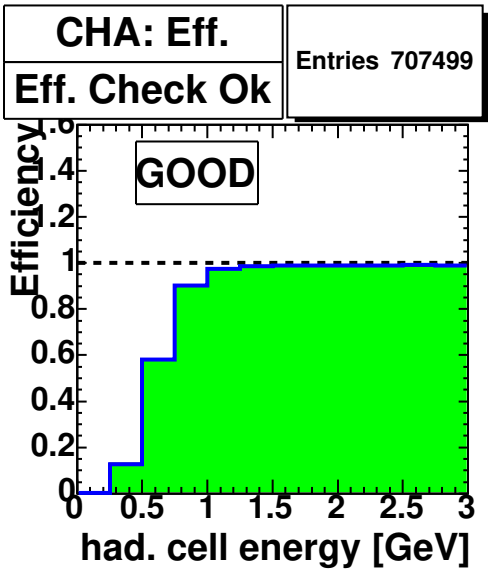
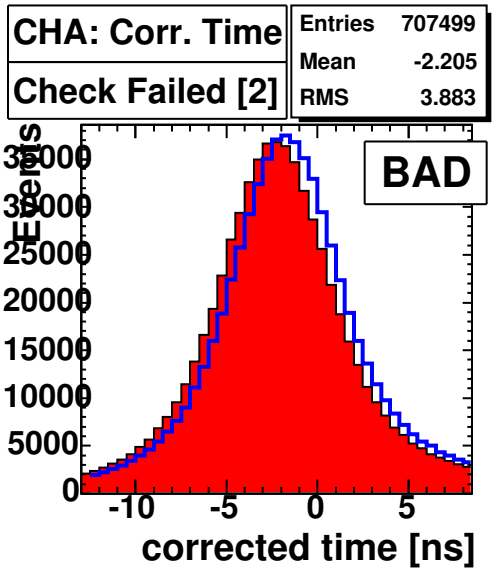
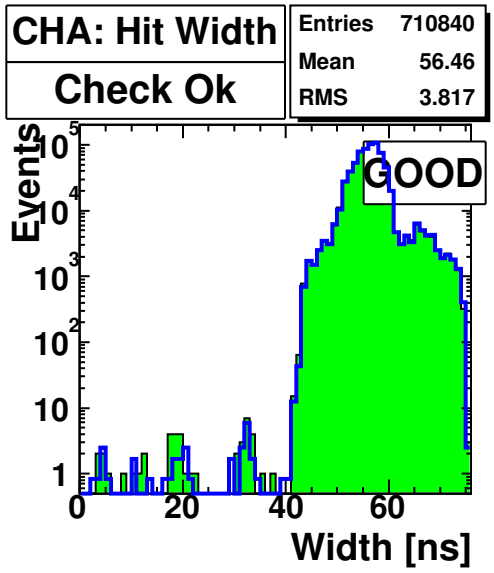
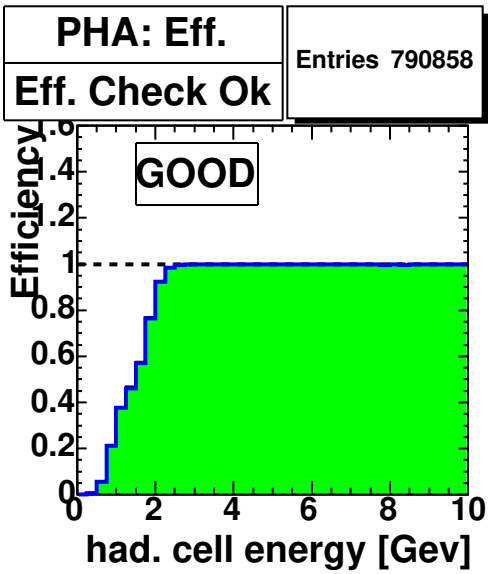
# ObjectMon #2 TimeMonitor HADTDC Timing

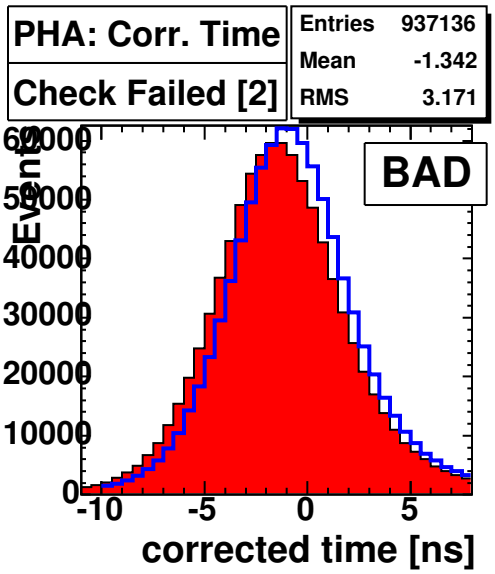
Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

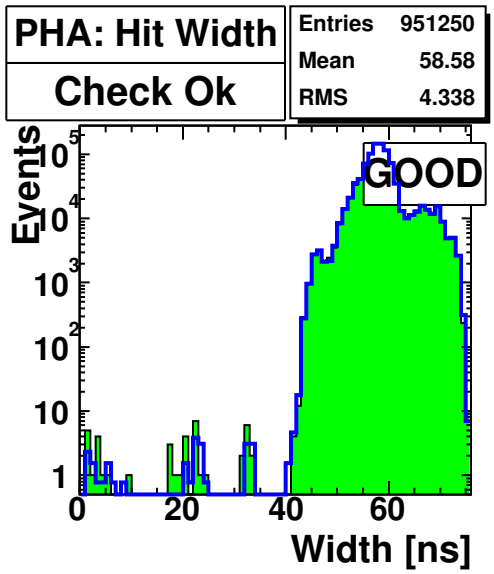


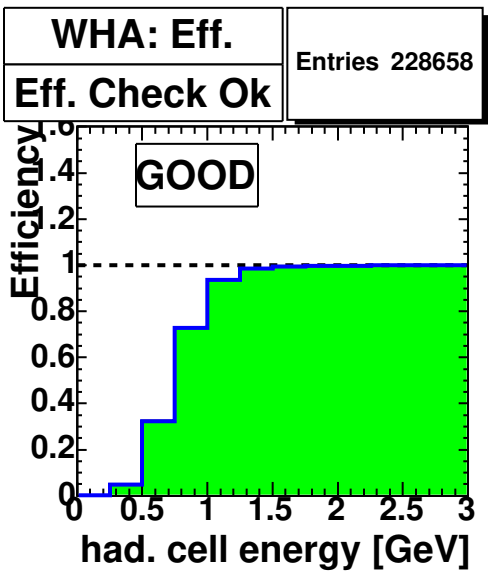



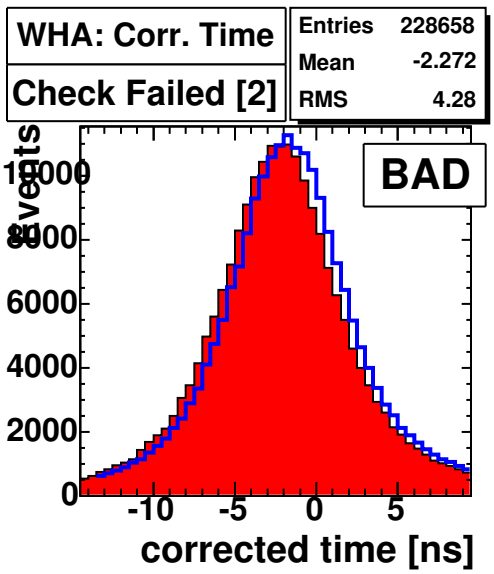



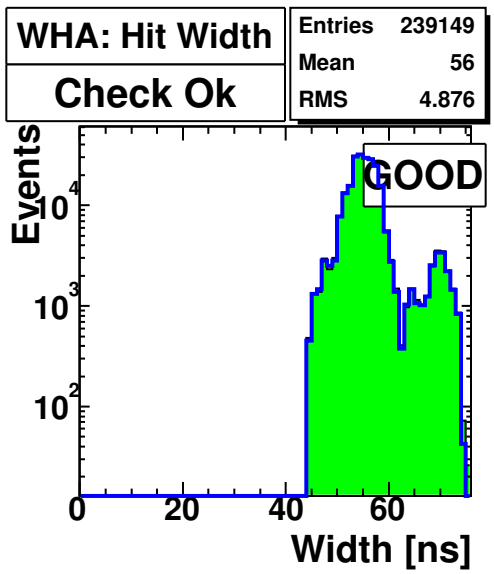



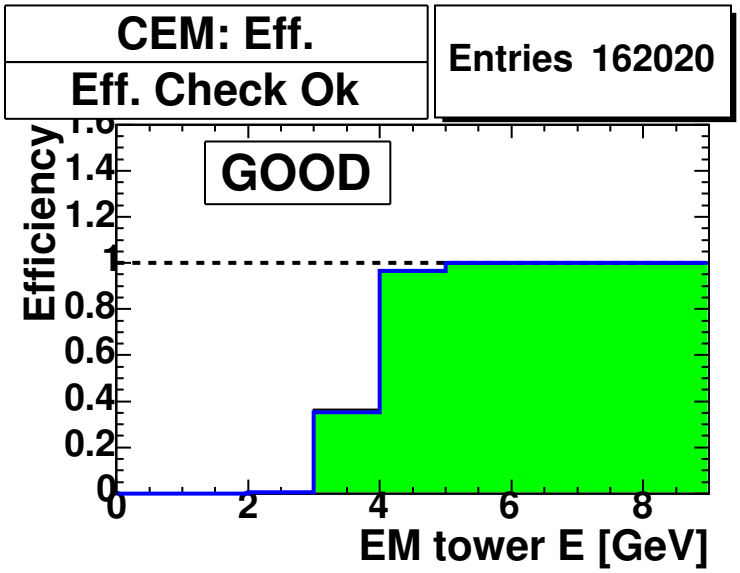



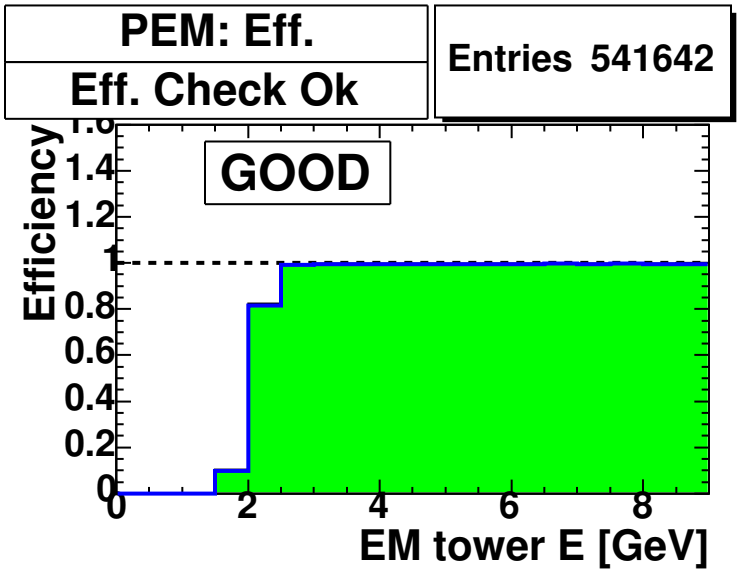



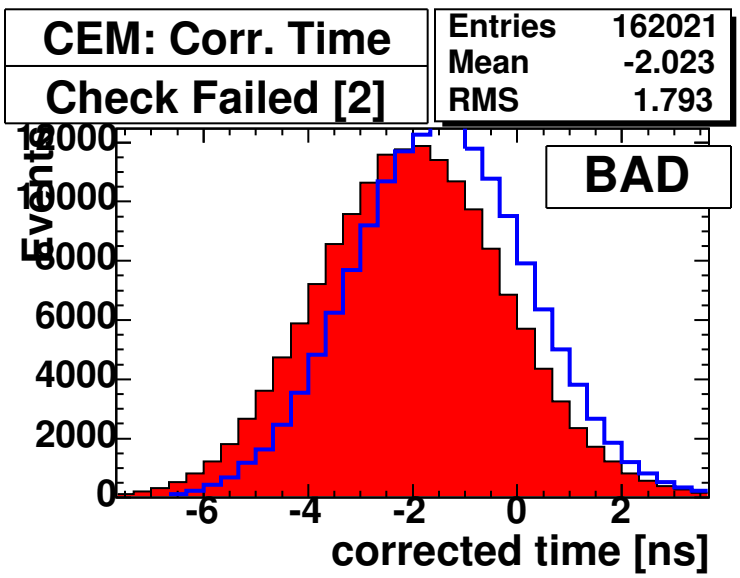



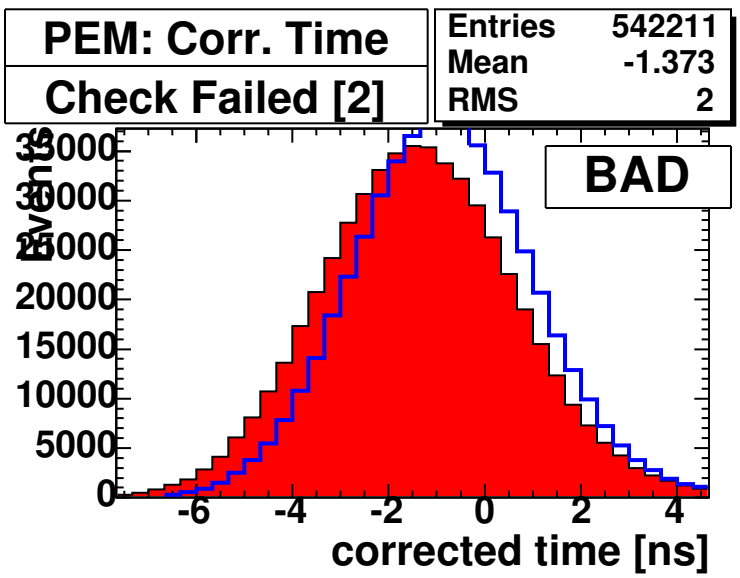
# ObjectMon #4 TimeMonitor EMTDC Timing

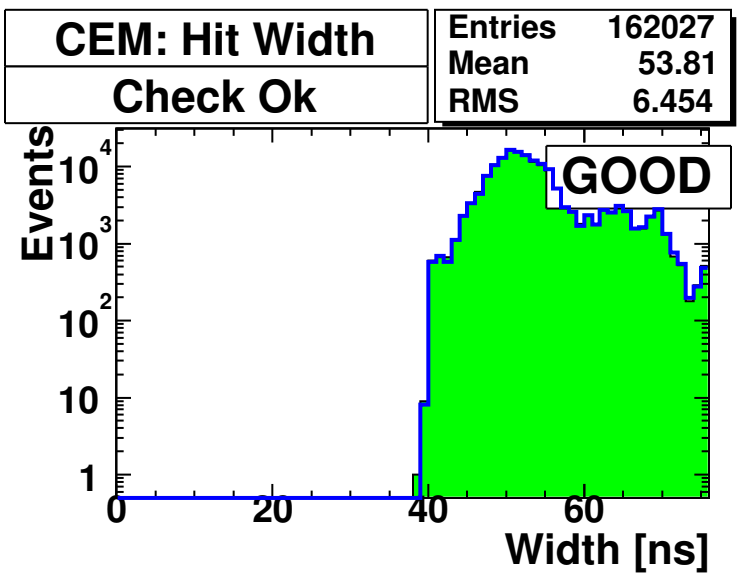
Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

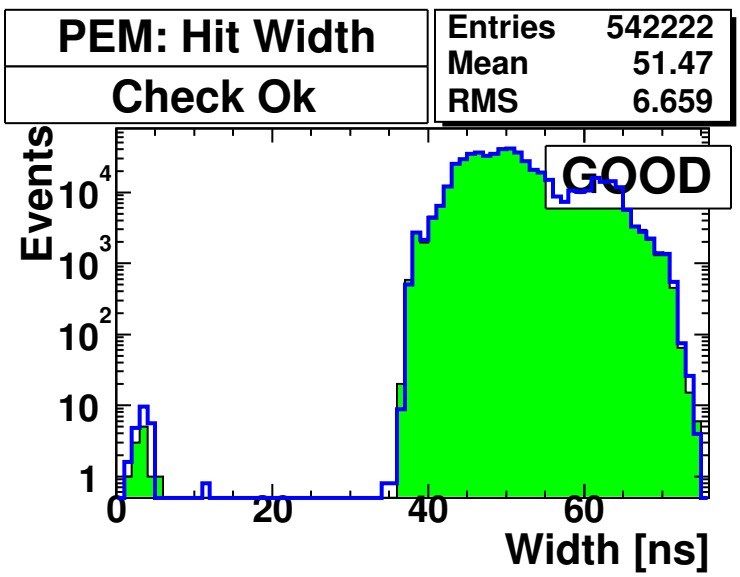


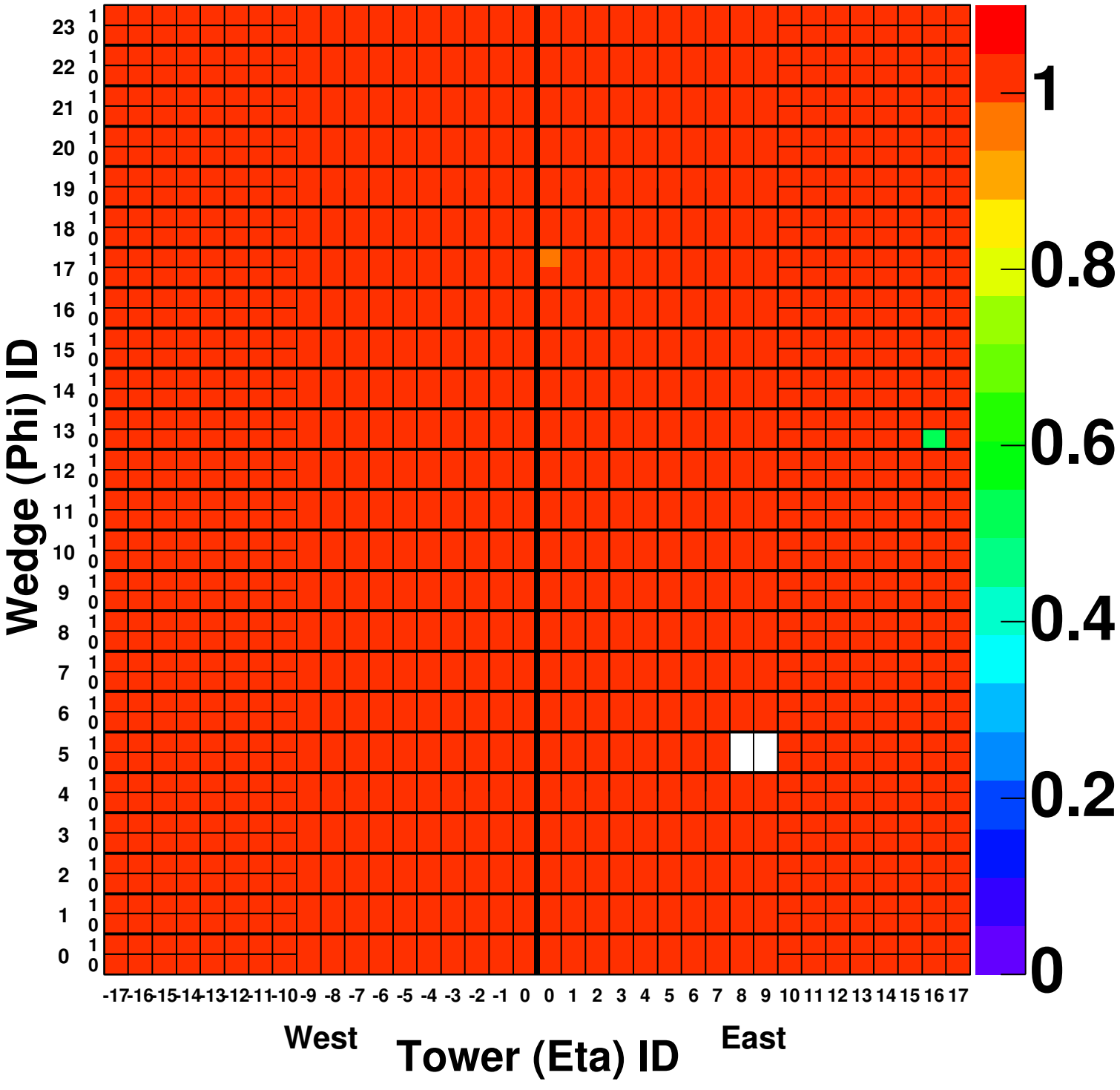
# ObjectMon #9 TimeMonitor EMTD: 100% Eff 2D

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

**EMTDC: Eff. of EM Phototubes in 100% range**

**not red are BAD**

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

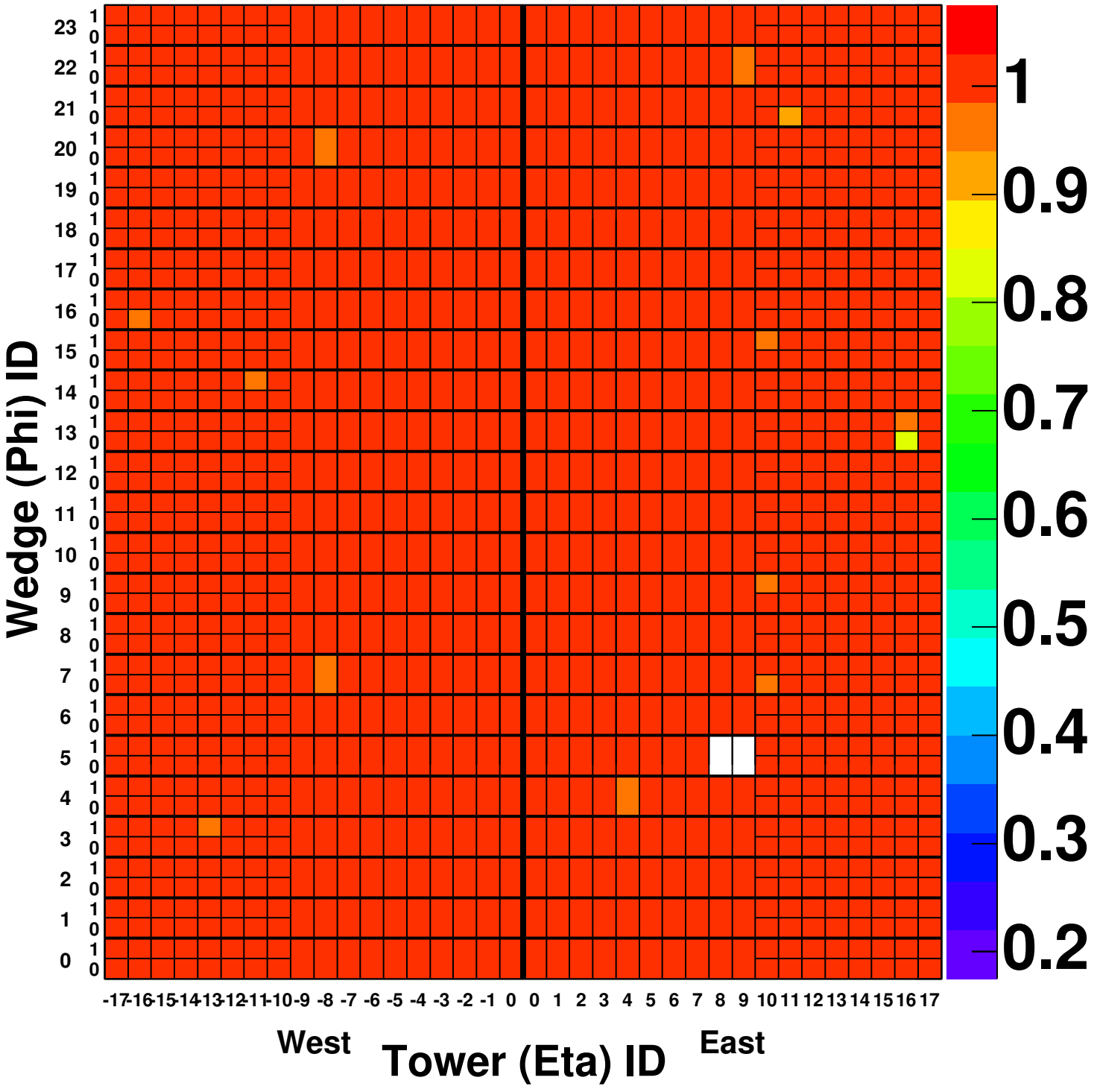


# ObjectMon #22 TimeMonitor EMTD: Fit Efficiency

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

## EMTDC: Eff. Fit Plateau
## not red are BAD

**ASD Time Window is**
**540 ns < CEM $t_0$ < 620 ns**
**540 ns < PEM $t_0$ < 620 ns**

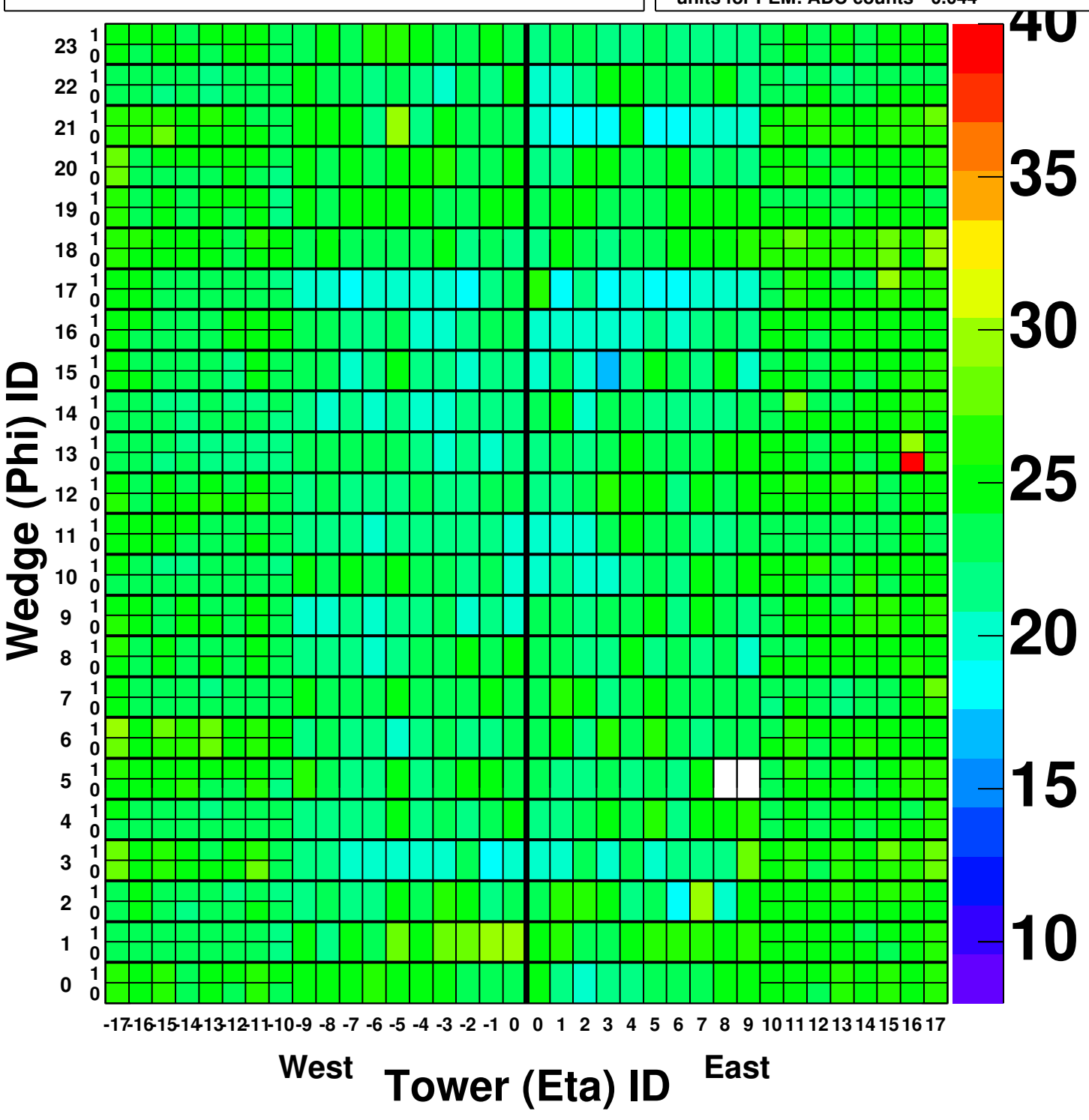


# ObjectMon #20 TimeMonitor EMTD: Thresholds

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

## EMTDC: 50% Thresholds
## red - BAD

ASD Time Window is
540 ns < CEM $t_0$ < 620 ns
540 ns < PEM $t_0$ < 620 ns
units for CEM: ADC counts * 0.01
units for PEM: ADC counts * 0.044



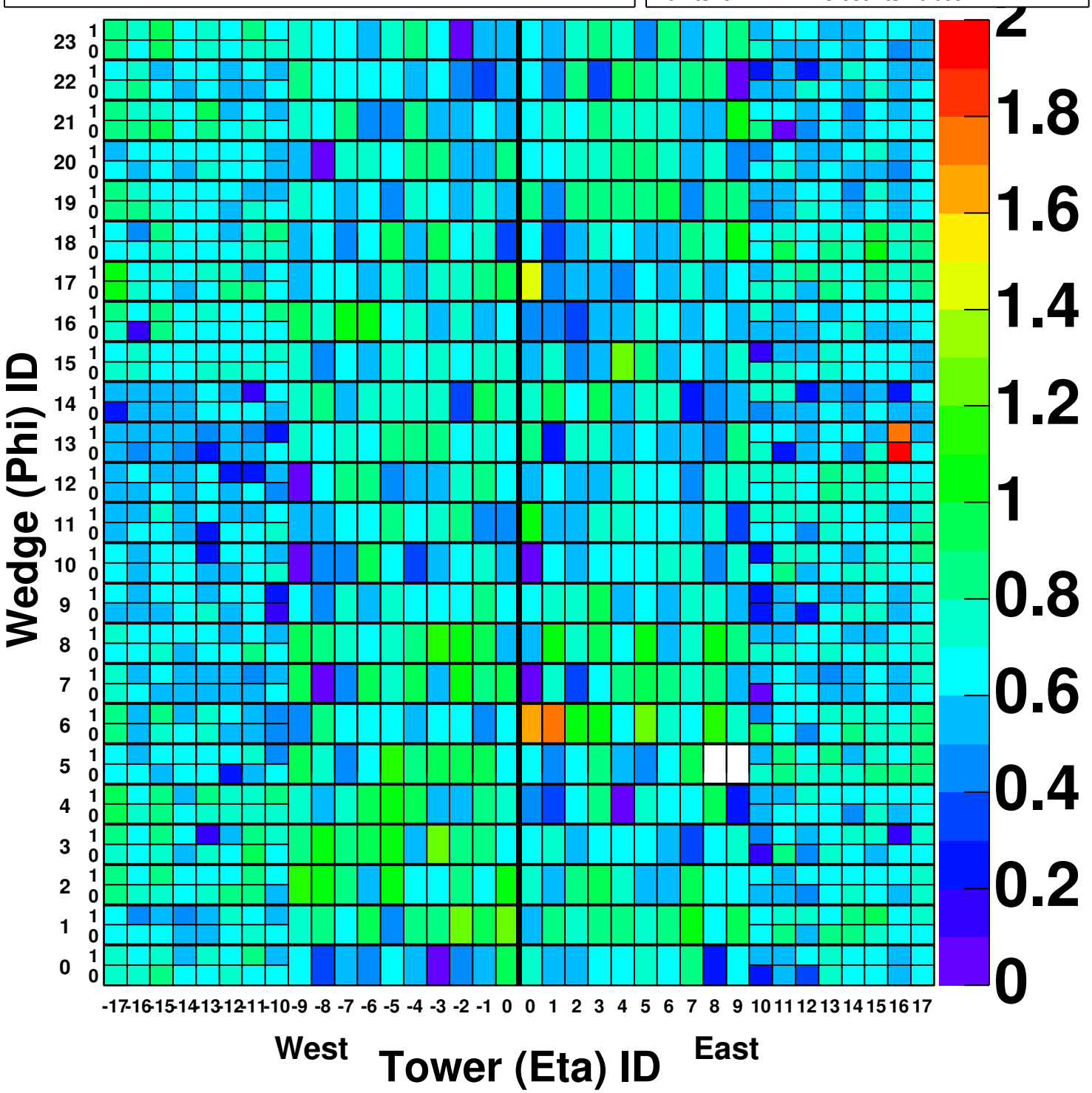
# ObjectMon #21 TimeMonitor EMTD: Threshold Sigma

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

## EMTDC: Threshold Width

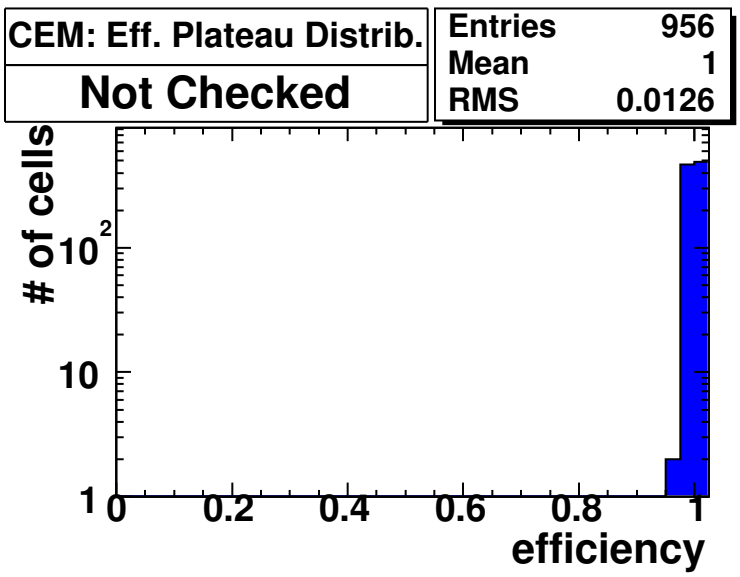
red - BAD

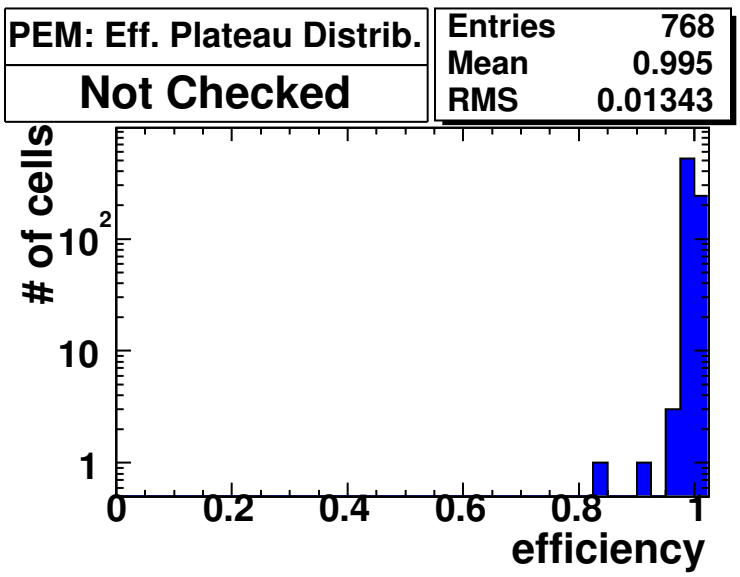
ASD Time Window is
540 ns < CEM $t_0$ < 620 ns
540 ns < PEM $t_0$ < 620 ns
units for CEM: ADC counts * 0.01
units for PEM: ADC counts * 0.035

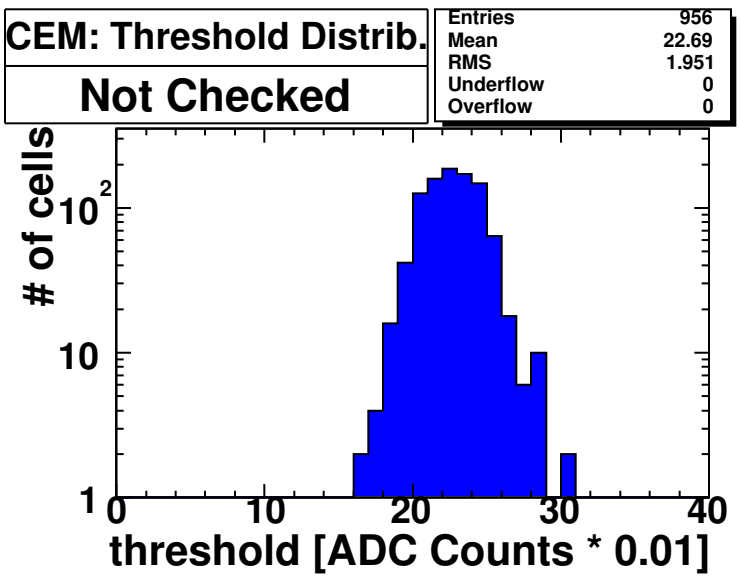


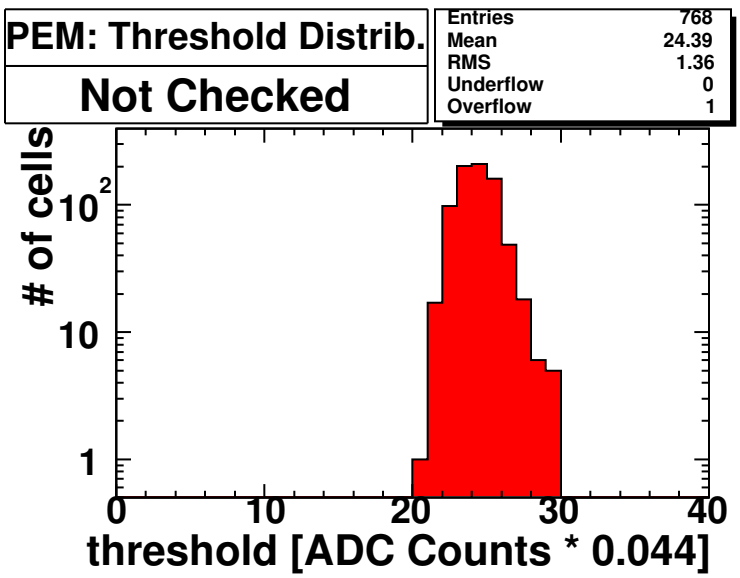
# ObjectMon #10 TimeMonitor EMTD: Thresh., Eff. and Sigmas

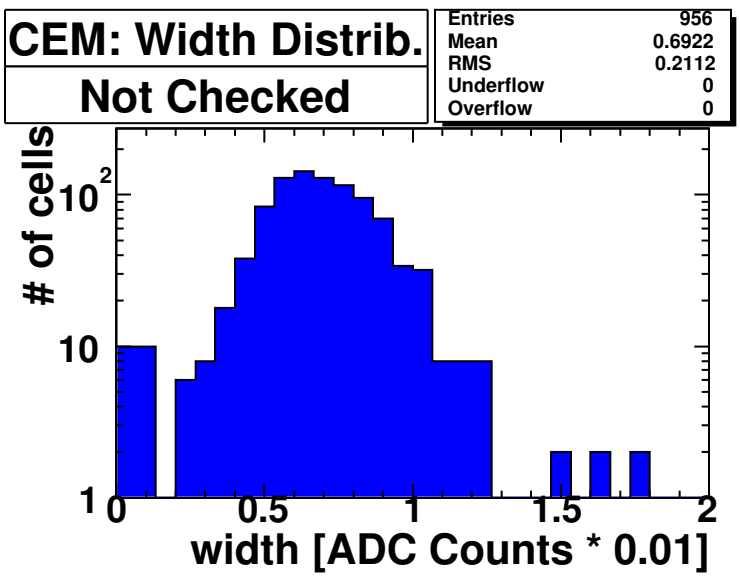
Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

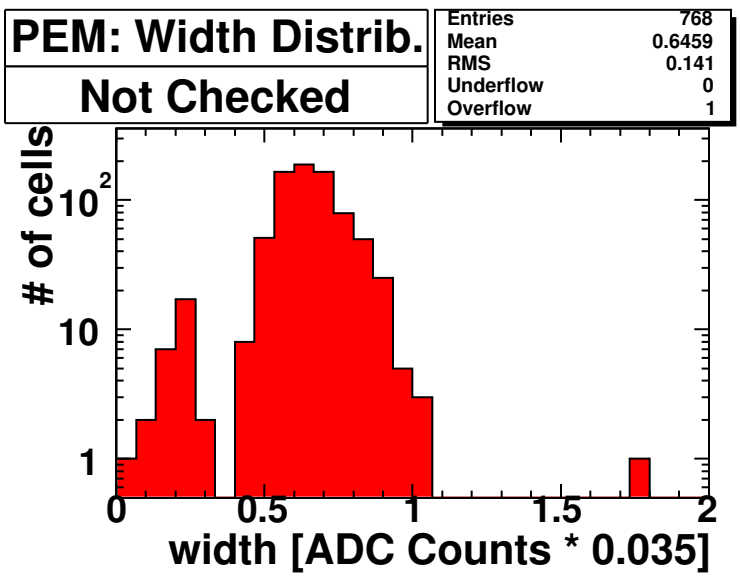


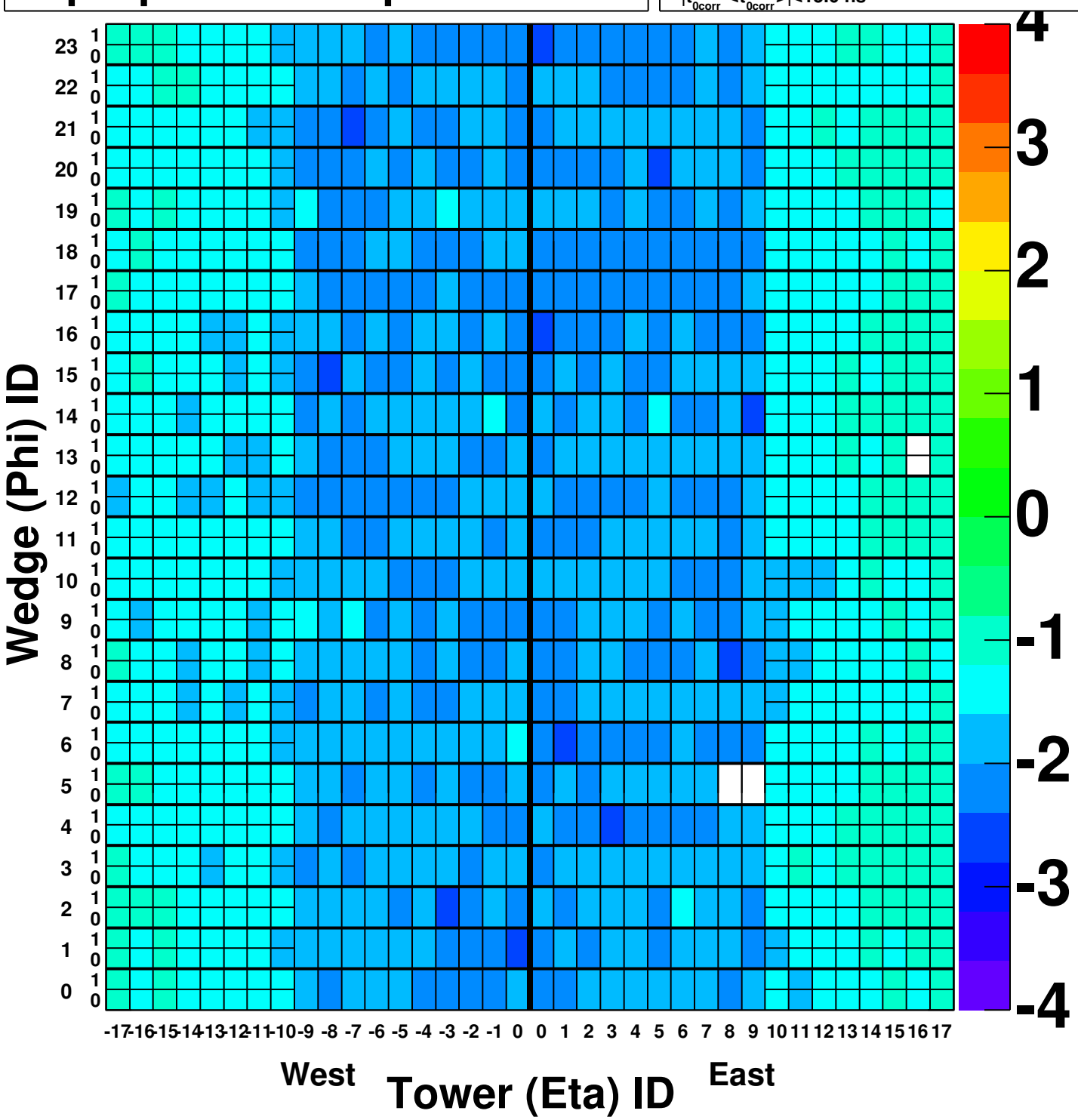
# ObjectMon #14 TimeMonitor EMTD: Mean Corrected t0

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

## EMTDC: Mean Corrected $t_0$

purple or red - problems

ASD Time Window is
540 ns < CEM $t_0$ < 620 ns
540 ns < PEM $t_0$ < 620 ns
Eeven+Eodd > 0.20 GeV
$|t_{0corr}-\langle t_{0corr}\rangle|<15.0$ ns



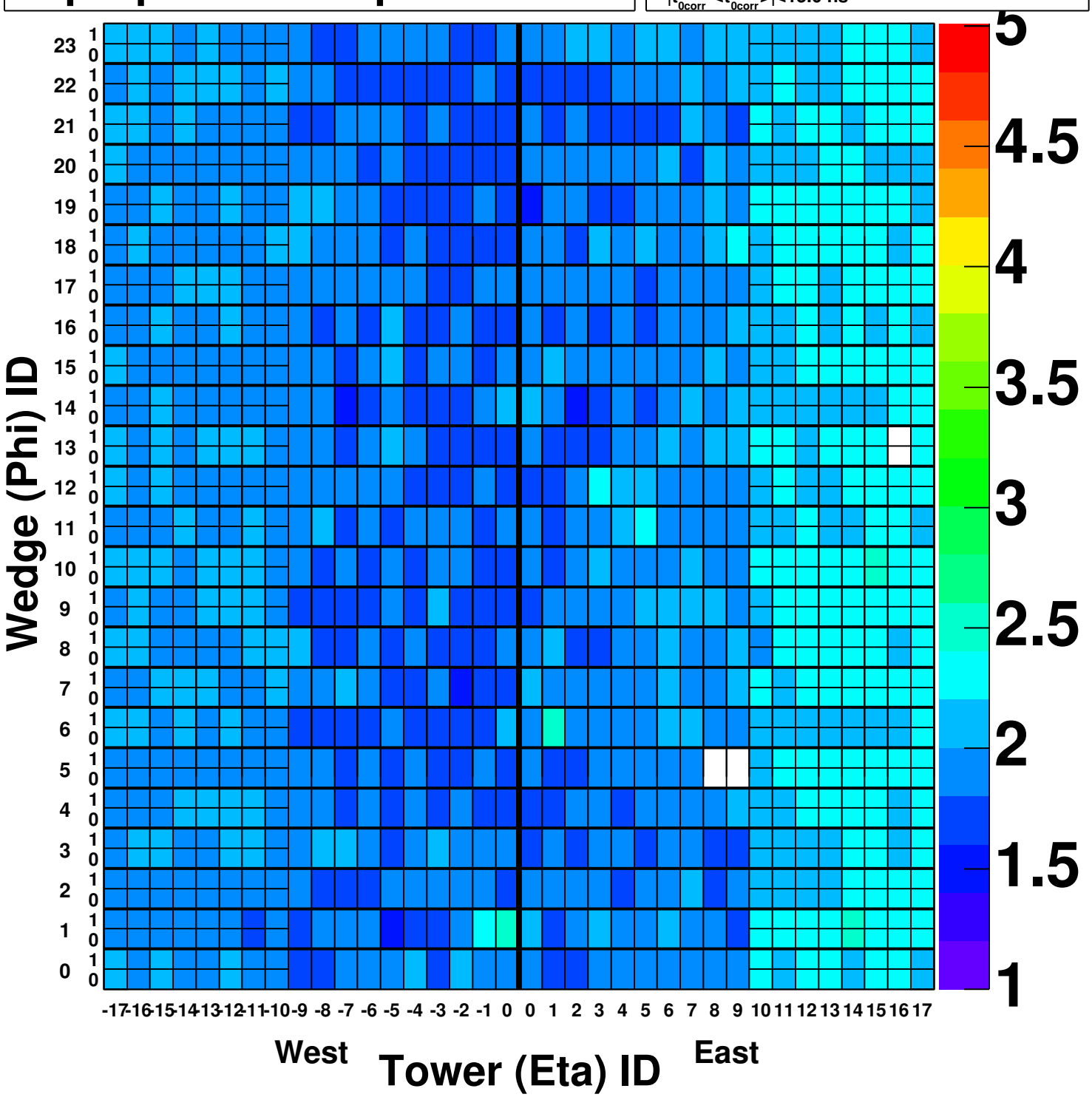
# ObjectMon #15 TimeMonitor EMTD: RMS for Corrected t0

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

## EMTDC: Corrected $t_0$ RMS

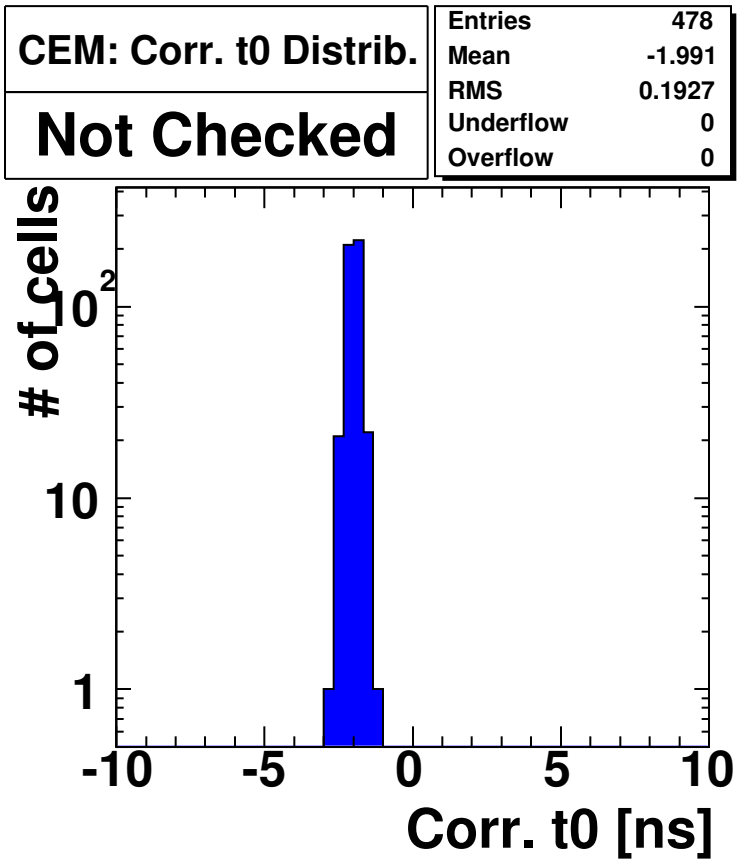
## purple or red - problems

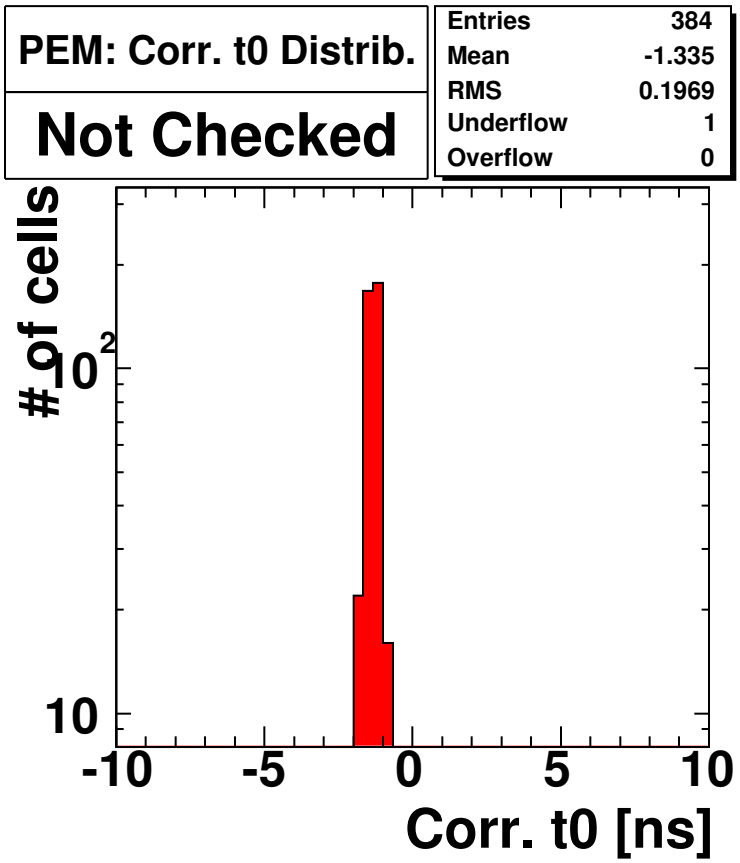
ASD Time Window is
540 ns < CEM $t_0$ < 620 ns
540 ns < PEM $t_0$ < 620 ns
Eeven+Eodd > 0.20 GeV
$|t_{0corr}-\langle t_{0corr}\rangle|<15.0$ ns

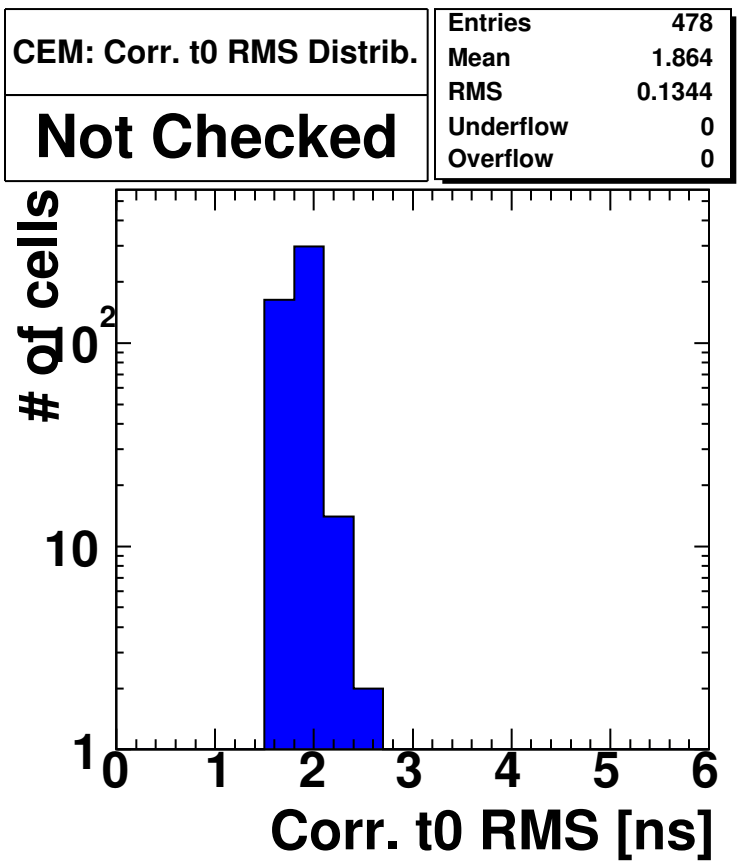


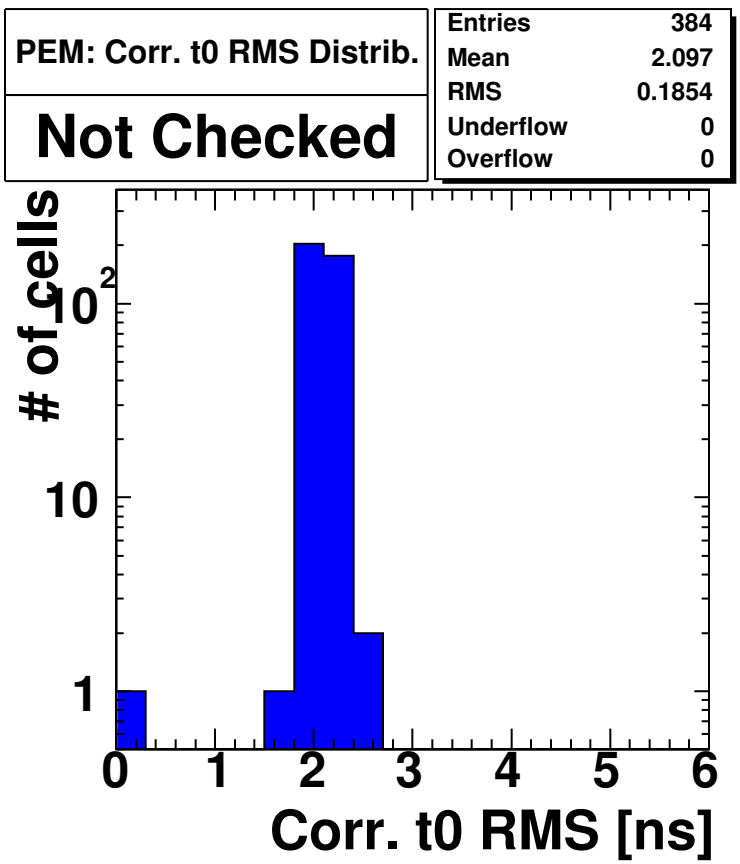
# ObjectMon #18 TimeMonitor EMTD: Corrected t0 and RMS

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620



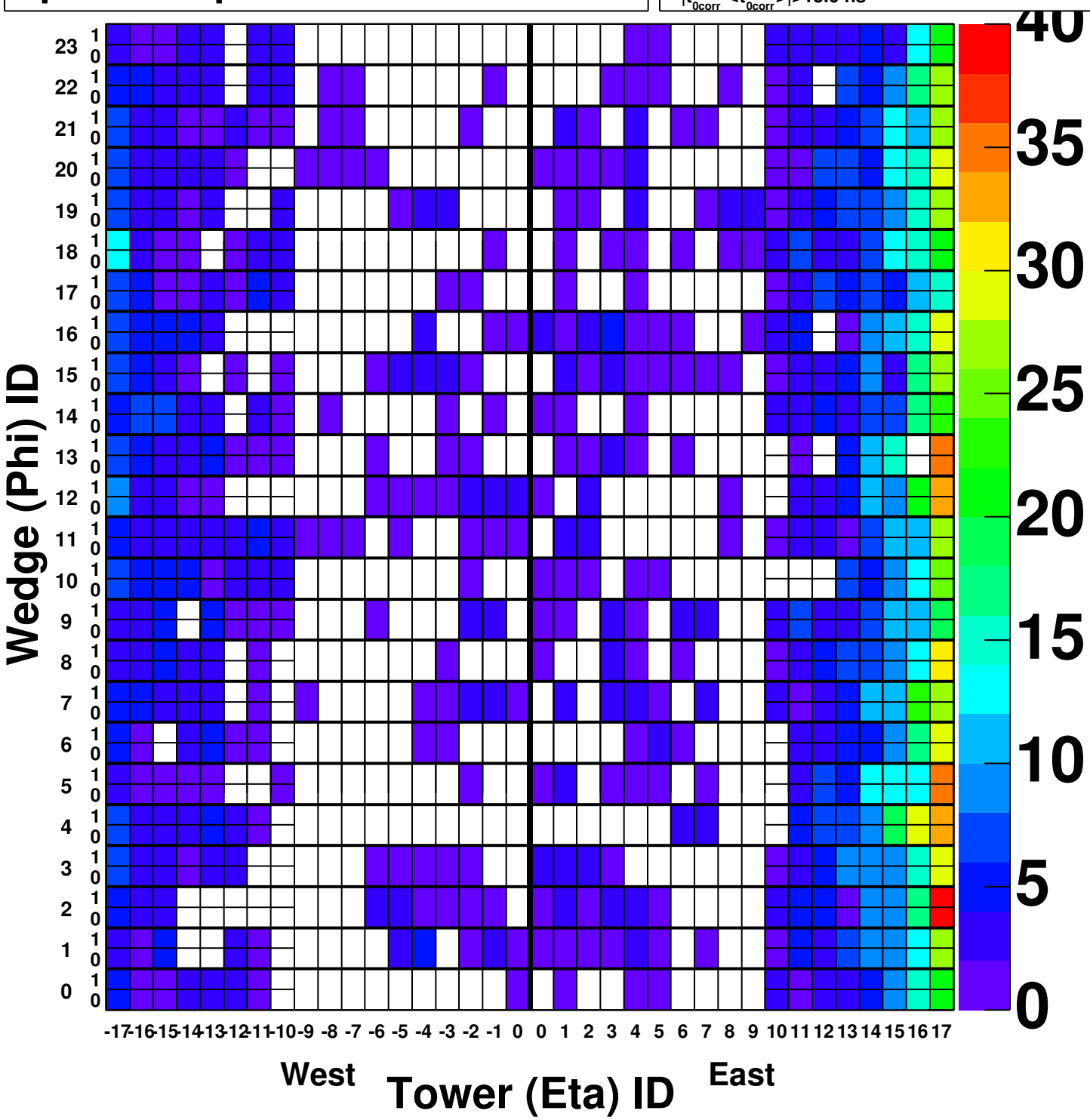
# ObjectMon #19 TimeMonitor EMTD: Corr. t0 Far From Mean

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

## EMTDC: Hits Far From Corr. <t0>

## potential problems are colored

ASD Time Window is
540 ns < CEM $t_0$ < 620 ns
540 ns < PEM $t_0$ < 620 ns
Eeven+Eodd > 0.2 GeV
$|t_{0corr}-\langle t_{0corr}\rangle|>15.0$ ns



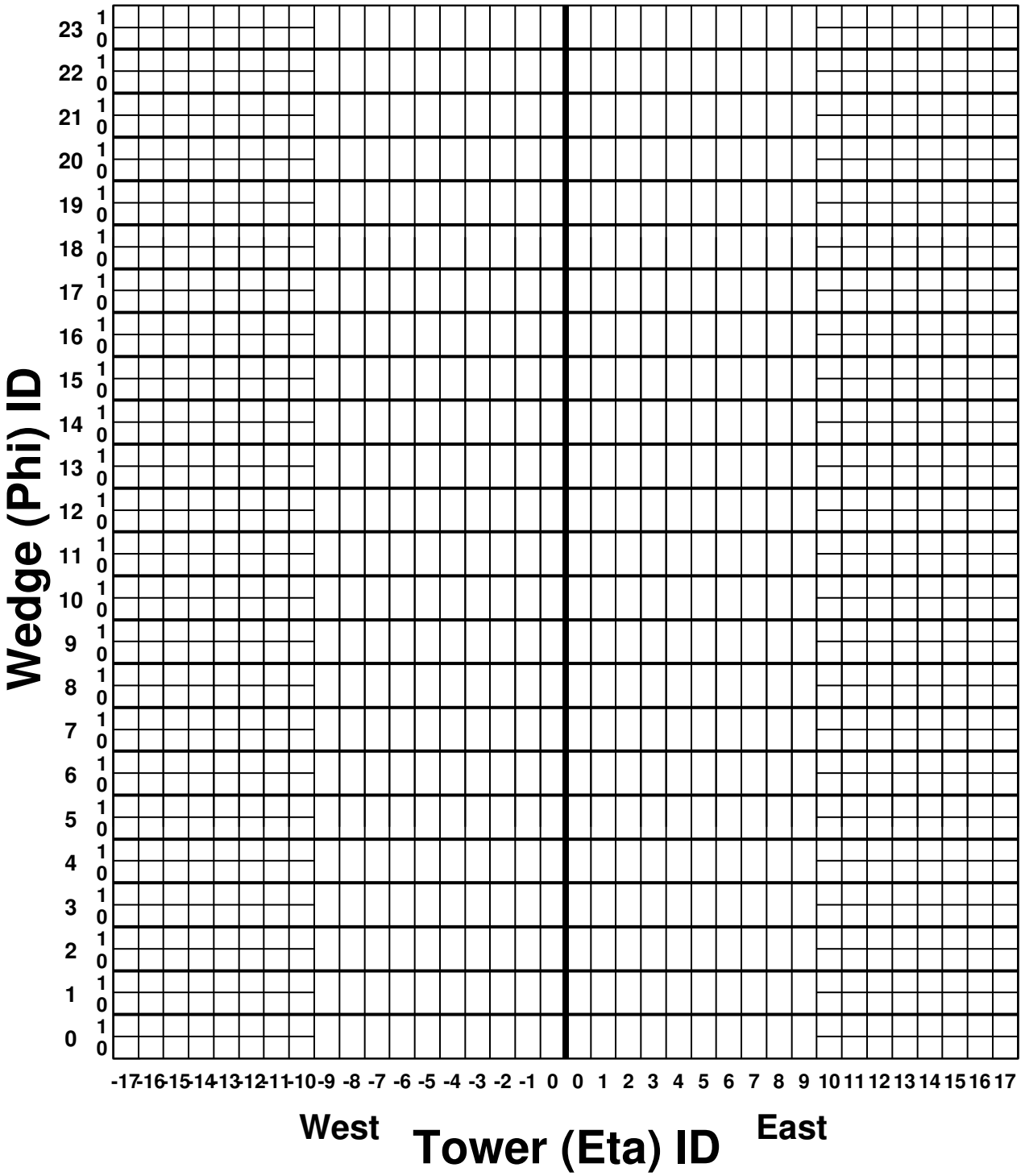
# ObjectMon #11 TimeMonitor EMTD: Fake Firings

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

## EMTDC: Fake Firings Occupancy

potential problems are colored

Energy range [GeV]:
Eeven+Eodd < 0.20
ASD Time Window is
540 ns < CEM $t_0$ < 620 ns
540 ns < PEM $t_0$ < 620 ns



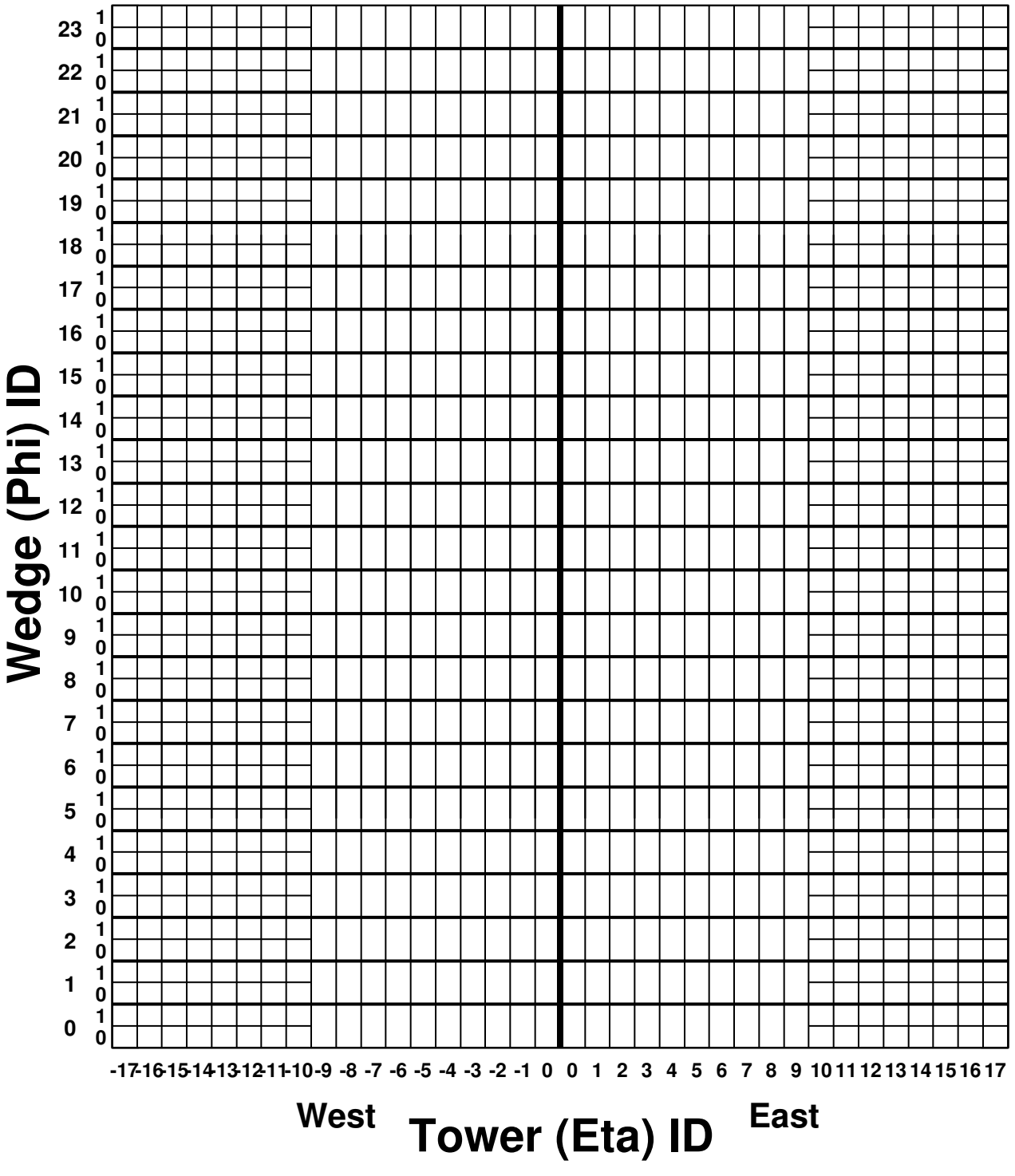
# ObjectMon #17 TimeMonitor EMTD: Multiple Firings & Ok Width

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

## EMTDC: Multiply Ok Width Firing Towers

potential problems are colored

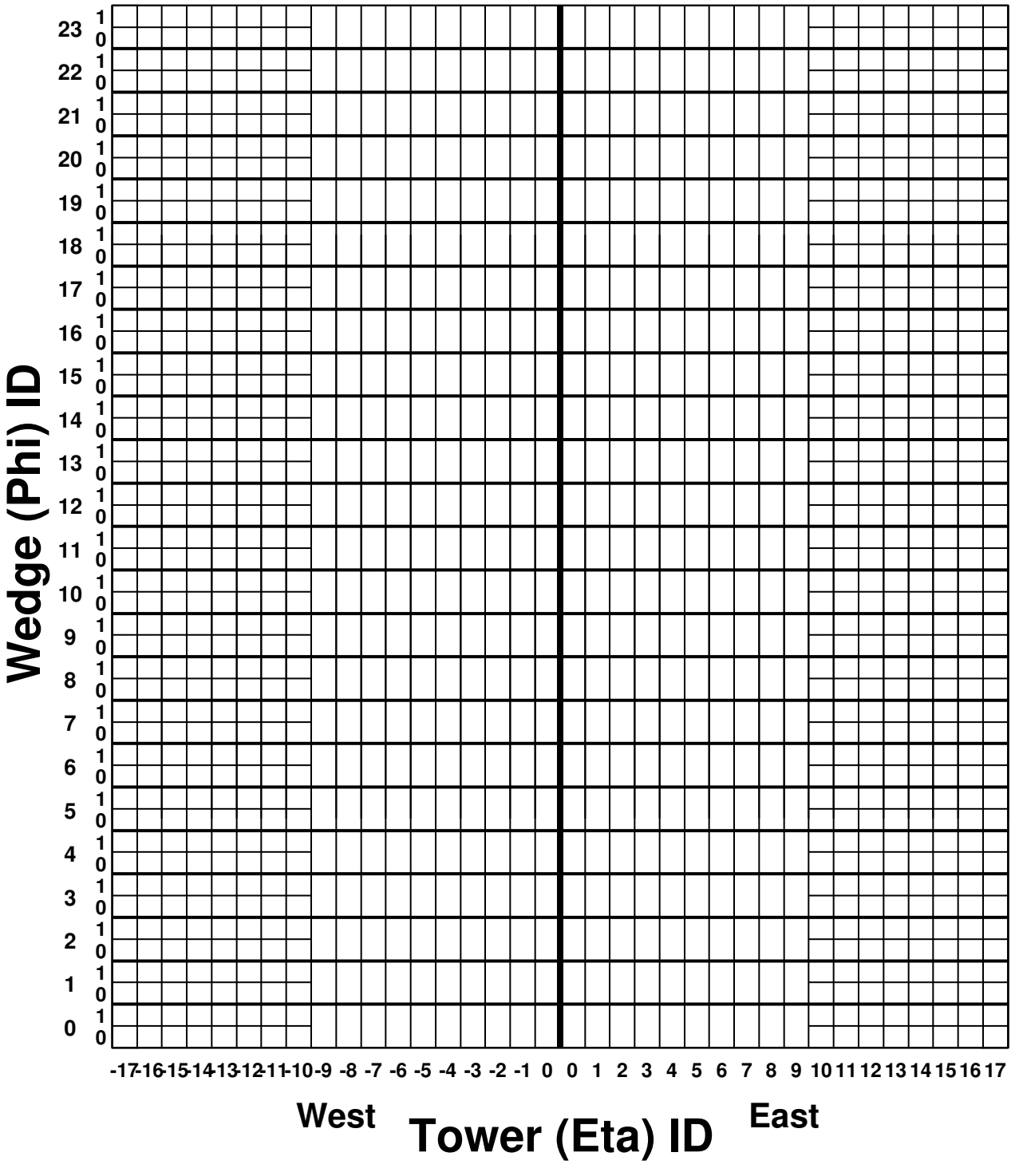
ASD Time Window is
540 ns < CEM $t_0$ < 620 ns
540 ns < PEM $t_0$ < 620 ns
20 < Hit width < 200 ns
Tower Energy > 0 GeV



# ObjectMon #16 TimeMonitor EMTD: Multiple Firings & Low Width

Run:200028 Event: 9202674 # of Events:129450 Time: Sun Jun 26 22:53:12 2005 Ref.Run:199620

## EMTDC: Multiply Low Width Firing Towers

potential problems are colored

ASD Time Window is
540 ns < CEM $t_0$ < 620 ns
540 ns < PEM $t_0$ < 620 ns
10 < Hit width < 20 ns
Tower Energy > 0 GeV