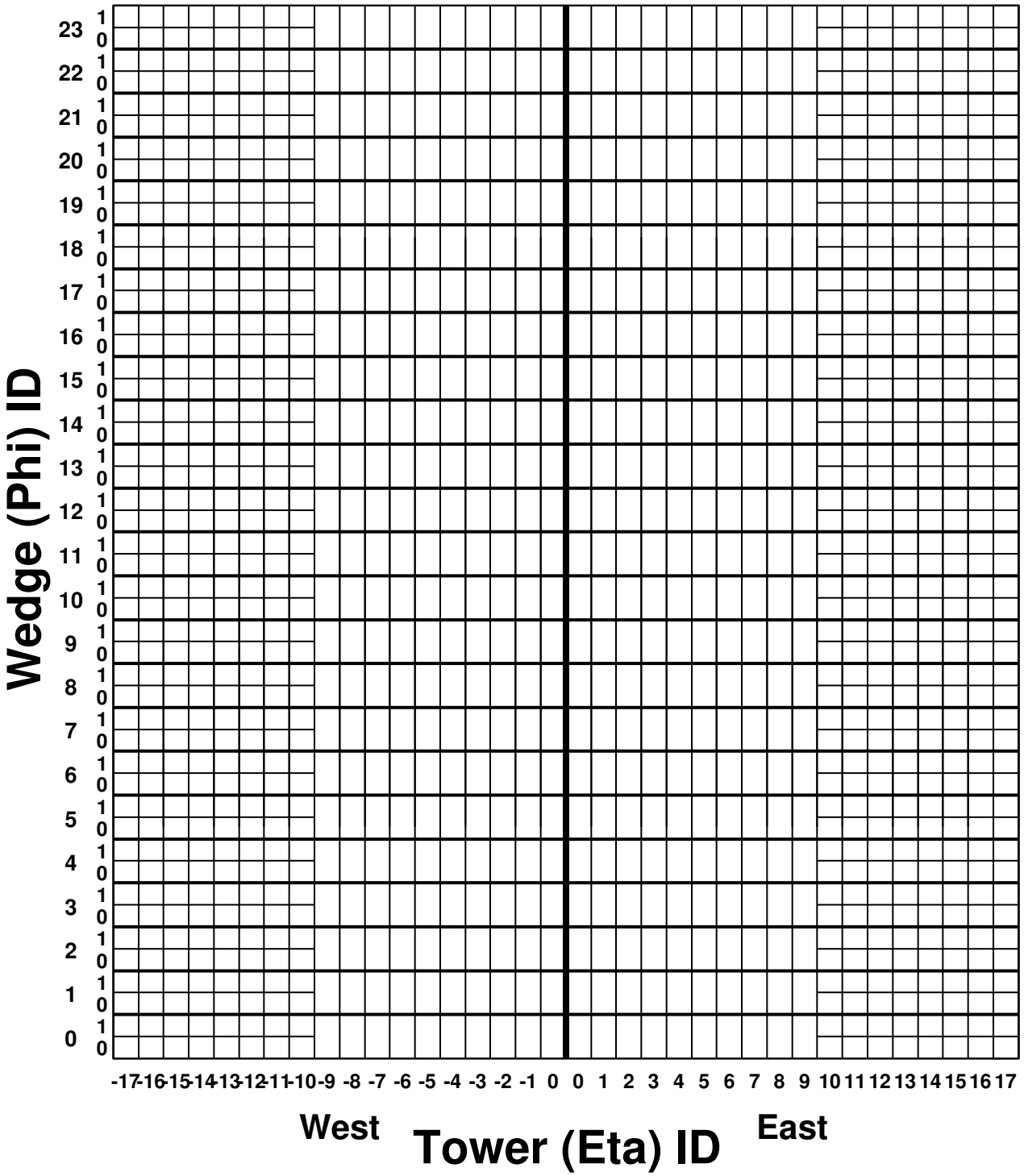
ObjectMon #17 TimeMonitor EMTD: Fake Firings

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Fake Firings Occupancy

potential problems are colored

Energy range [GeV]:
Eeven+Eodd < 0.20
ASD Time Window is
520 ns < t_0 < 660 ns



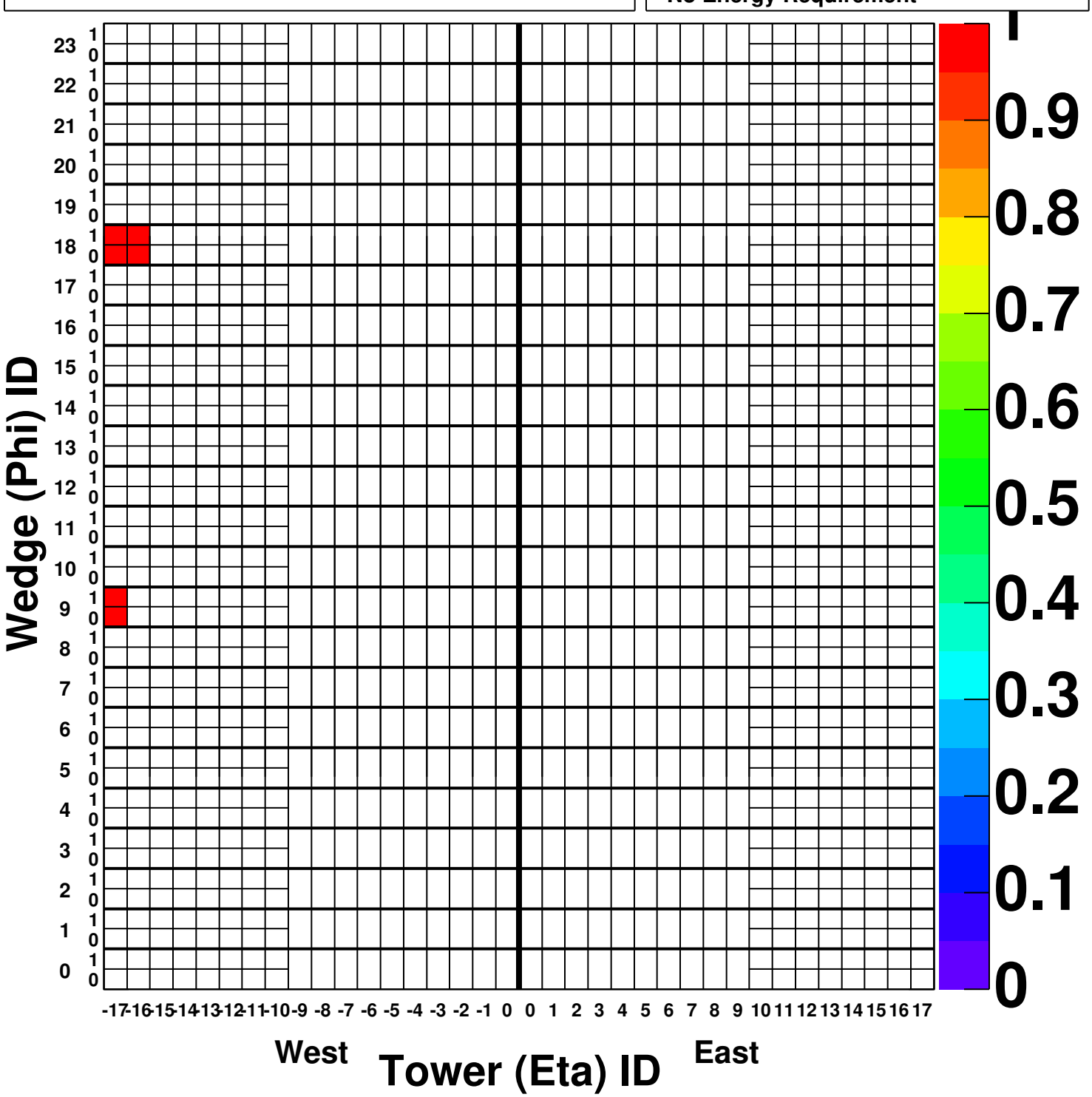
ObjectMon #19 TimeMonitor EMTD: Multiple Firings & Ok Width

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Multiply Ok Width Firing Towers

potential problems are colored

ASD Time Window is
520 ns < t_0 < 660 ns
20 < Hit width < 200 ns
No Energy Requirement



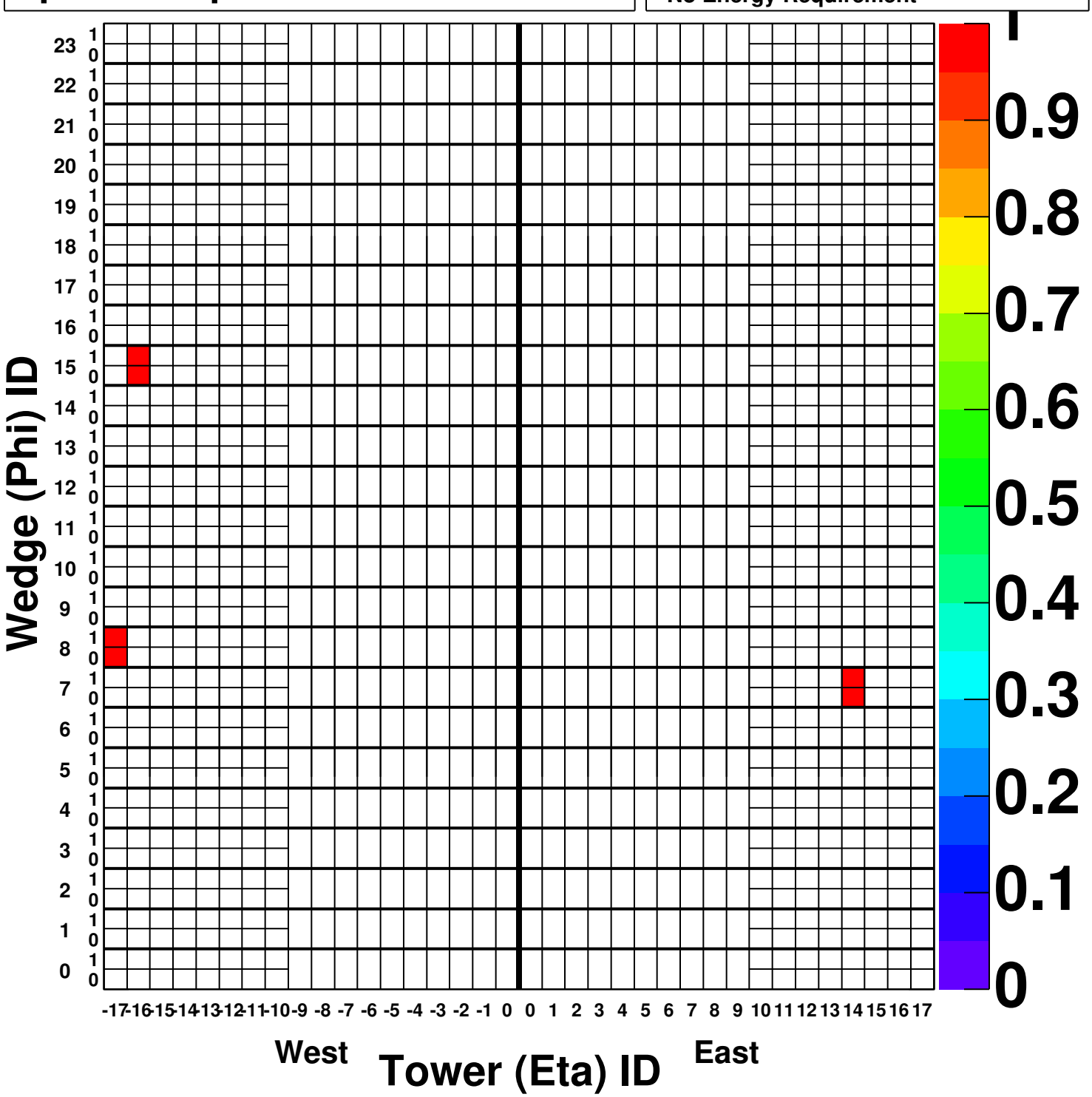
ObjectMon #18 TimeMonitor EMTD: Multiple Firings & Low Width

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

EMTDC: Low Width Firing Towers

potential problems are colored

ASD Time Window is
520 ns < t_0 < 660 ns
0 < Hit width < 20 ns
No Energy Requirement

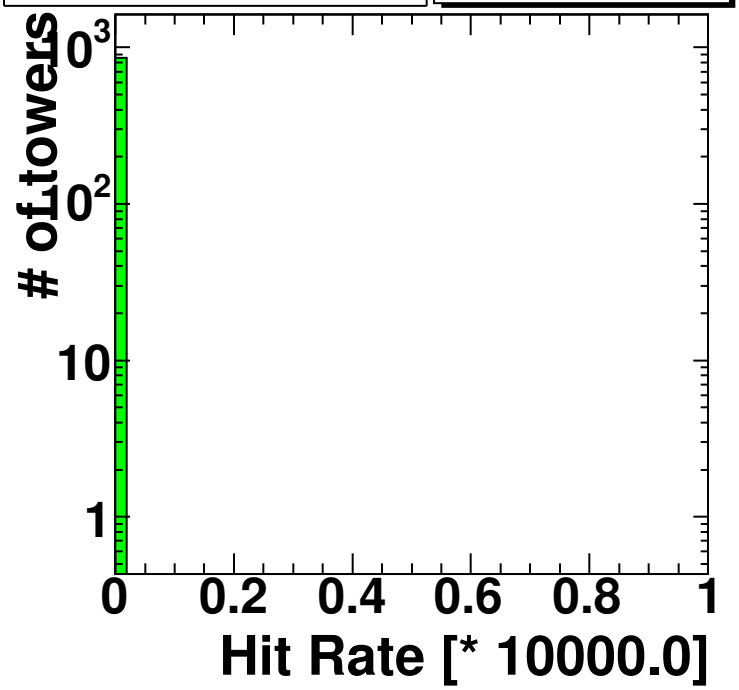


ObjectMon #21 TimeMonitor EMTD: Fakes, Low Width and OOT Hits & Mult. Firings

Run:256989 Event: 949236 # of Events:4873 Time: Wed Jan 30 09:46:25 2008 Ref.Run:243070

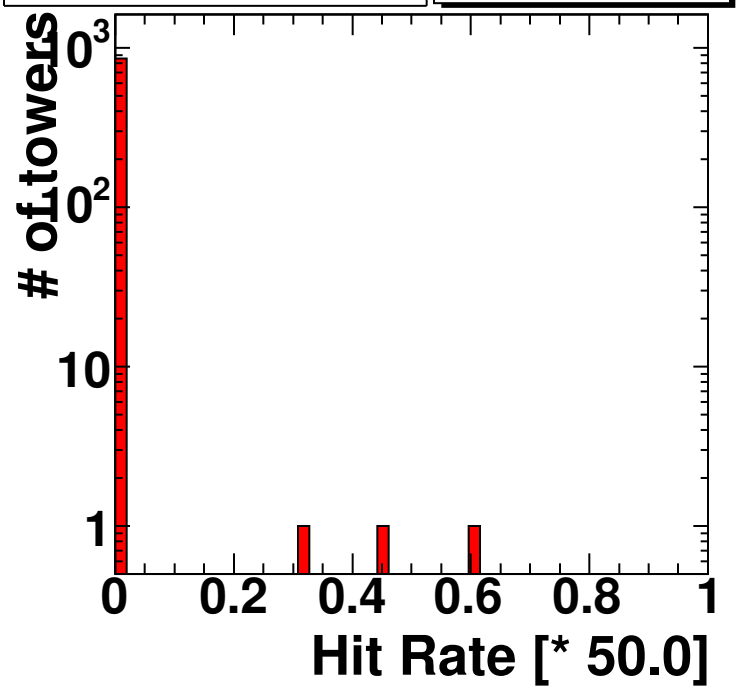
Fake Firing Rate

Entries	862
Mean	0
RMS	-0
Underflow	0
Overflow	0



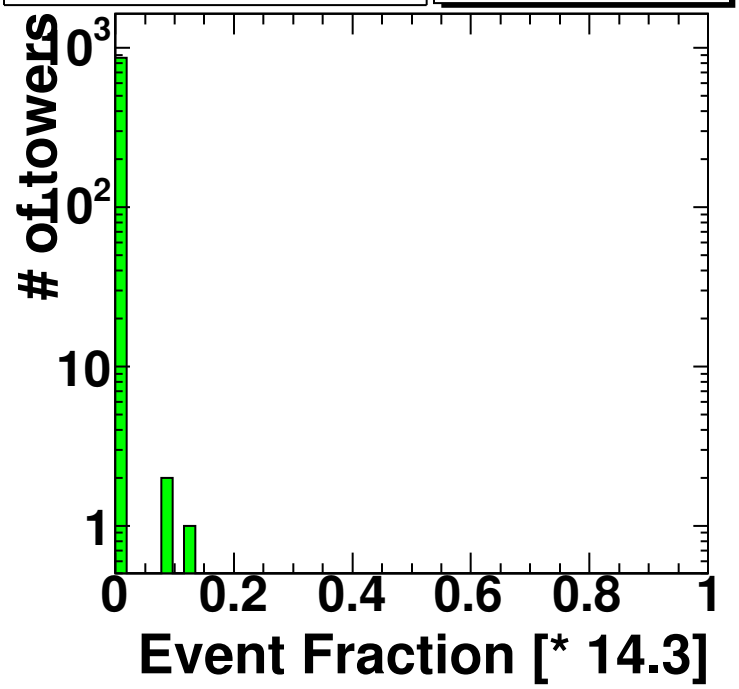
Low Wid. Firng. Rate

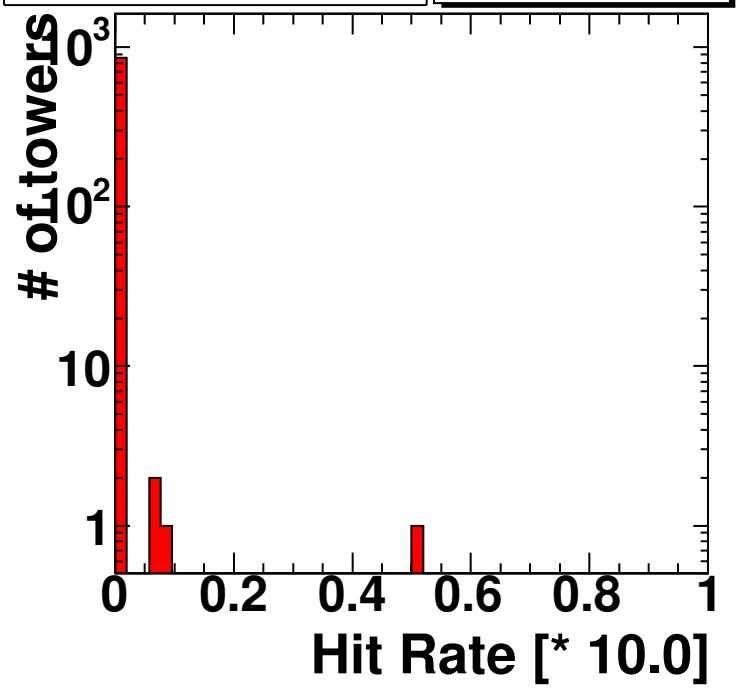
Entries	862
Mean	3.237e-05
RMS	0.0005645
Underflow	0
Overflow	0



Mult. Ok-Wid. Firng. Rate

Entries	862
Mean	2.364e-05
RMS	0.0004041
Underflow	0
Overflow	0



OOT Hit Rate

Entries	862
Mean	8.174e-05
RMS	0.00175
Underflow	0
Overflow	1