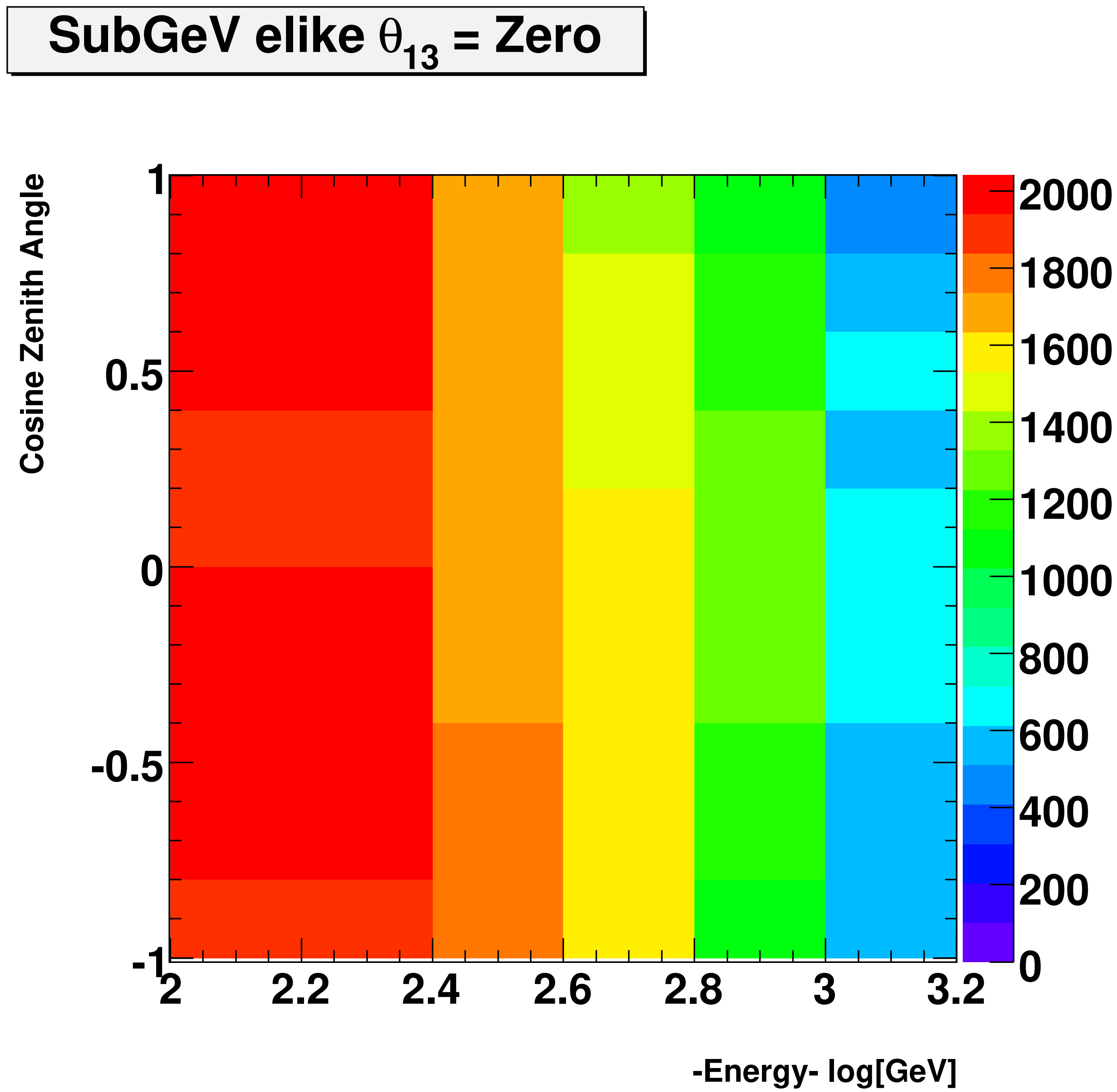
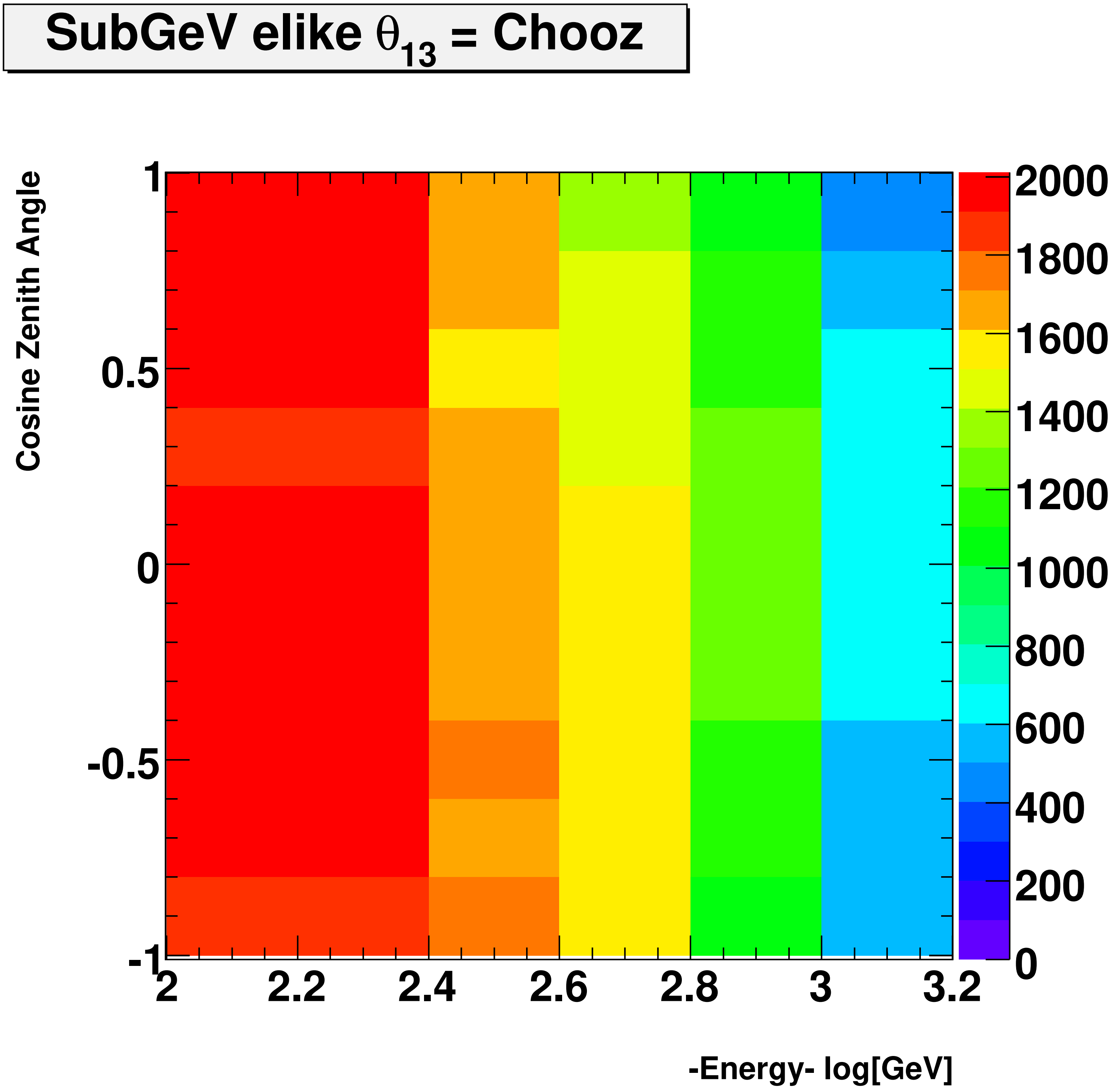
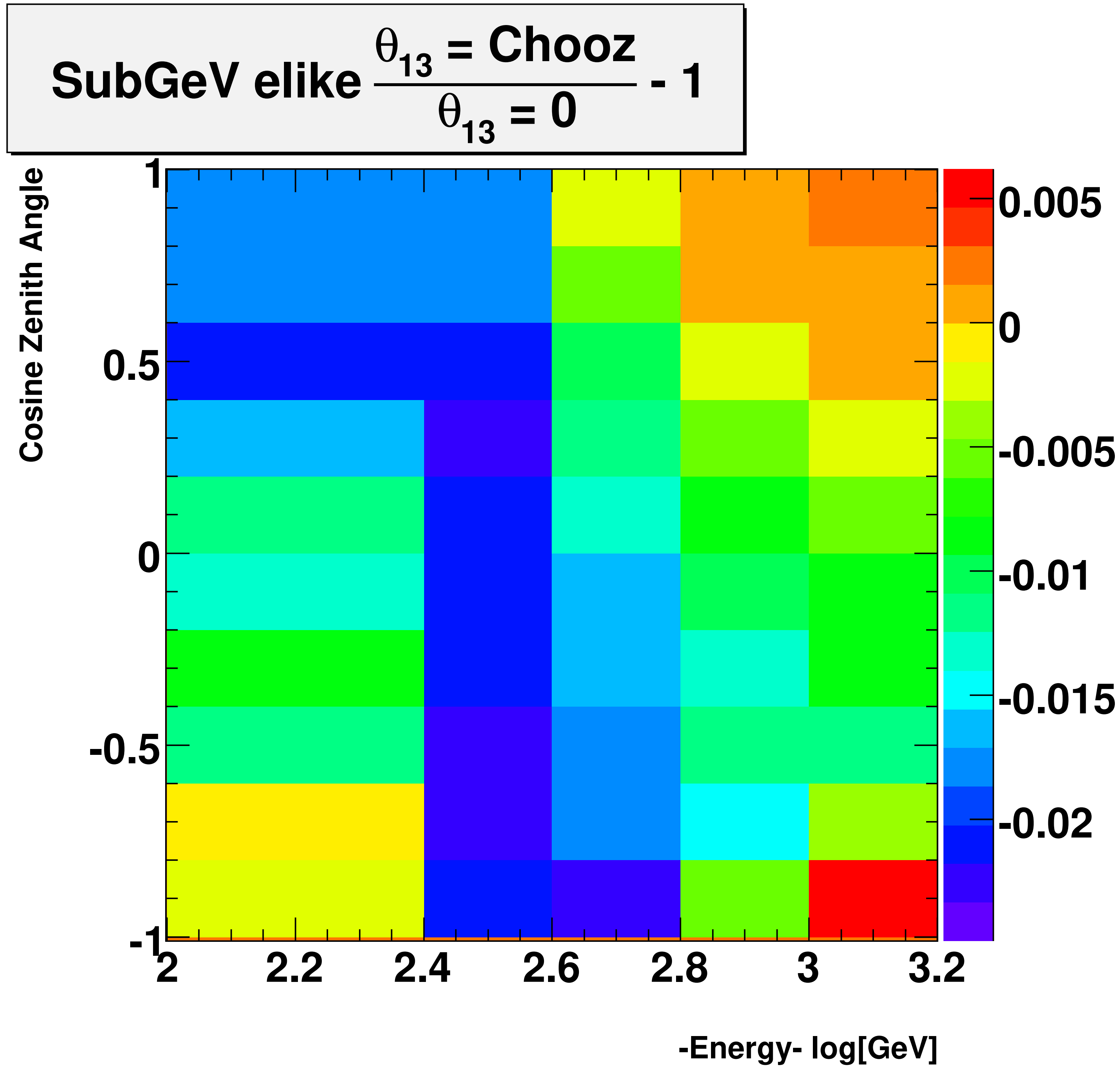
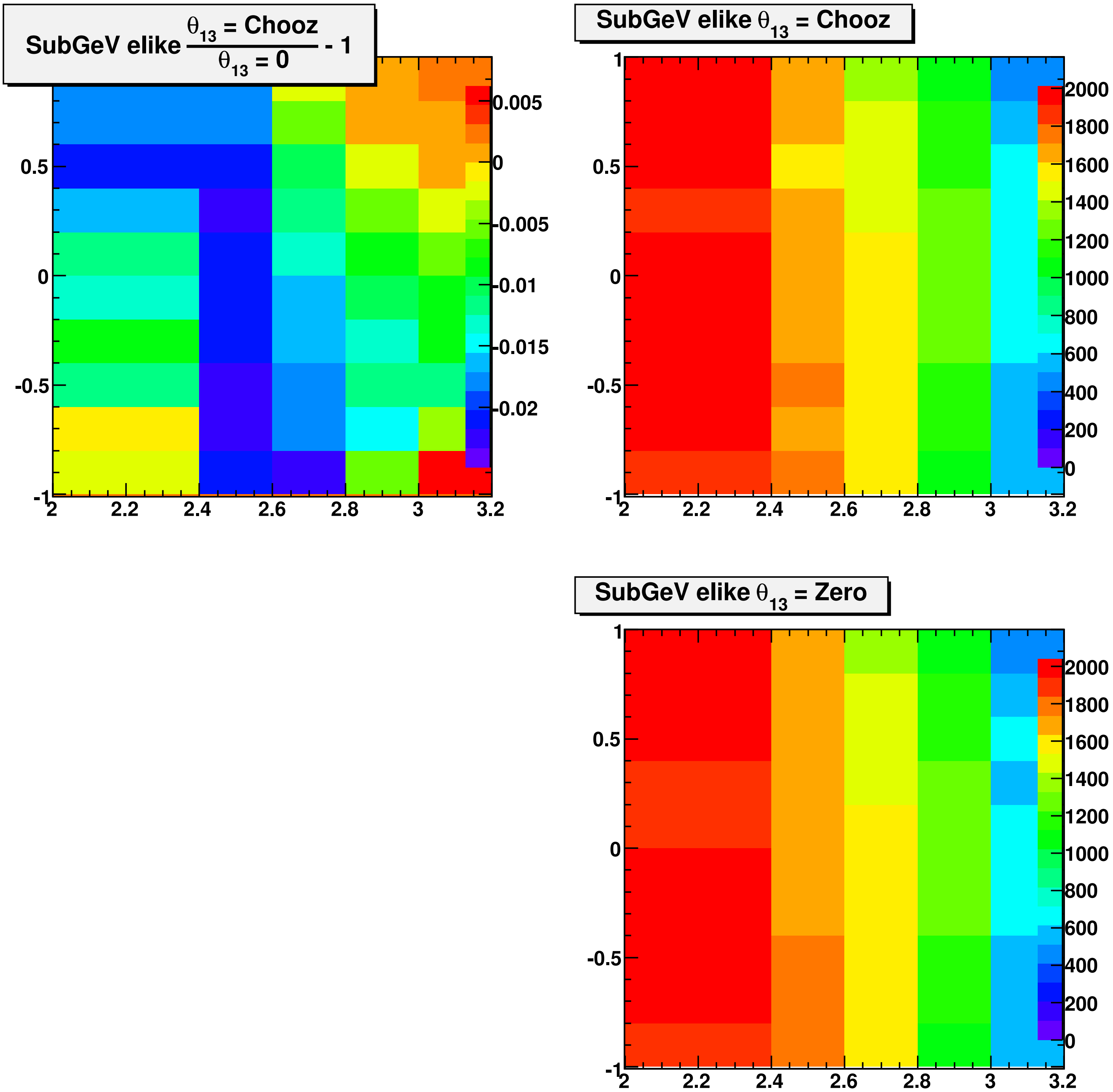

SubGeV elike θ_{13} = Zero
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.2
2.4
2.6
2.8
3
3.2
-Energy- log[GeV]
2000
1800
1600
1400
1200
1000
800
600
400
200
0



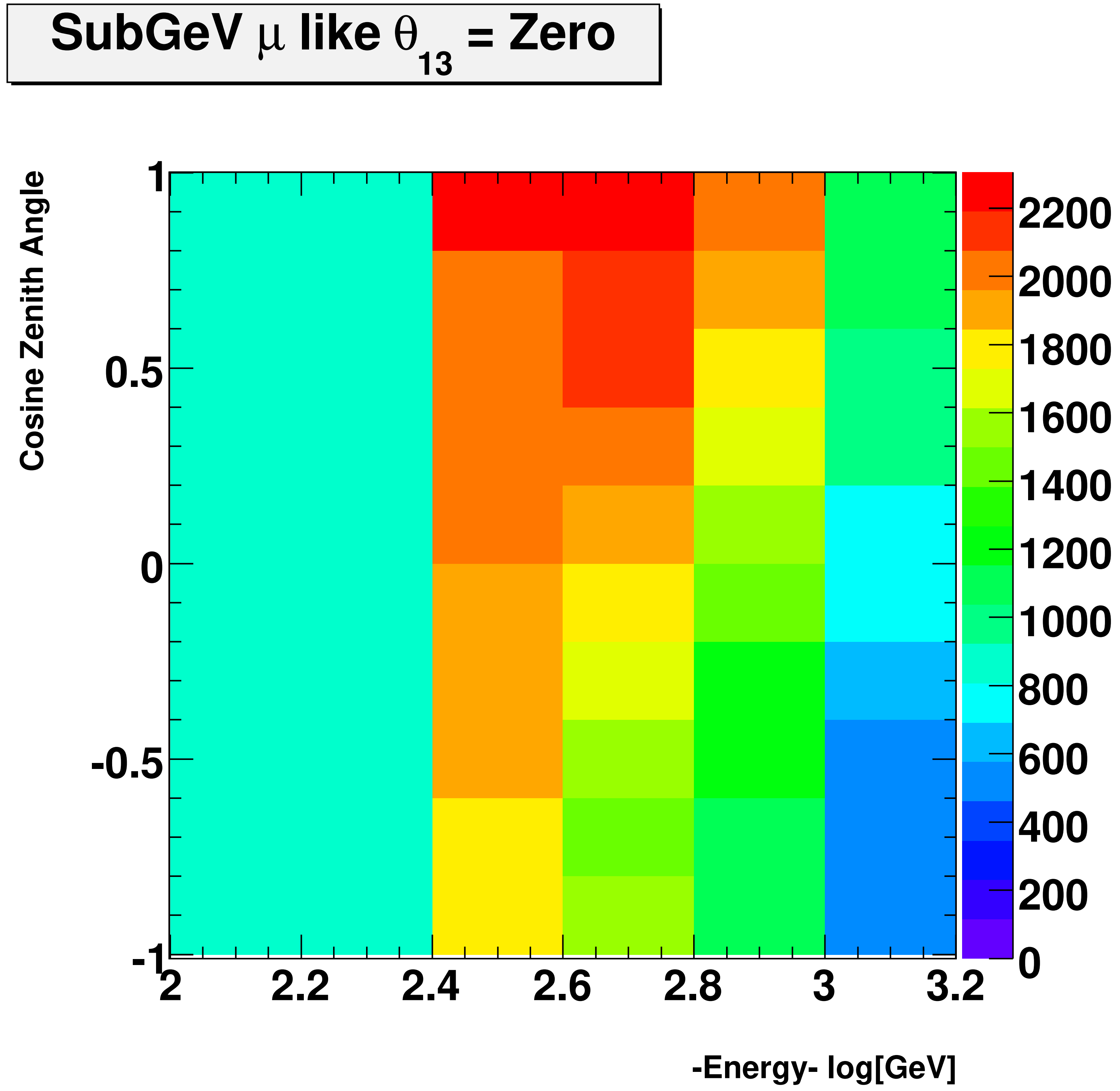
SubGeV elike θ_{13} = Chooz
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.2
2.4
2.6
2.8
3
3.2
-Energy- log[GeV]
2000
1800
1600
1400
1200
1000
800
600
400
200
0

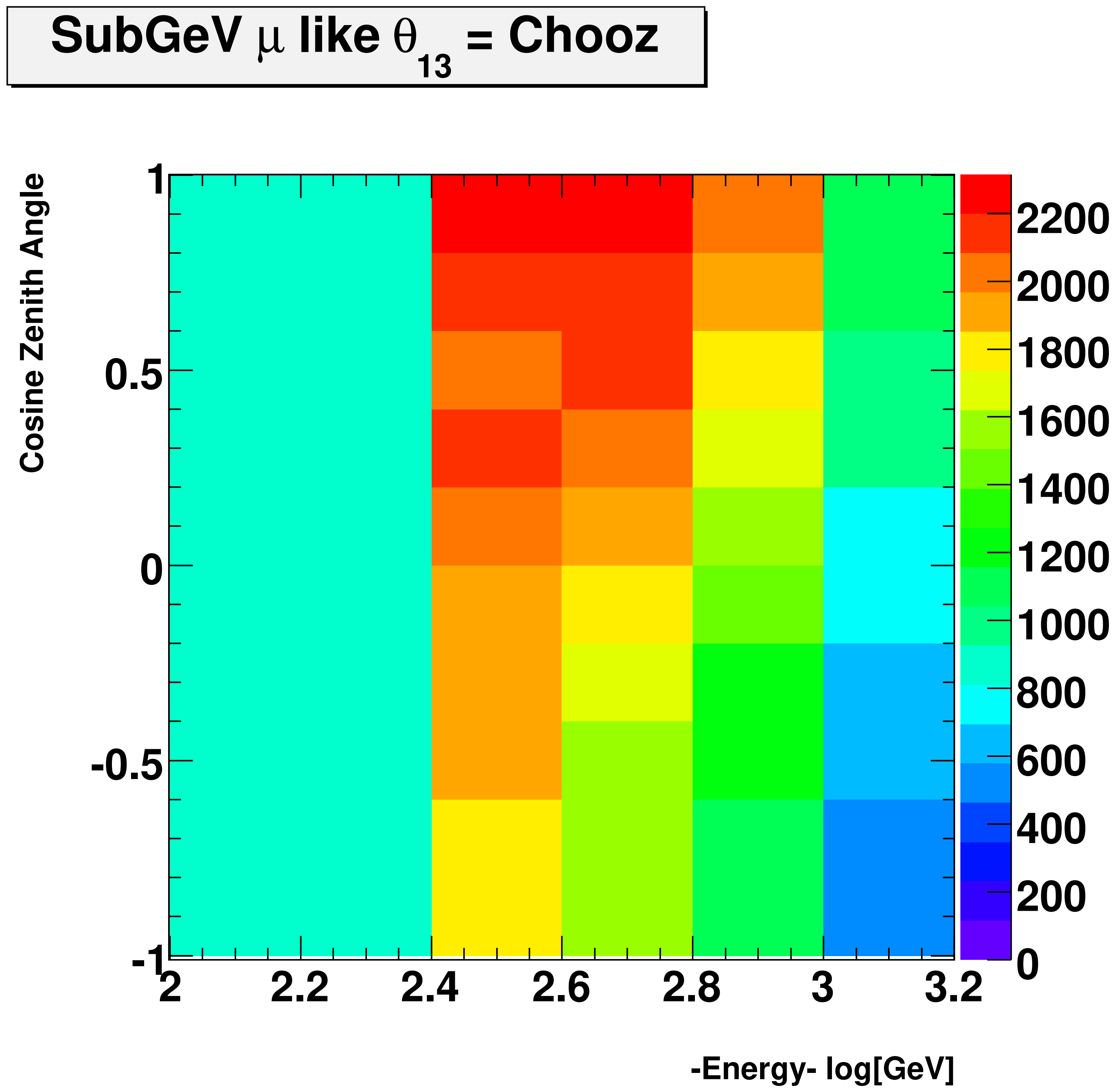


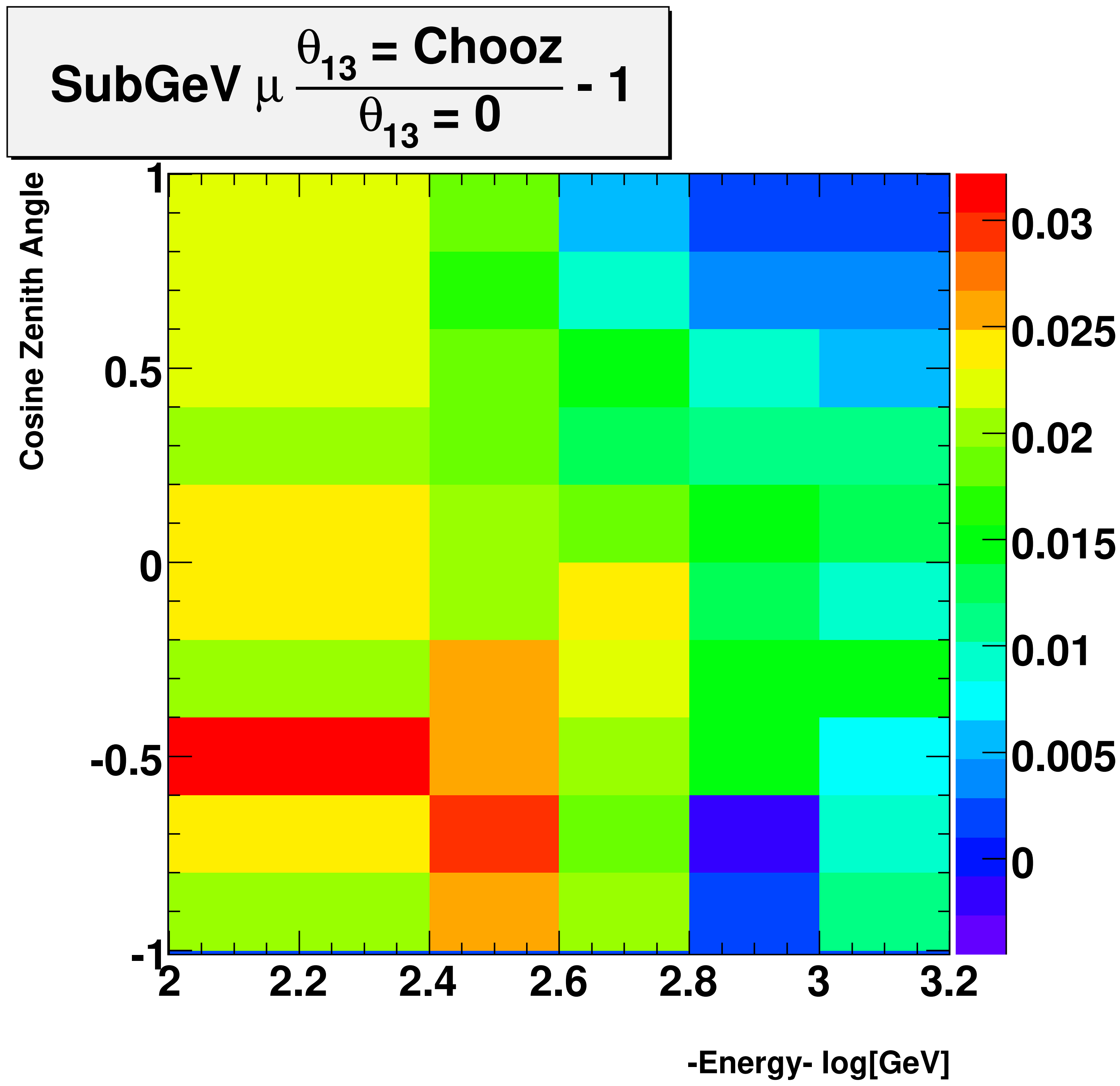
SubGeV elike $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.2
2.4
2.6
2.8
3
3.2
0.005
0
-0.005
-0.01
-0.015
-0.02
-Energy- log[GeV]



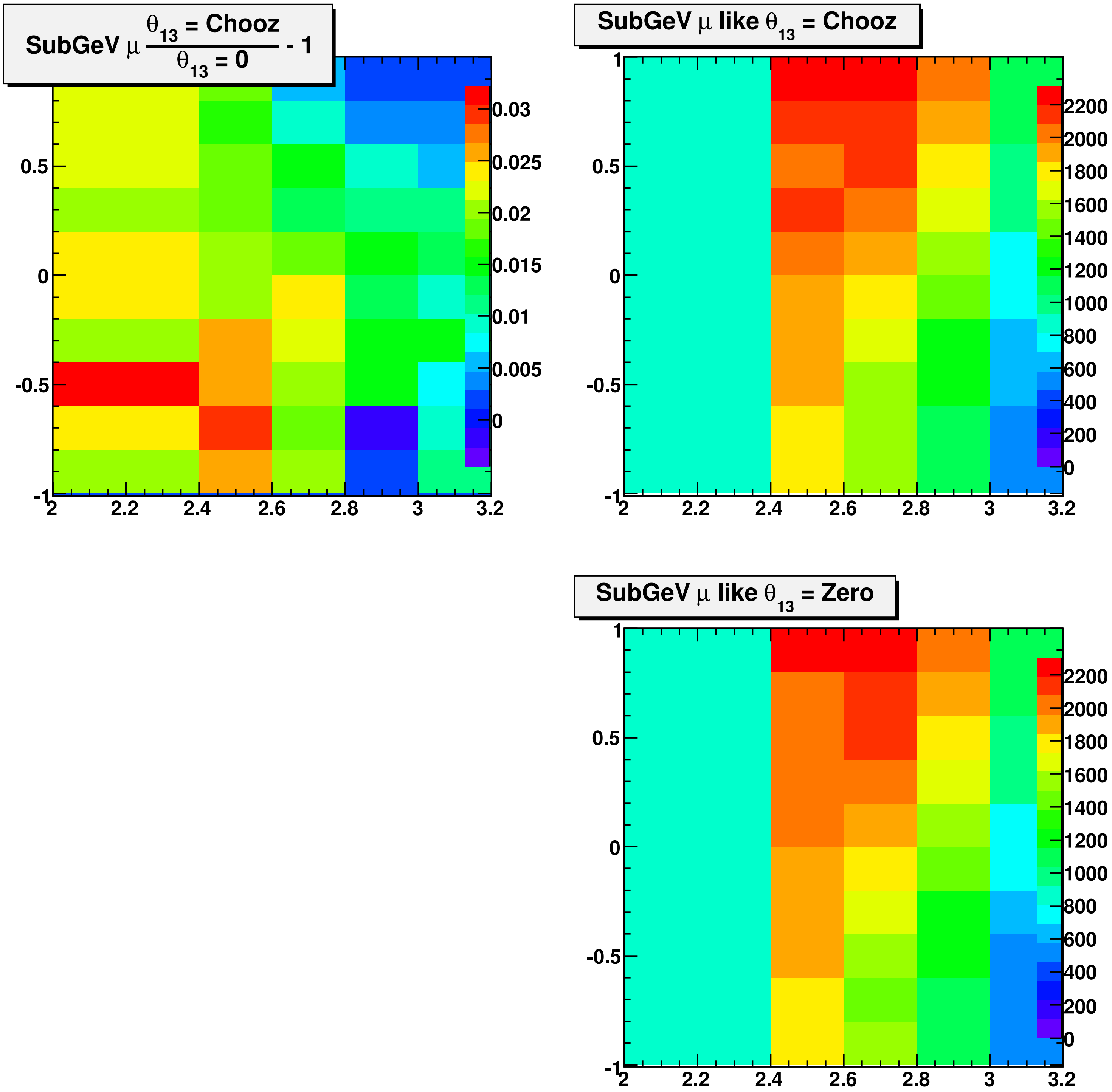
SubGeV elike $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
SubGeV elike θ_{13} = Chooz
SubGeV elike θ_{13} = Zero
-1
-0.5
0
0.5
1
2
2.2
2.4
2.6
2.8
3
3.2
0.005
0
-0.005
-0.01
-0.015
-0.02
0
200
400
600
800
1000
1200
1400
1600
1800
2000

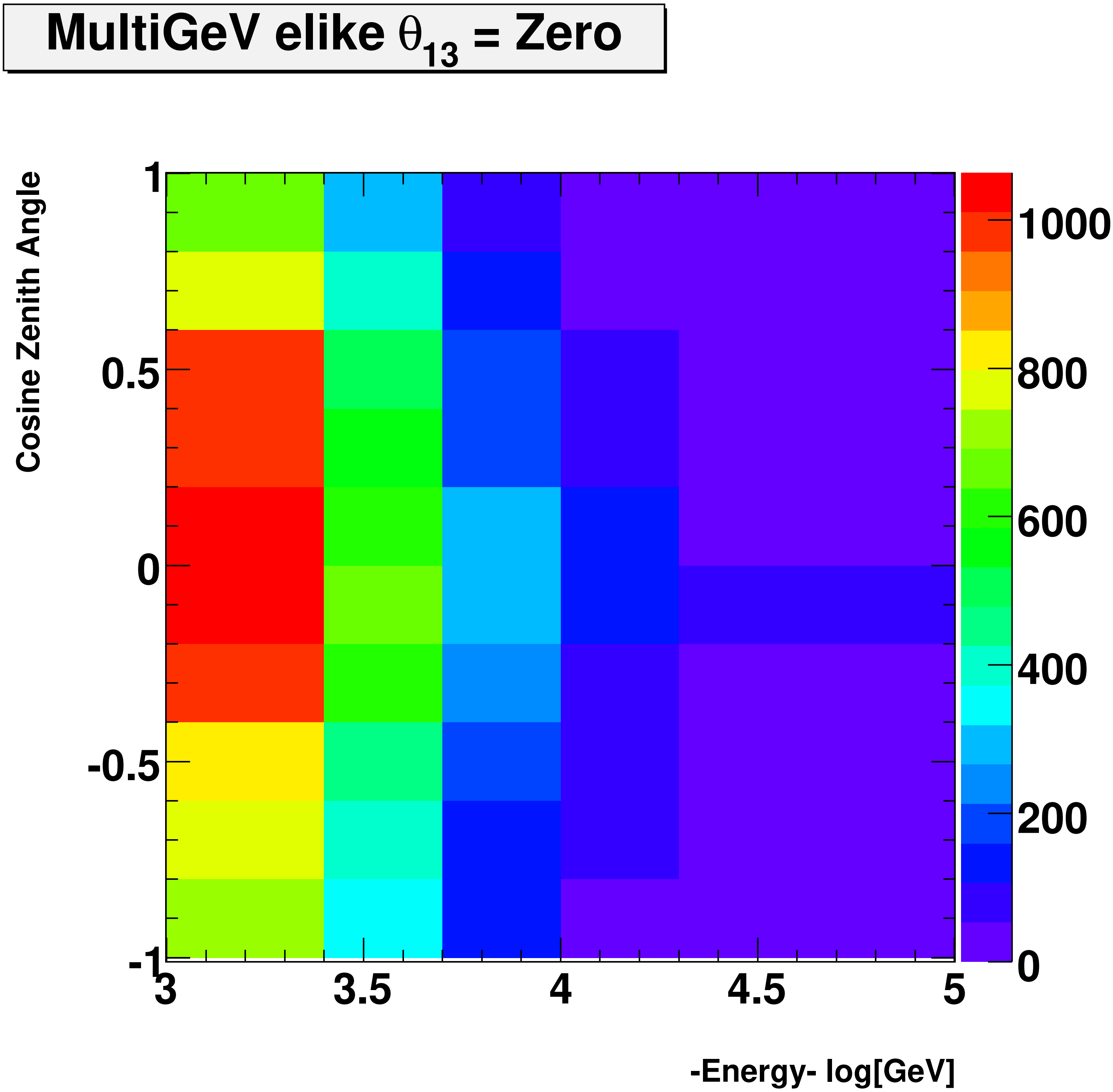

SubGeV μ like θ_{13} = Zero
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.2
2.4
2.6
2.8
3
3.2
-Energy- log[GeV]
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0

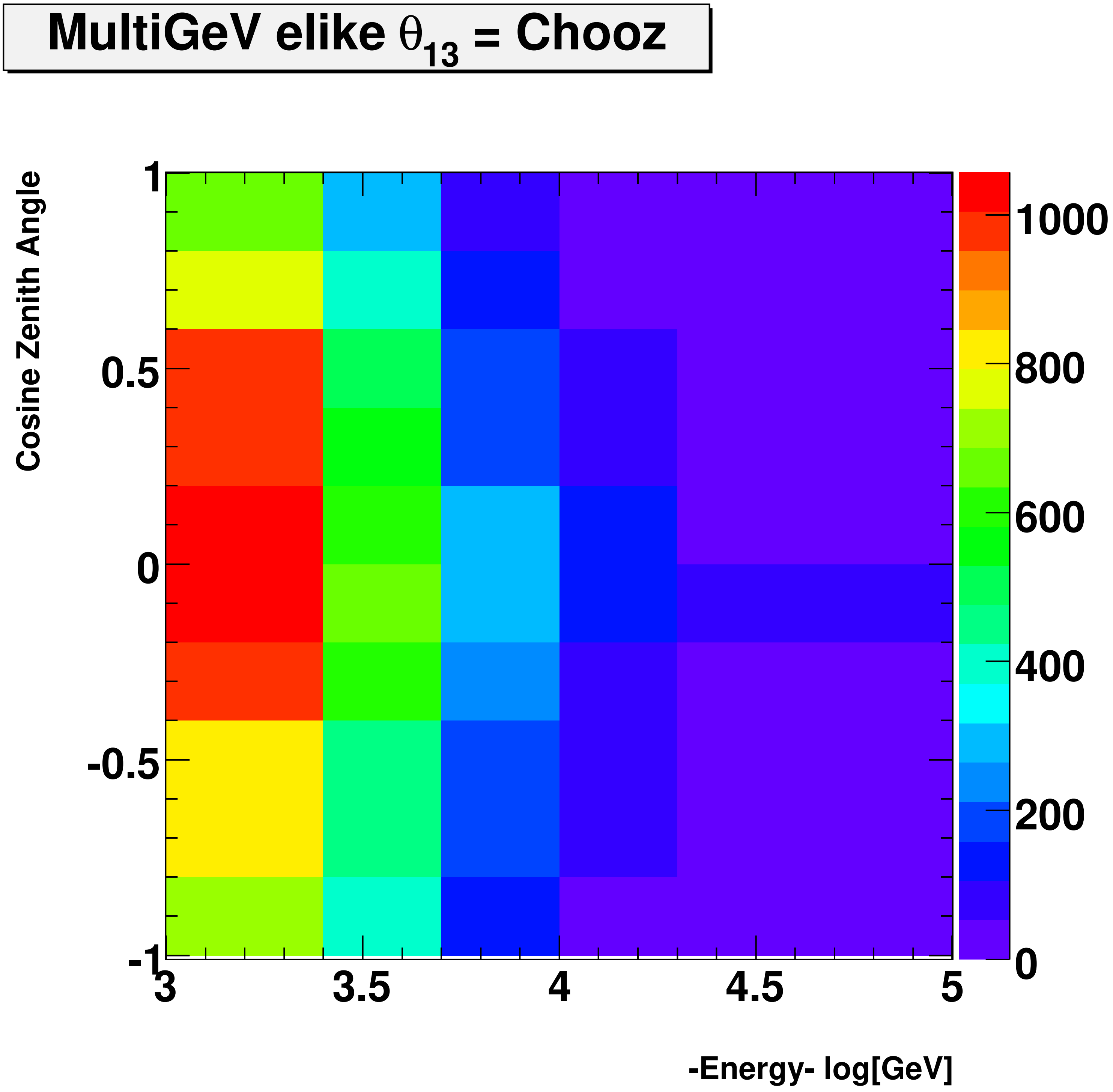

SubGeV μ like θ13 = Chooz
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.2
2.4
2.6
2.8
3
3.2
-Energy- log[GeV]
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0

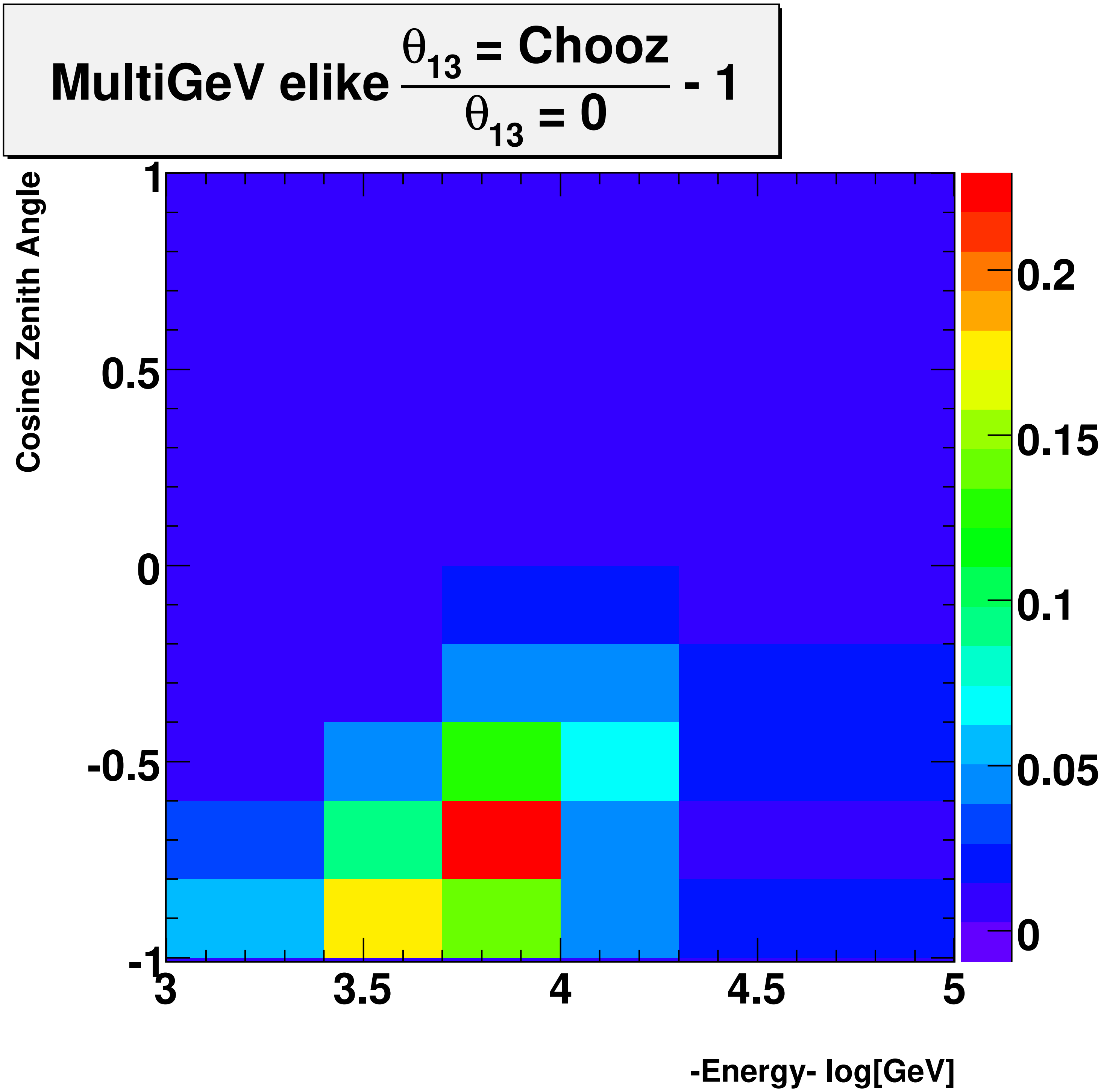


SubGeV μ θ13 = Chooz / θ13 = 0 - 1
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.2
2.4
2.6
2.8
3
3.2
-Energy- log[GeV]
0.03
0.025
0.02
0.015
0.01
0.005
0

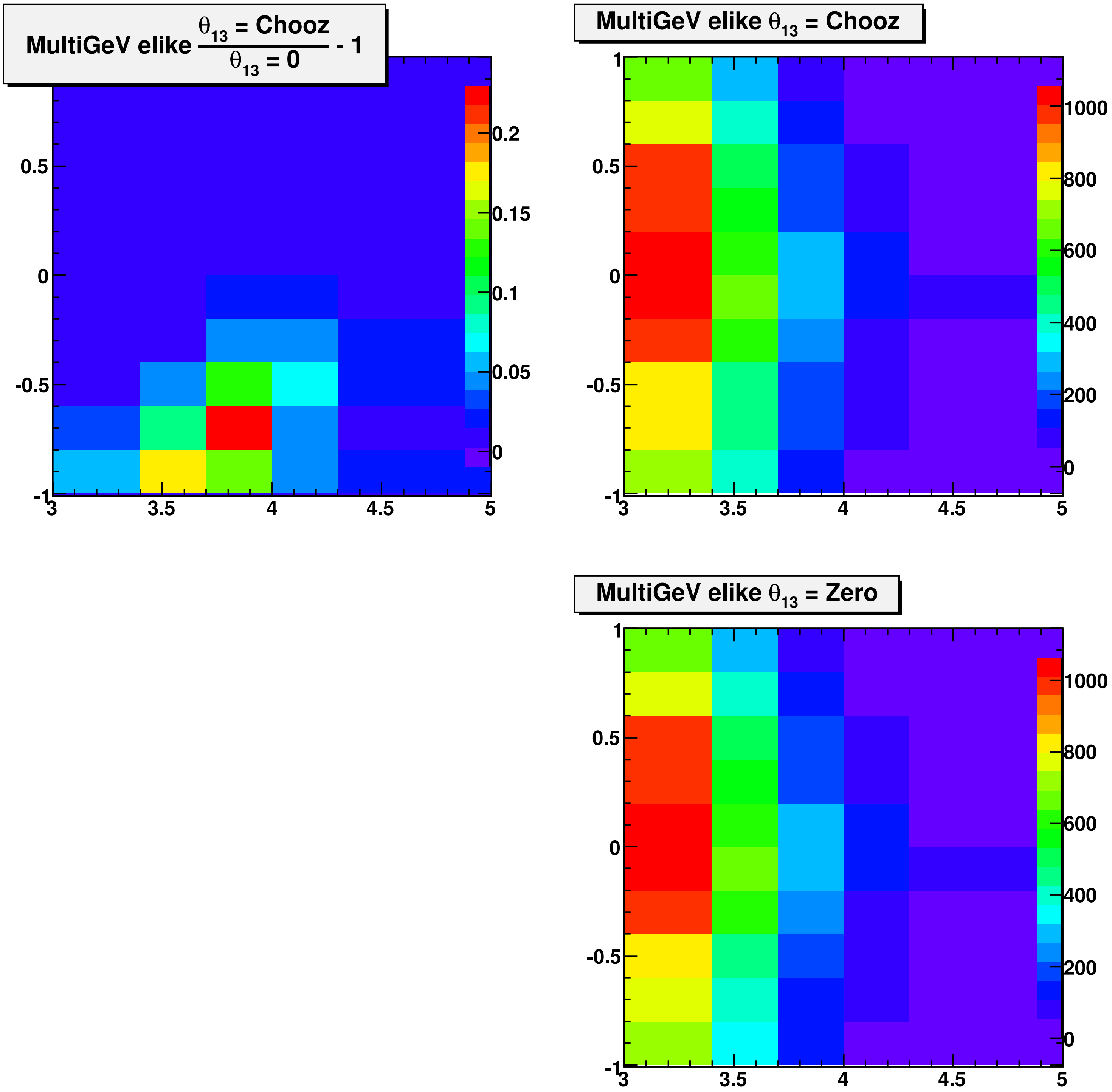

SubGeV μ $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0}$ - 1
SubGeV μ like θ_{13} = Chooz
SubGeV μ like θ_{13} = Zero
0.03
0.025
0.02
0.015
0.01
0.005
0
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
2
2.2
2.4
2.6
2.8
3
3.2
1
0.5
0
-0.5
-1

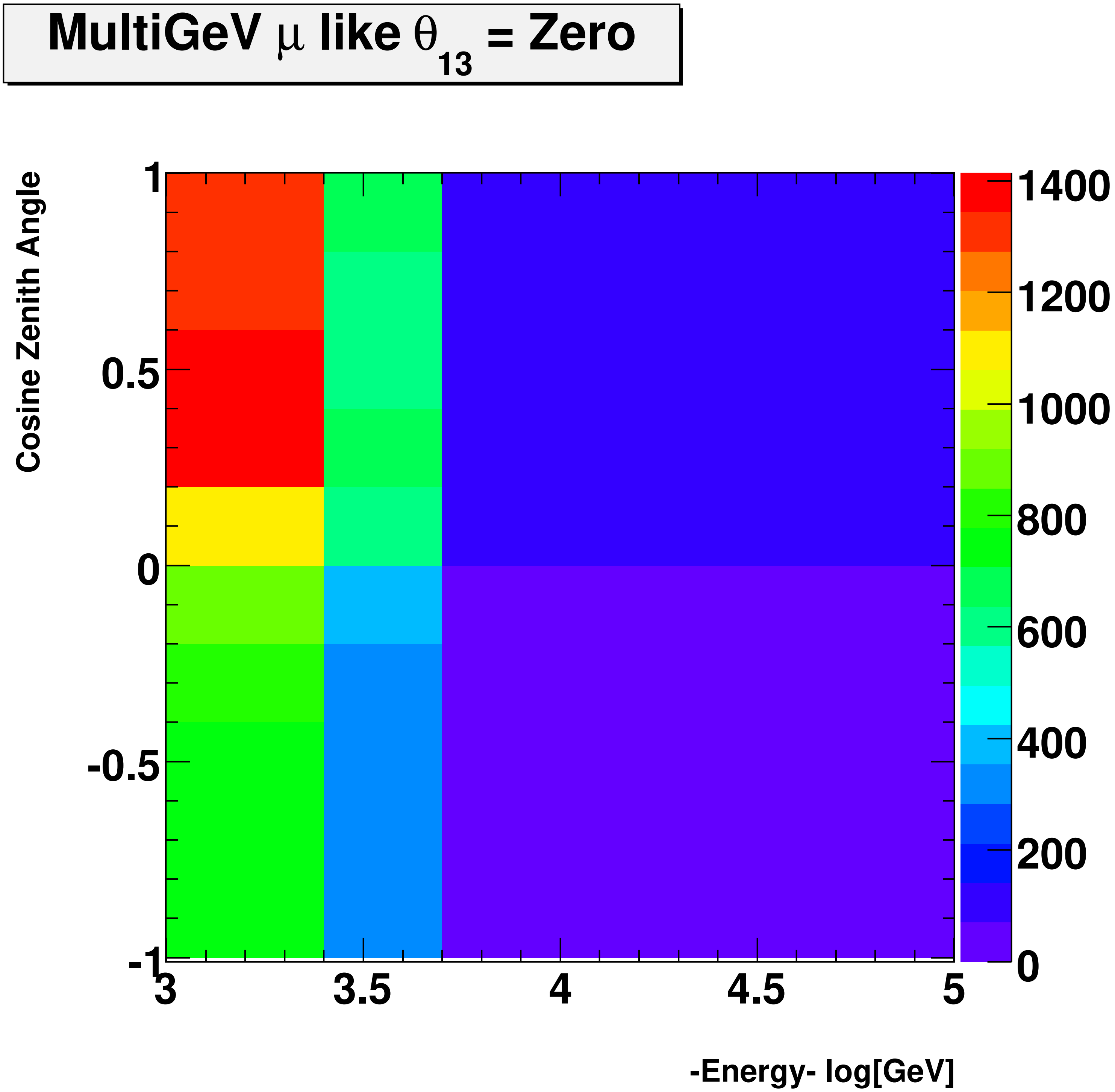

MultiGeV elike θ_{13} = Zero
Cosine Zenith Angle
1
0.5
0
-0.5
-1
3
3.5
4
4.5
5
-Energy- log[GeV]
1000
800
600
400
200
0


MultiGeV elike θ_{13} = Chooz
Cosine Zenith Angle
1
0.5
0
-0.5
-1
3
3.5
4
4.5
5
1000
800
600
400
200
0
-Energy- log[GeV]

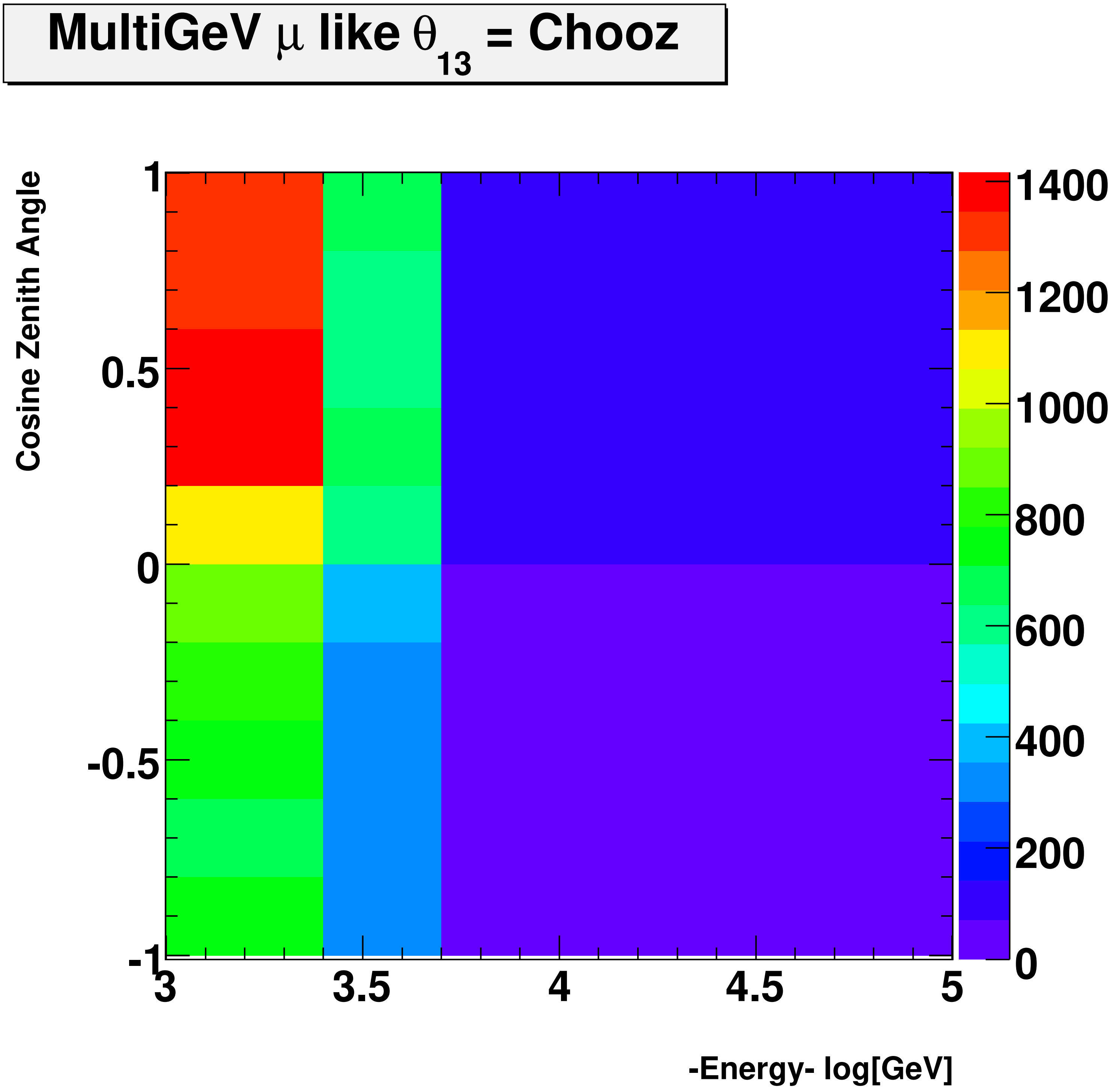


MultiGeV elike $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
Cosine Zenith Angle
1
0.5
0
-0.5
-1
3
3.5
4
4.5
5
-Energy- log[GeV]
0.2
0.15
0.1
0.05
0

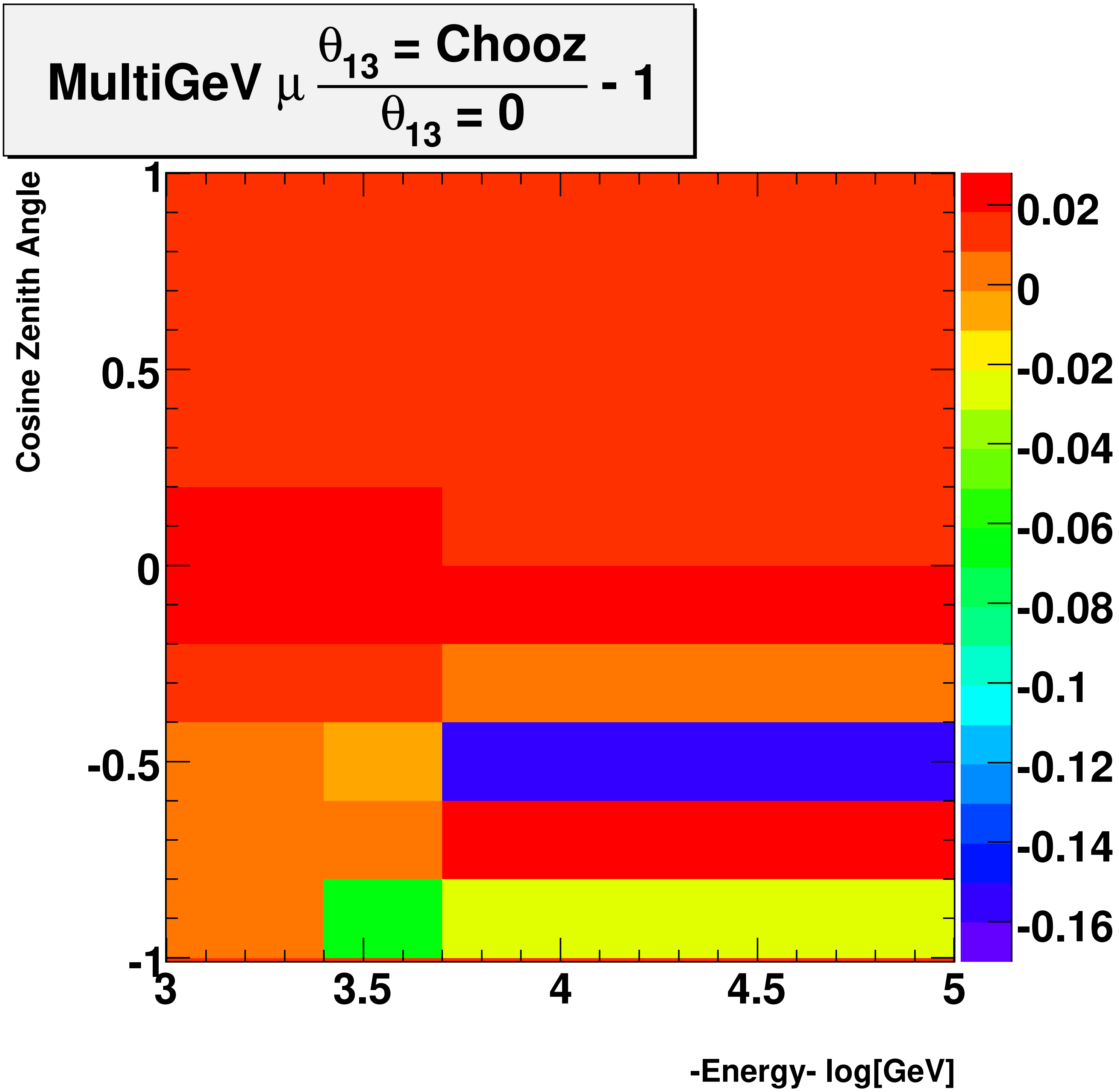

MultiGeV elike $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
MultiGeV elike θ_{13} = Chooz
MultiGeV elike θ_{13} = Zero
0.5
0
-0.5
-1
1
3
3.5
4
4.5
5
0.2
0.15
0.1
0.05
1000
800
600
400
200



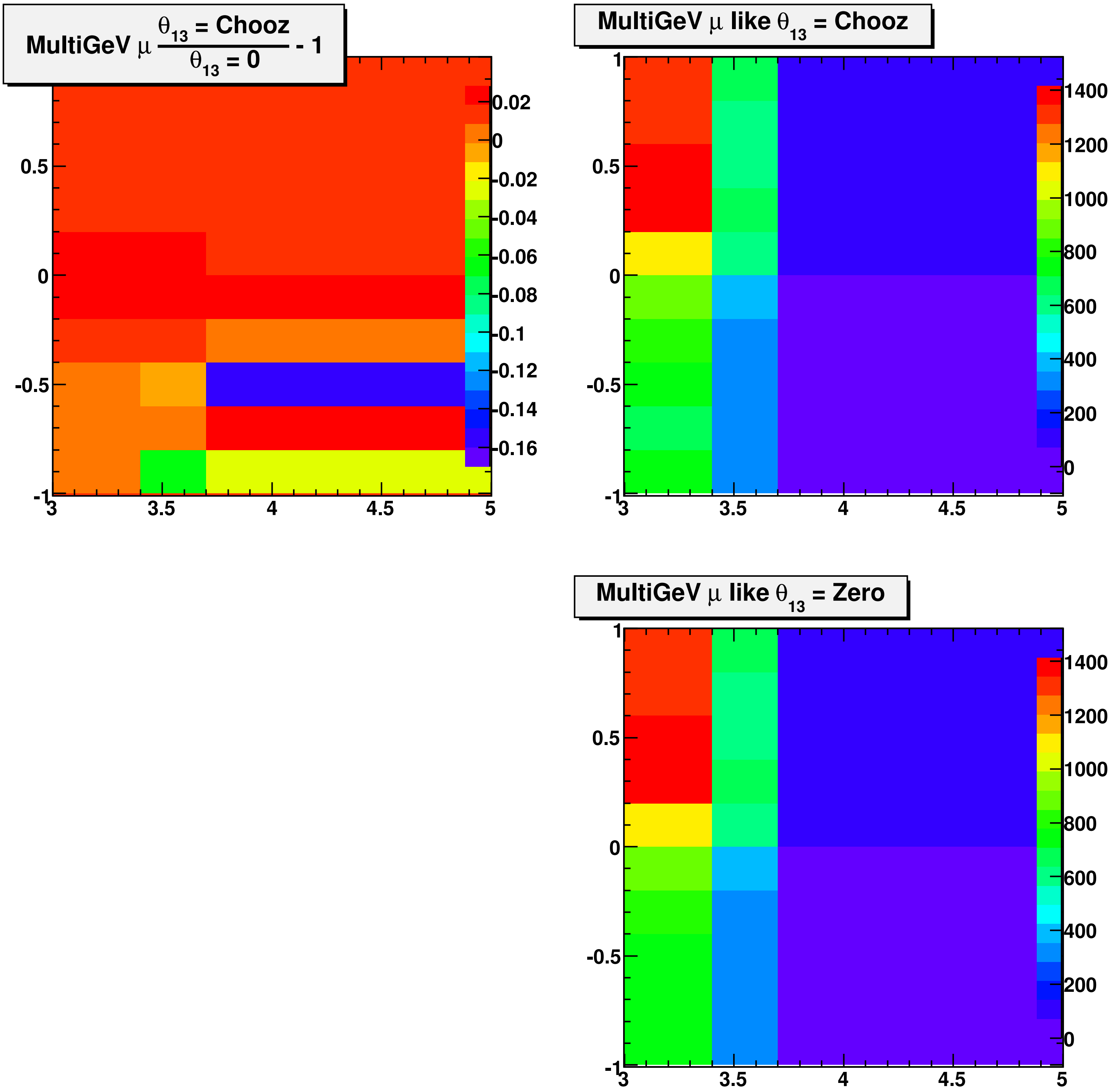
MultiGeV μ like θ_{13} = Zero
Cosine Zenith Angle
1
0.5
0
-0.5
-1
3
3.5
4
4.5
5
-Energy- log[GeV]
1400
1200
1000
800
600
400
200
0



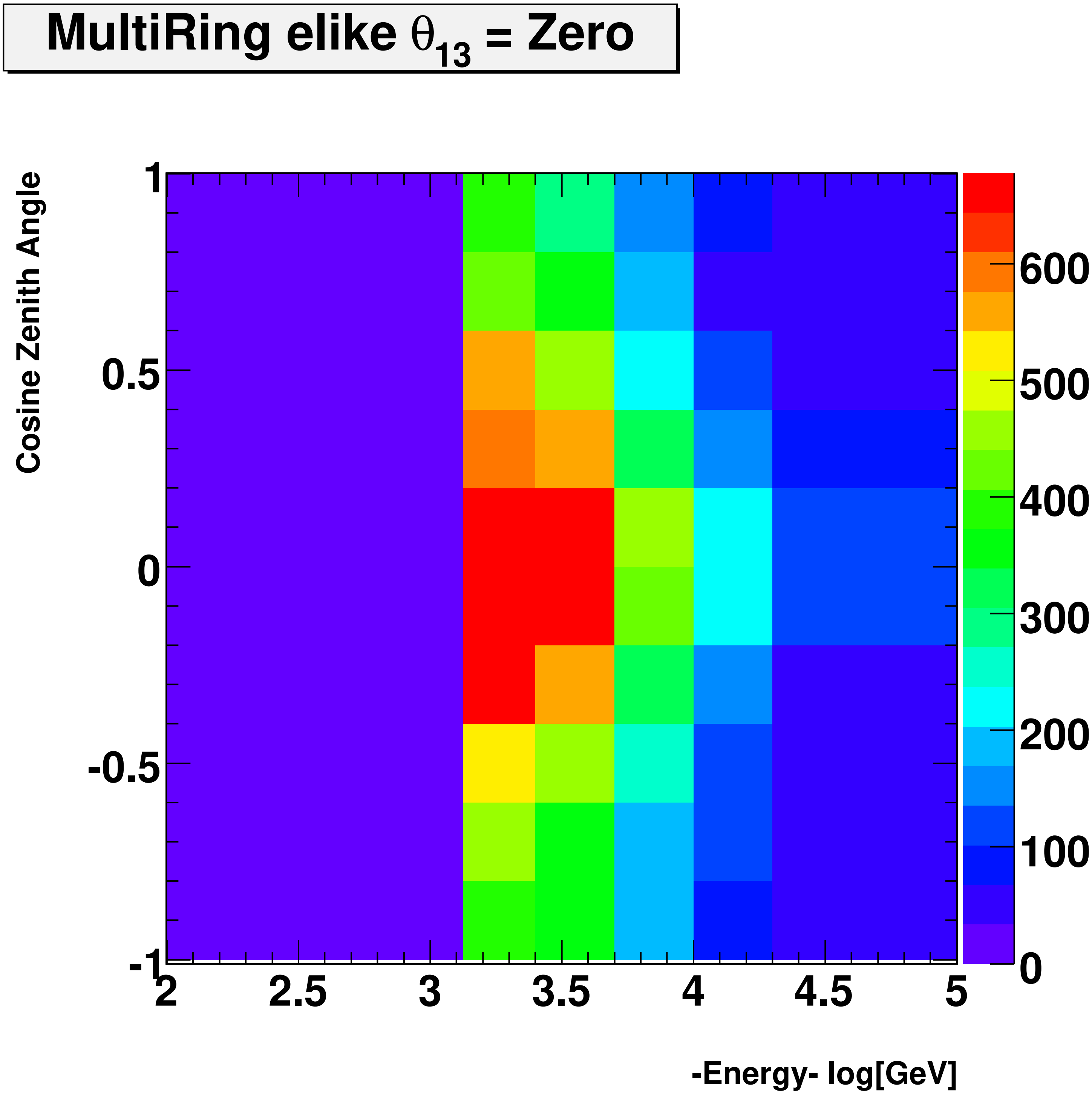
MultiGeV μ like θ13 = Chooz
Cosine Zenith Angle
1
0.5
0
-0.5
-1
3
3.5
4
4.5
5
-Energy- log[GeV]
1400
1200
1000
800
600
400
200
0



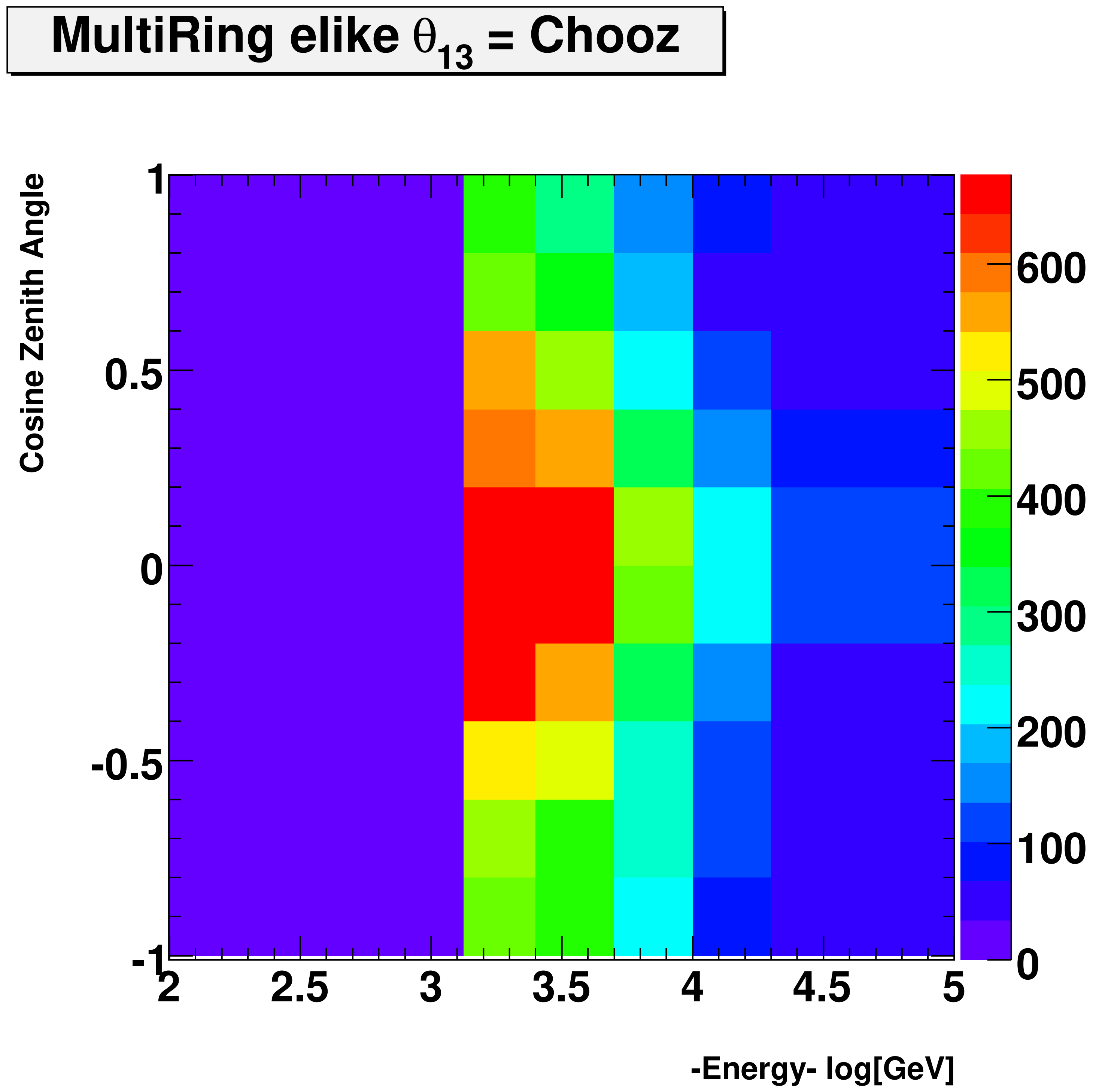
MultiGeV μ $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0}$ - 1
Cosine Zenith Angle
1
0.5
0
-0.5
-1
3
3.5
4
4.5
5
-Energy- log[GeV]
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.12
-0.14
-0.16

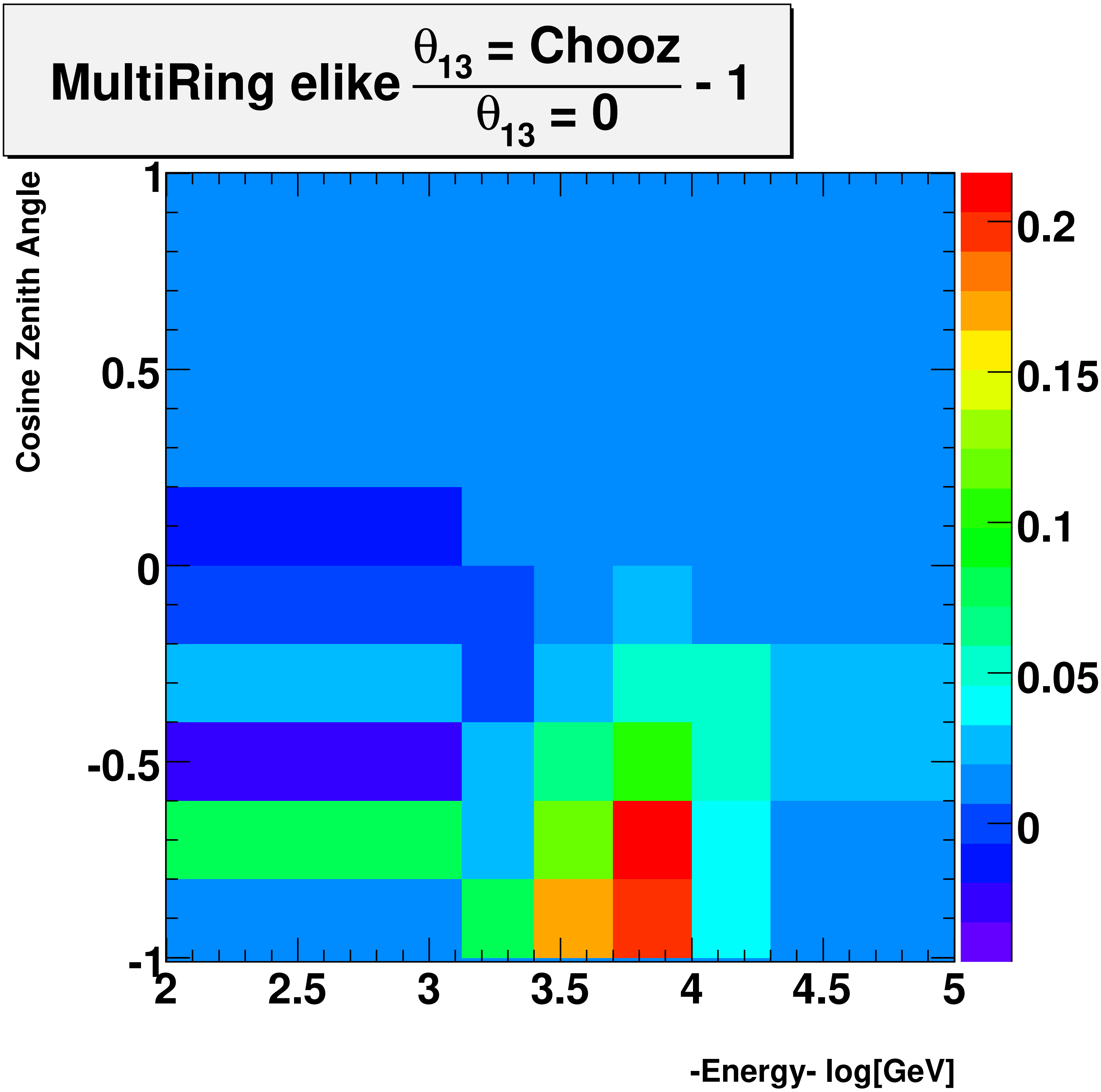


MultiGeV μ $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0}$ - 1
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.12
-0.14
-0.16
0.5
0
-0.5
-1
3
3.5
4
4.5
5
MultiGeV μ like θ_{13} = Chooz
1400
1200
1000
800
600
400
200
0
1
0.5
0
-0.5
-1
3
3.5
4
4.5
5
MultiGeV μ like θ_{13} = Zero
1400
1200
1000
800
600
400
200
0
1
0.5
0
-0.5
-1
3
3.5
4
4.5
5

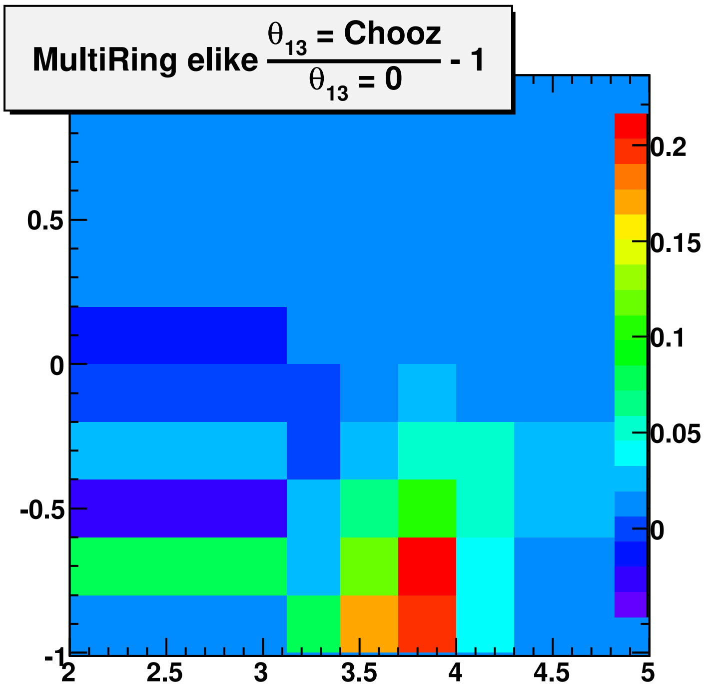


MultiRing elike θ_{13} = Zero
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
600
500
400
300
200
100
0
-Energy- log[GeV]

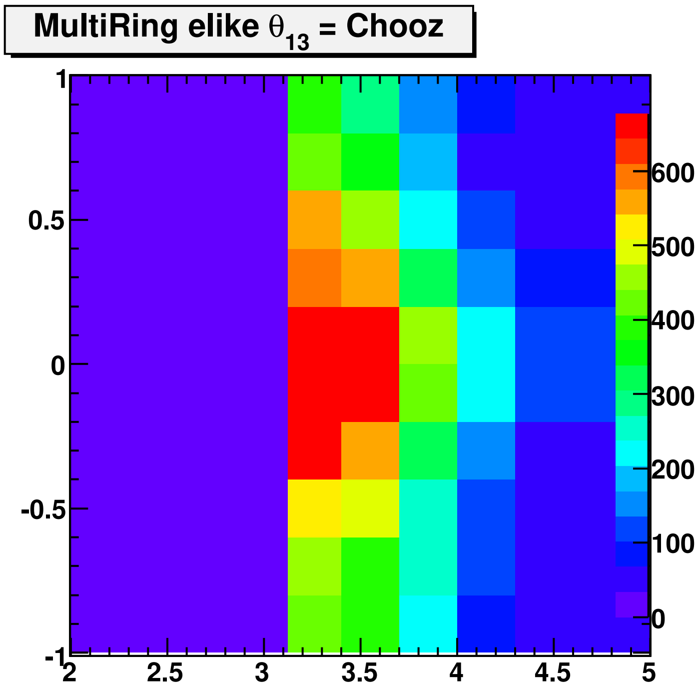

MultiRing elike θ_{13} = Chooz
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
-Energy- log[GeV]
600
500
400
300
200
100
0



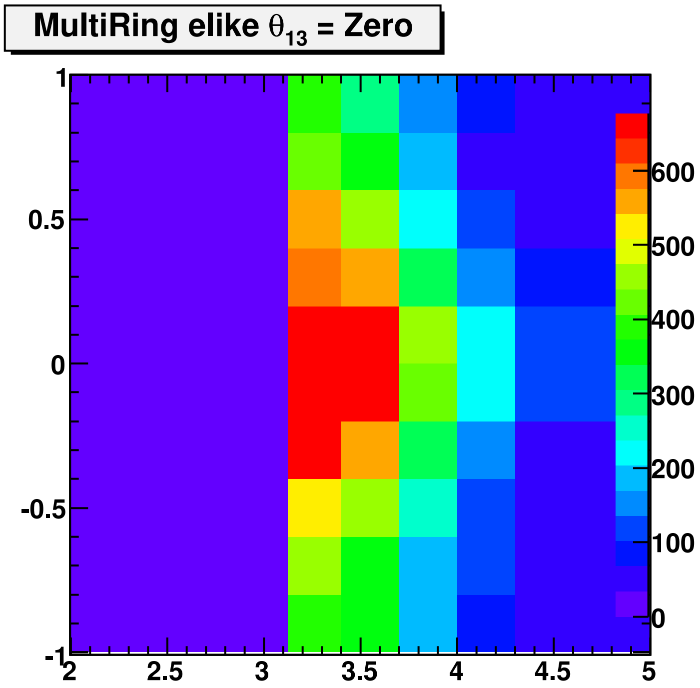
MultiRing elike $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
0.2
0.15
0.1
0.05
0
-Energy- log[GeV]



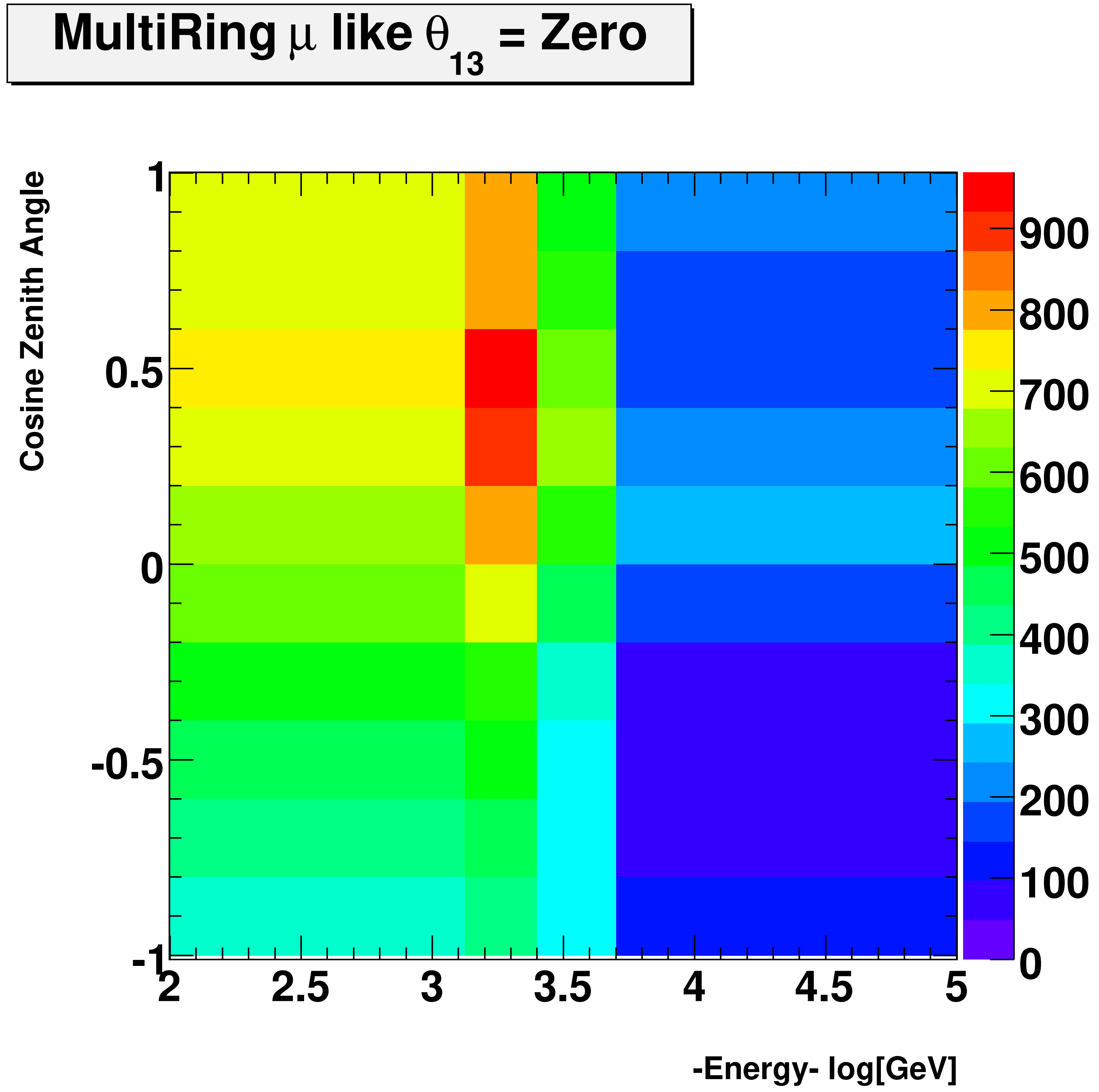
MultiRing elike $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
0.2
0.15
0.1
0.05
0
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5

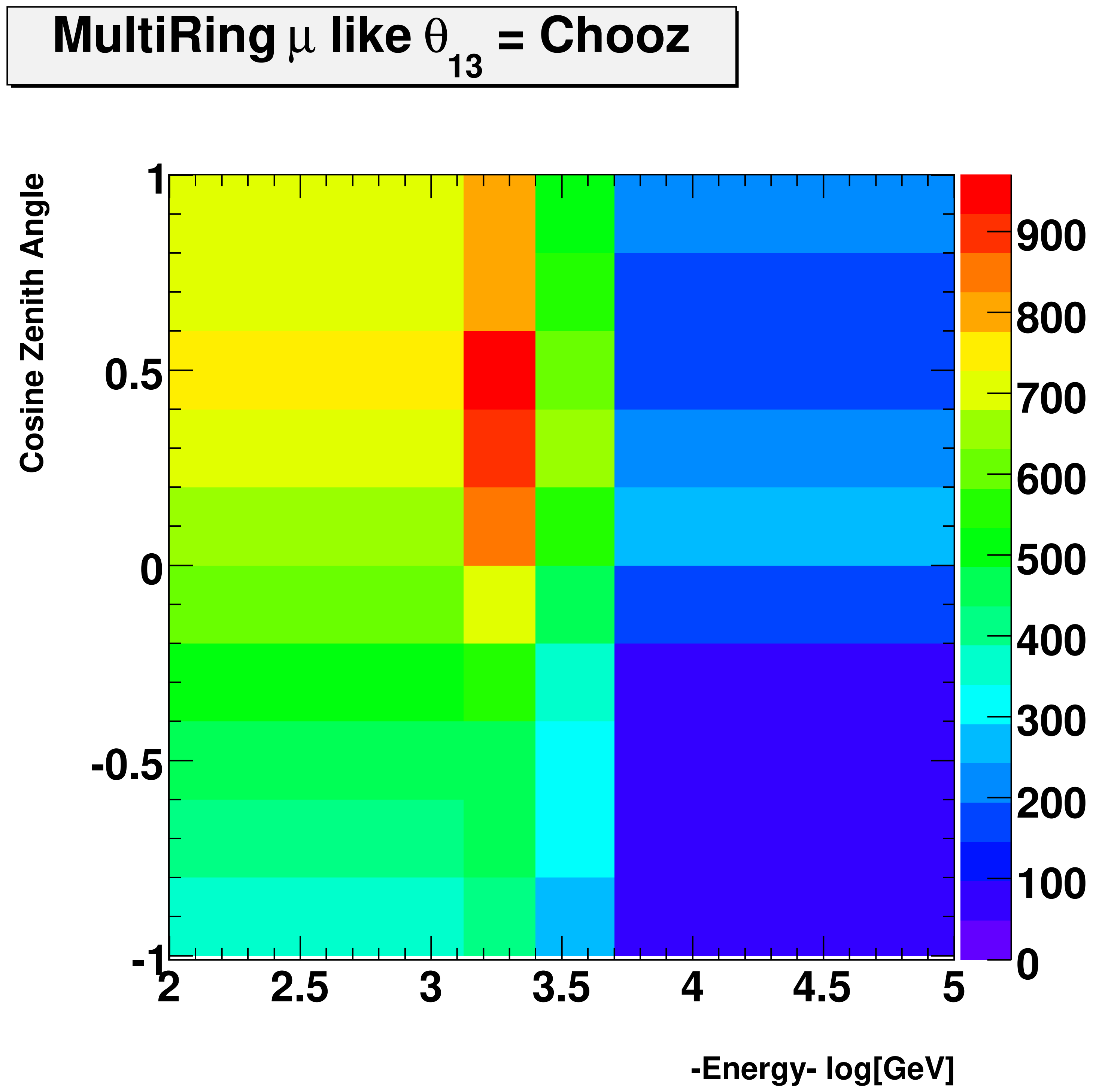


MultiRing elike θ_{13} = Chooz
600
500
400
300
200
100
0
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5

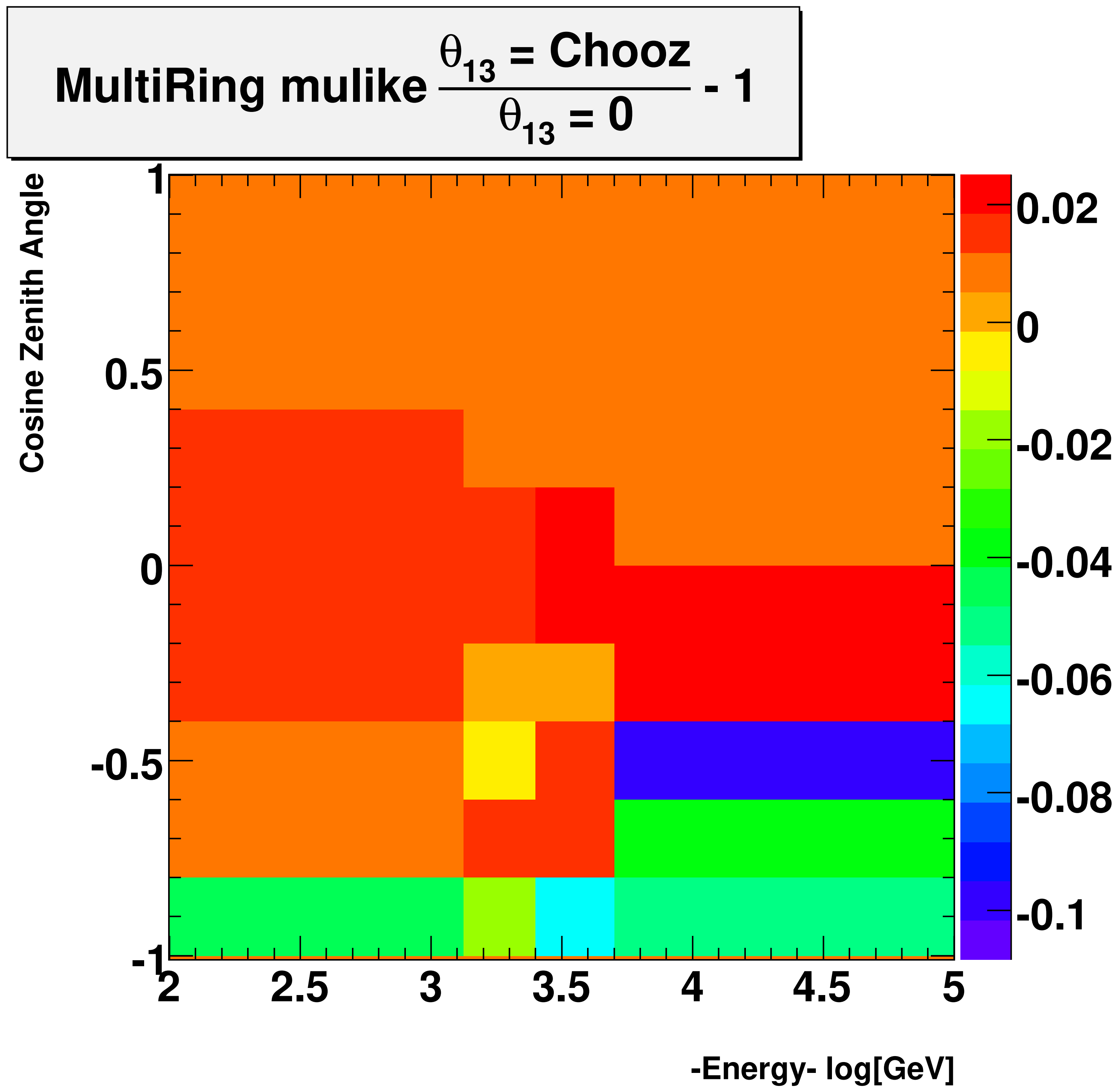


MultiRing elike θ_{13} = Zero
600
500
400
300
200
100
0
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5

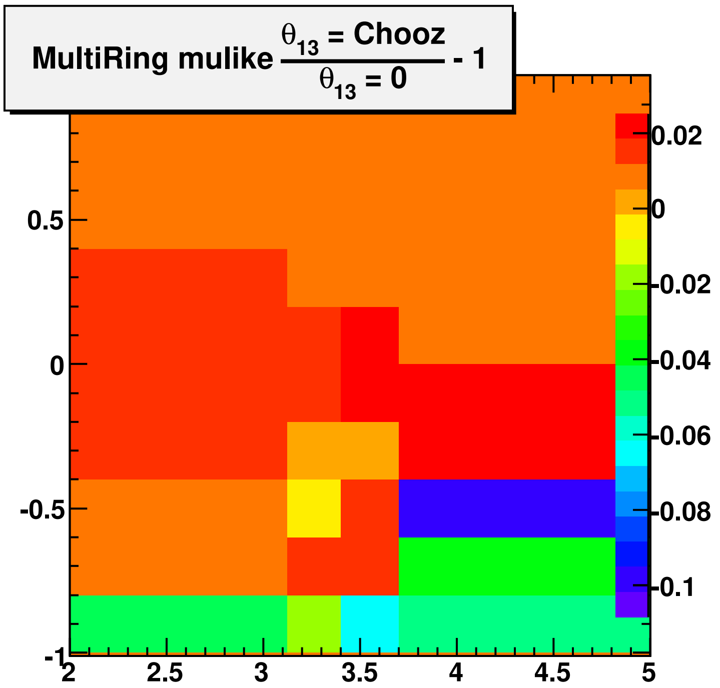

MultiRing μ like θ13 = Zero
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
-Energy- log[GeV]
900
800
700
600
500
400
300
200
100
0

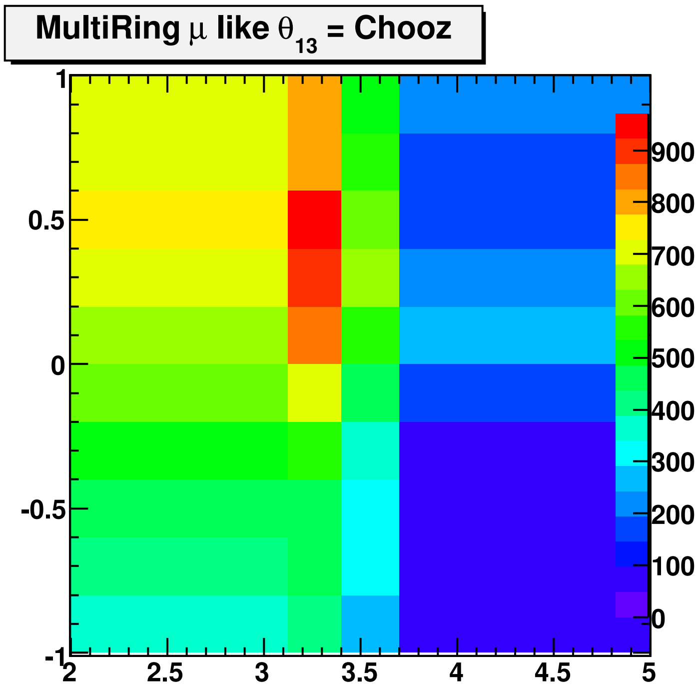


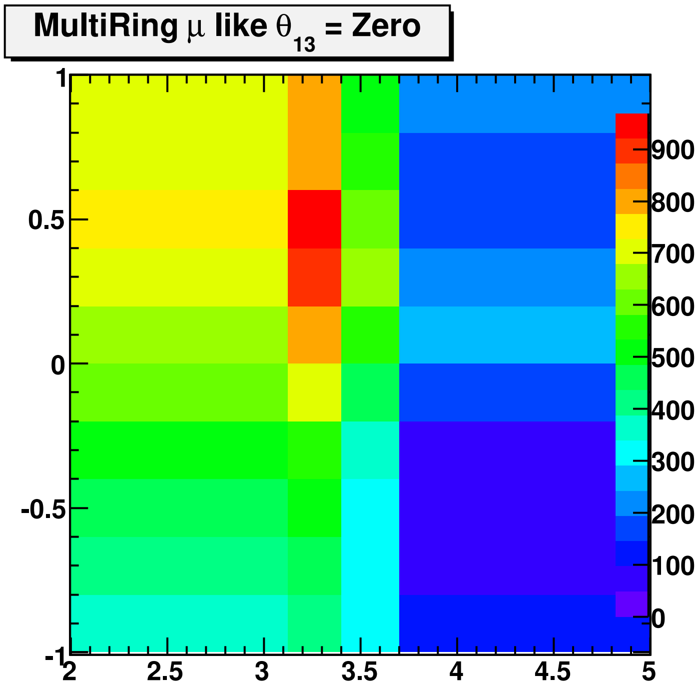
MultiRing μ like θ_{13} = Chooz
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
-Energy- log[GeV]
900
800
700
600
500
400
300
200
100
0

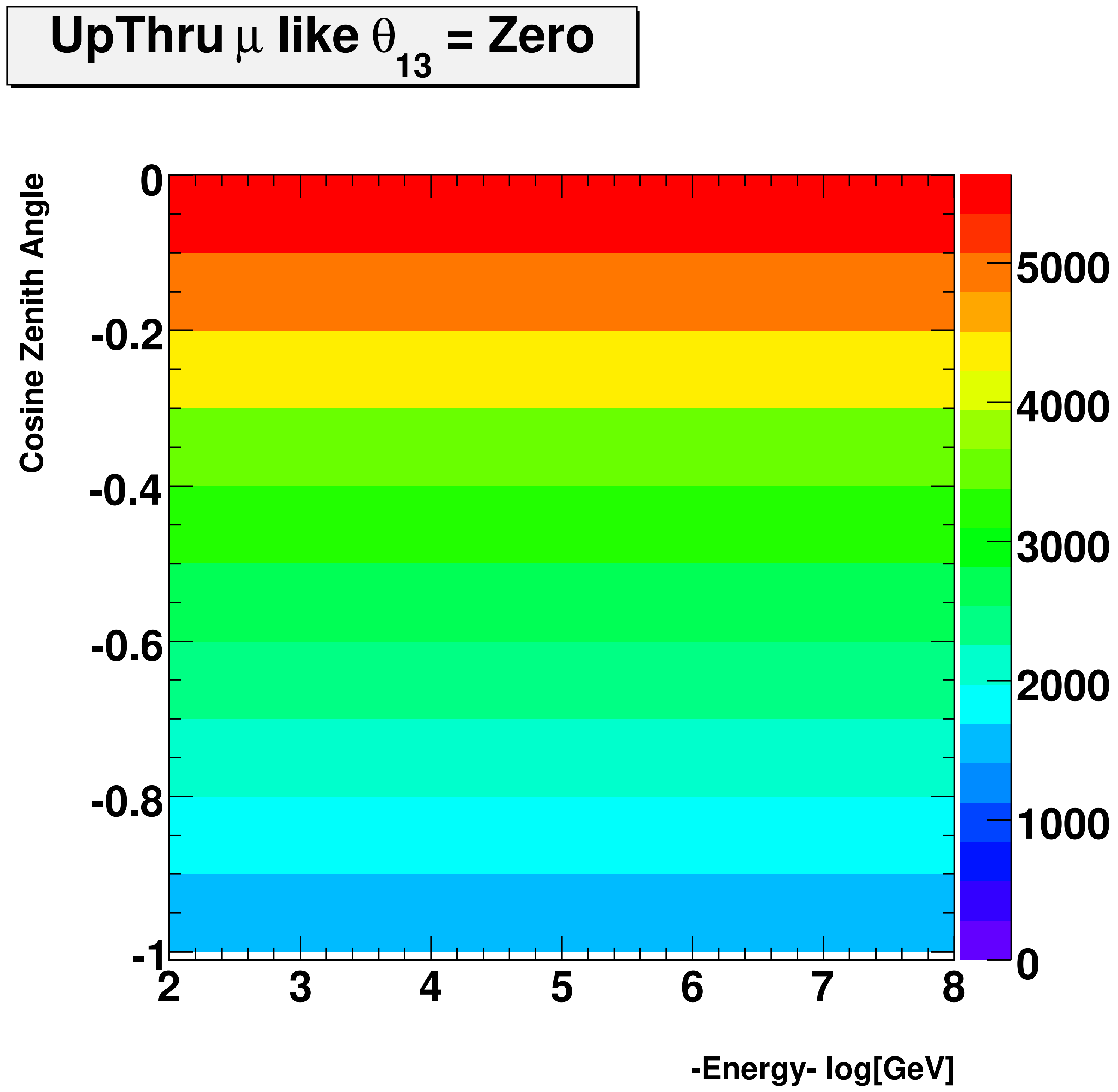


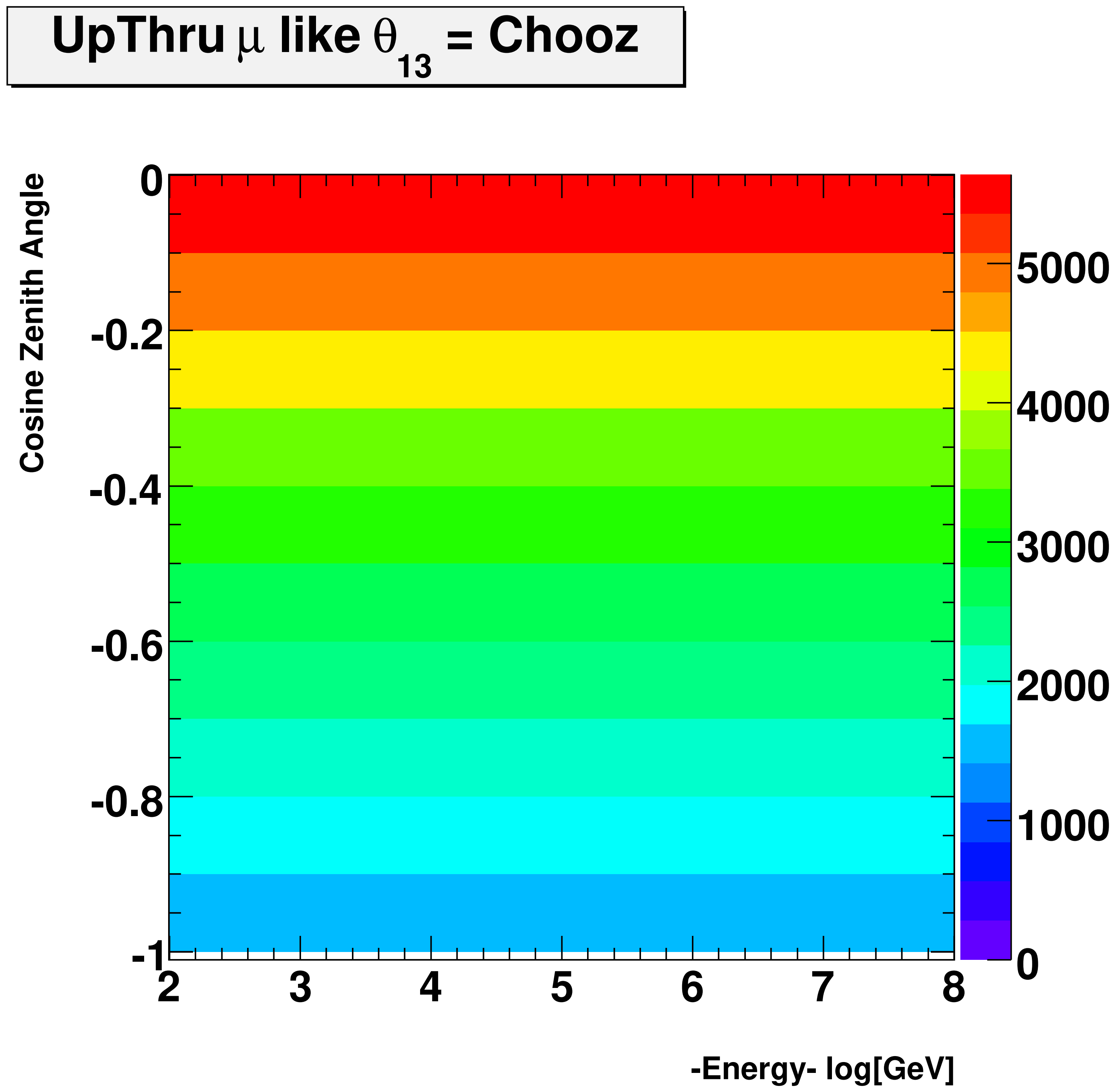
MultiRing mulike $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
-Energy- log[GeV]
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1


MultiRing mulike $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5

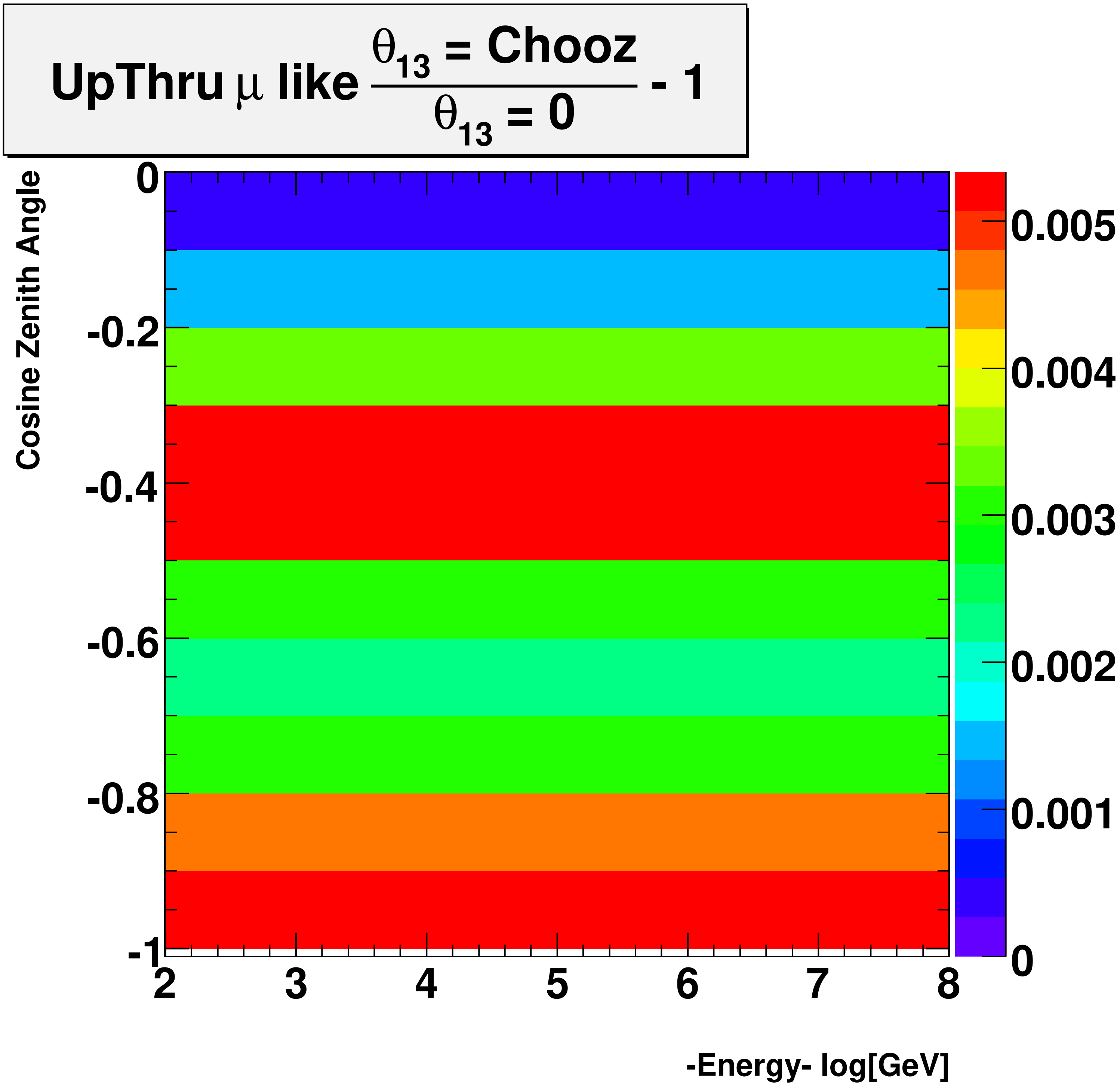

MultiRing μ like θ_{13} = Chooz
900
800
700
600
500
400
300
200
100
0
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5


MultiRing μ like θ_{13} = Zero
900
800
700
600
500
400
300
200
100
0
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5

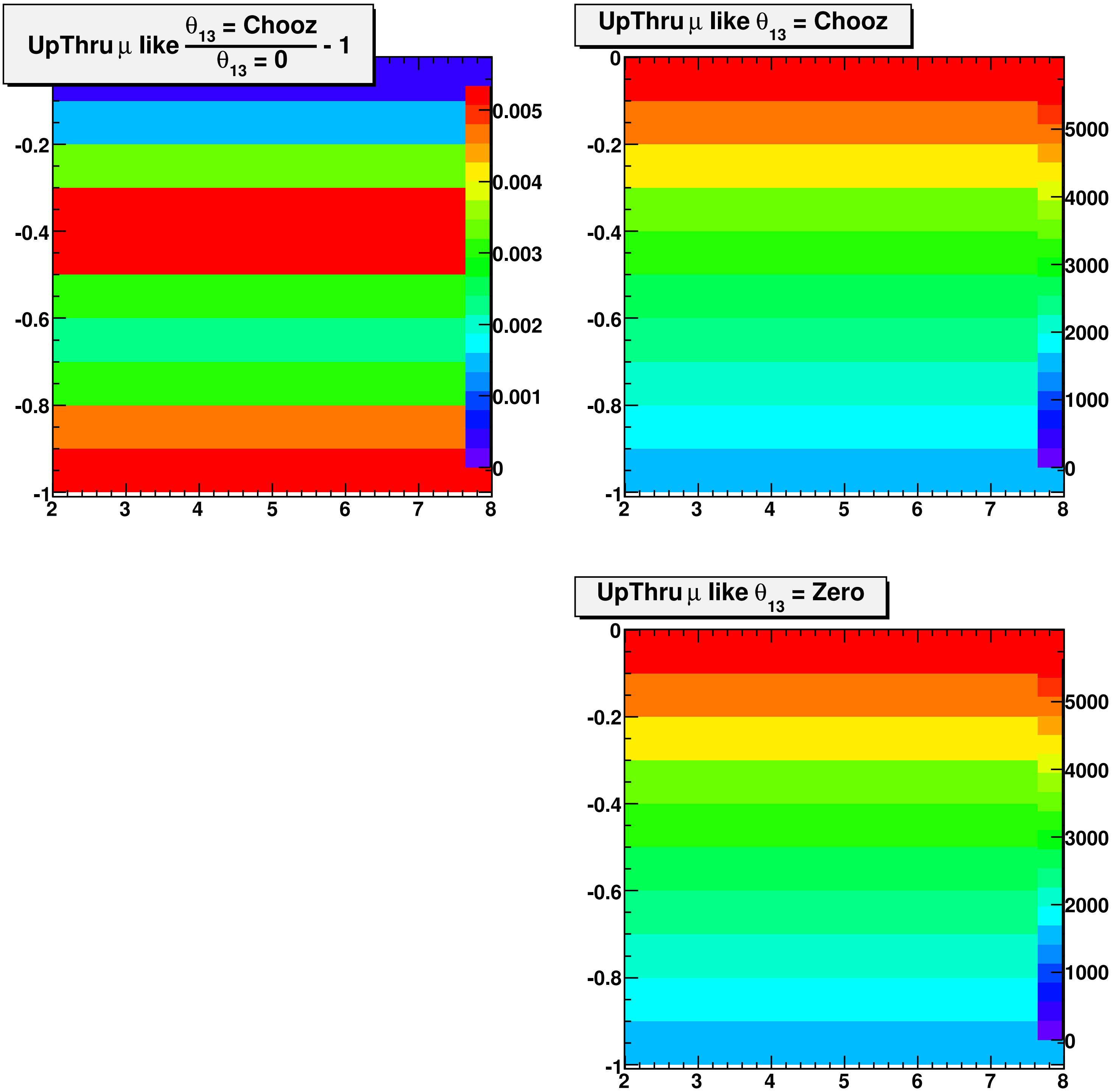

UpThru μ like θ13 = Zero
Cosine Zenith Angle
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
-Energy- log[GeV]
5000
4000
3000
2000
1000
0



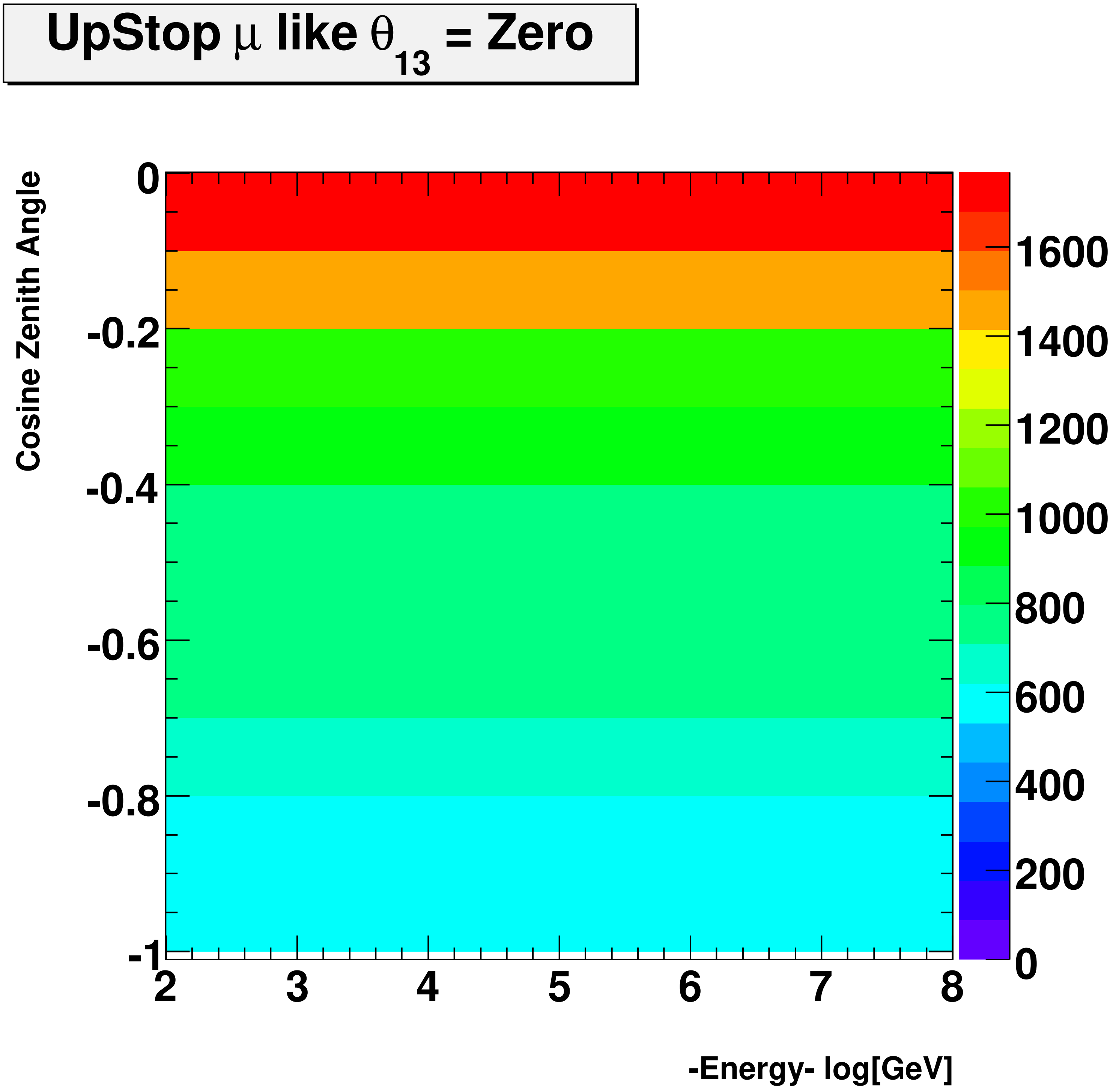
UpThru μ like θ13 = Chooz
Cosine Zenith Angle
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
-Energy- log[GeV]
5000
4000
3000
2000
1000
0



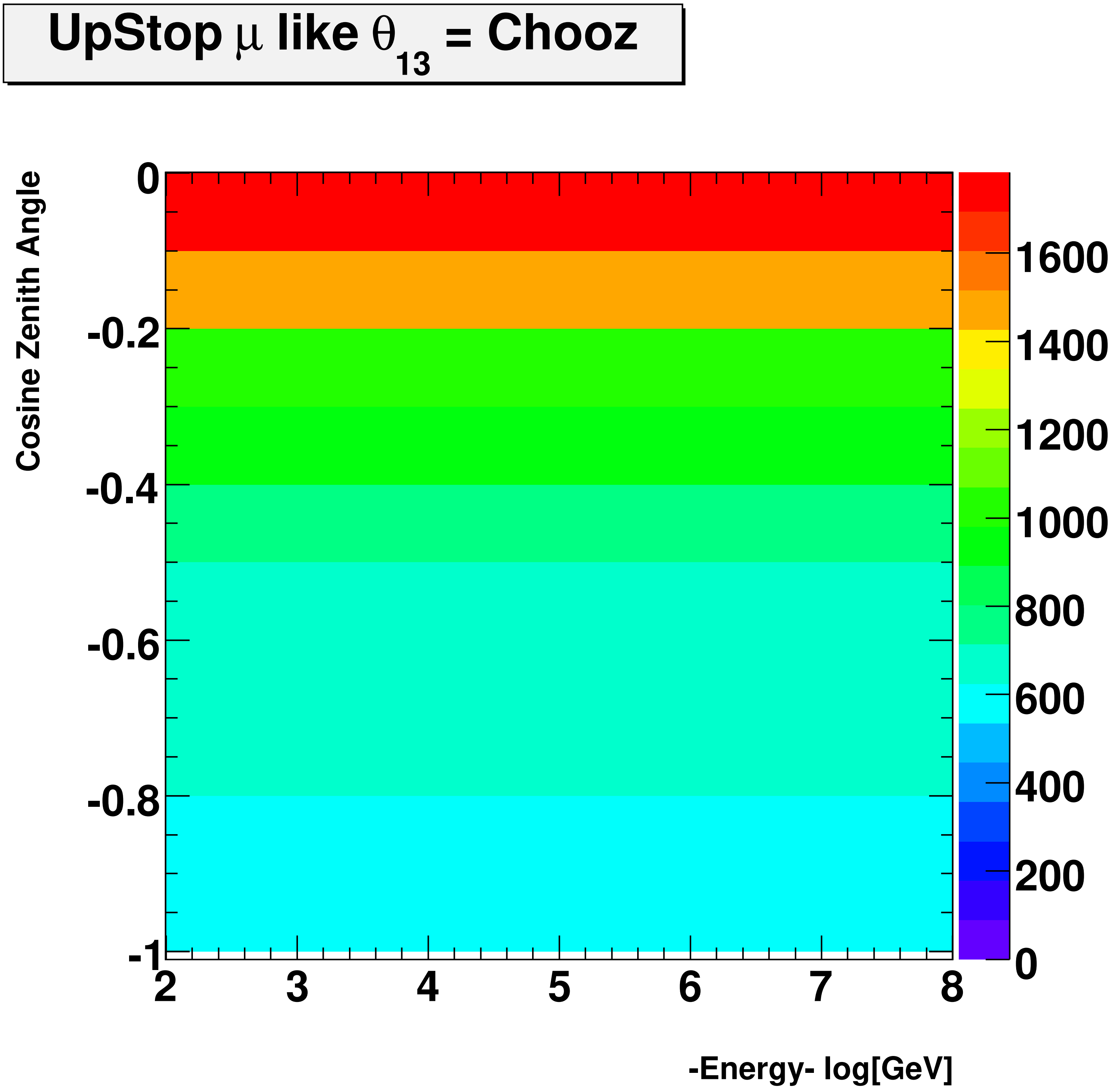
UpThru μ like $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
Cosine Zenith Angle
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
-Energy- log[GeV]
0.005
0.004
0.003
0.002
0.001
0

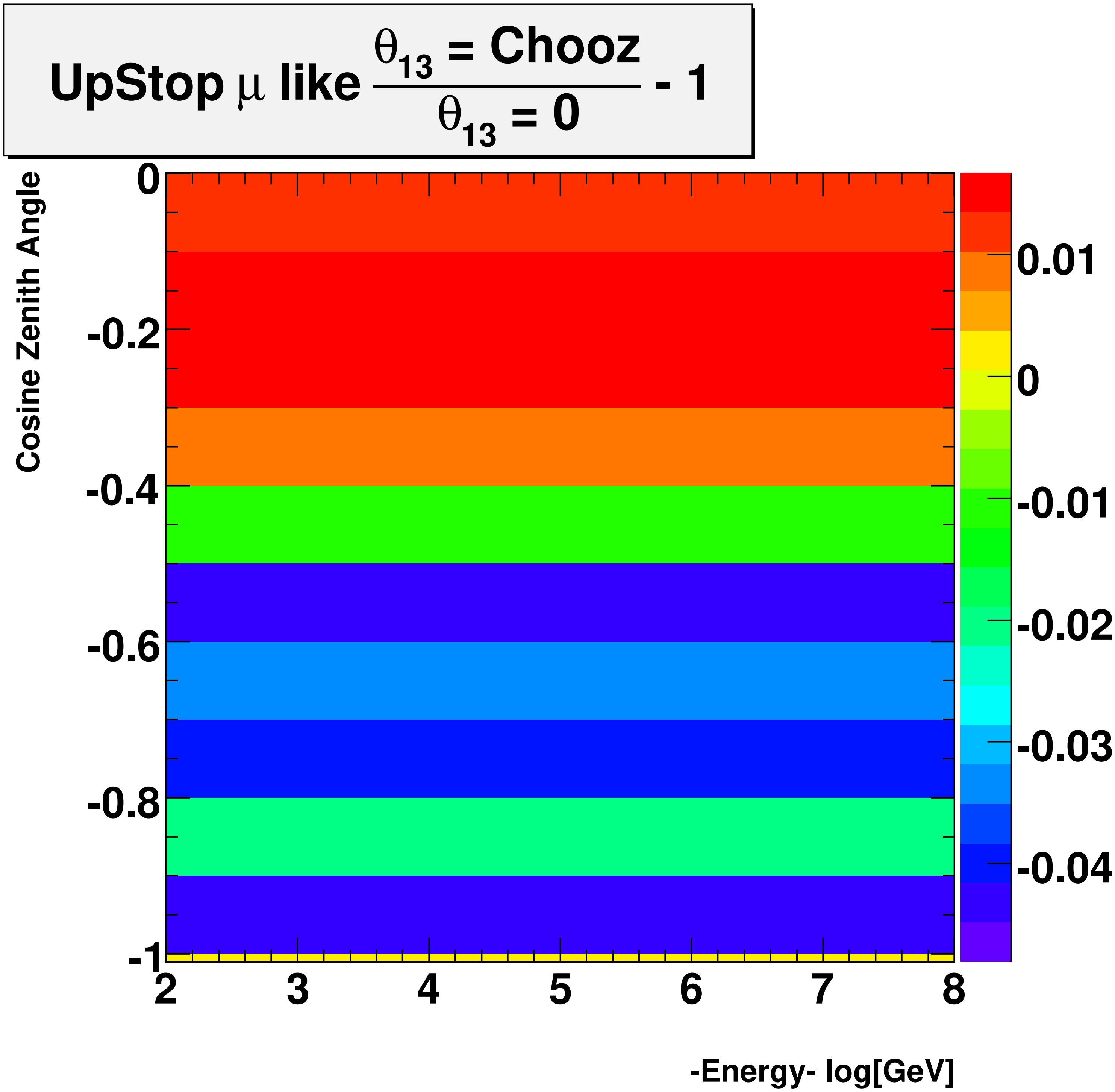


UpThru μ like $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
0.005
0.004
0.003
0.002
0.001
0
UpThru μ like θ_{13} = Chooz
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
5000
4000
3000
2000
1000
0
UpThru μ like θ_{13} = Zero
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
5000
4000
3000
2000
1000
0

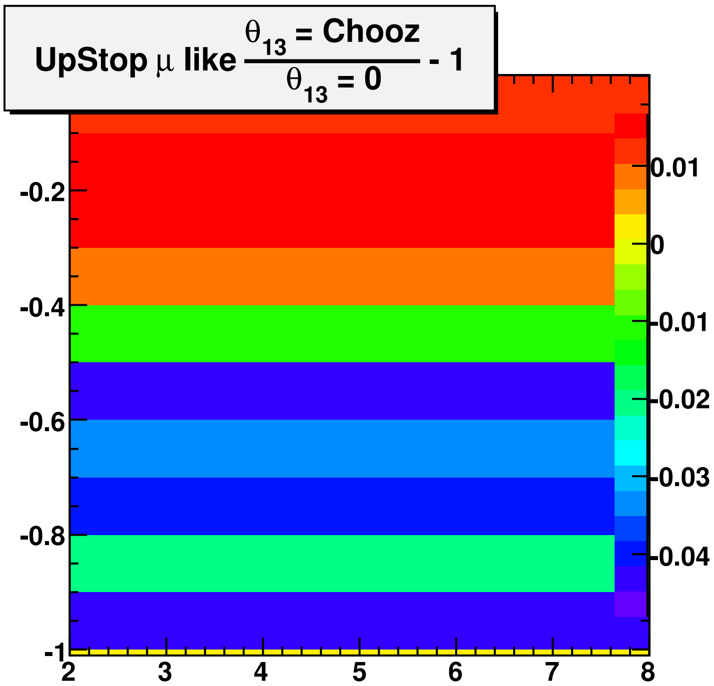


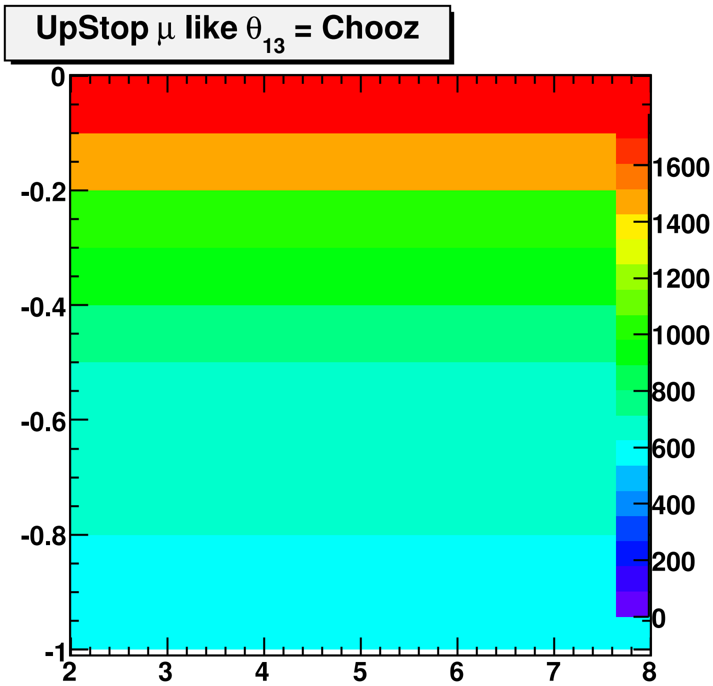
UpStop μ like θ13 = Zero
Cosine Zenith Angle
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
1600
1400
1200
1000
800
600
400
200
0
-Energy- log[GeV]

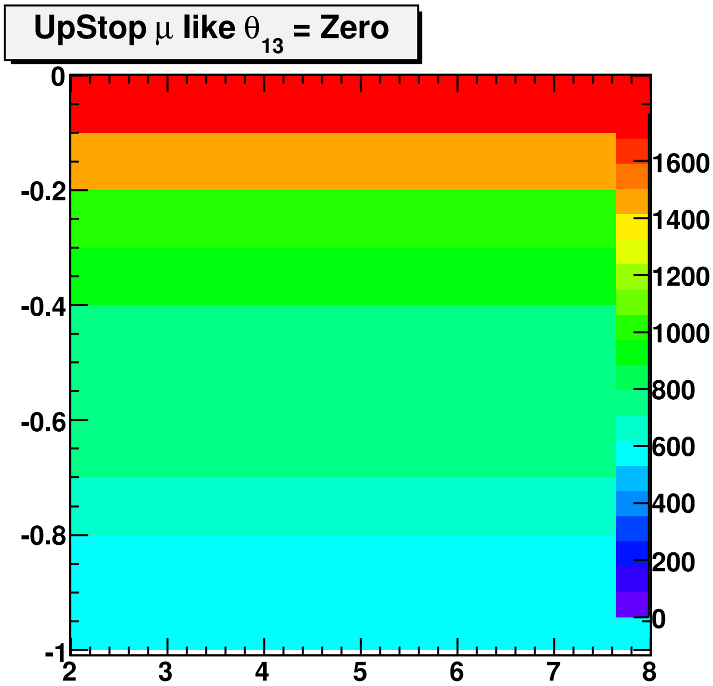

UpStop μ like θ13 = Chooz
Cosine Zenith Angle
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
-Energy- log[GeV]
1600
1400
1200
1000
800
600
400
200
0

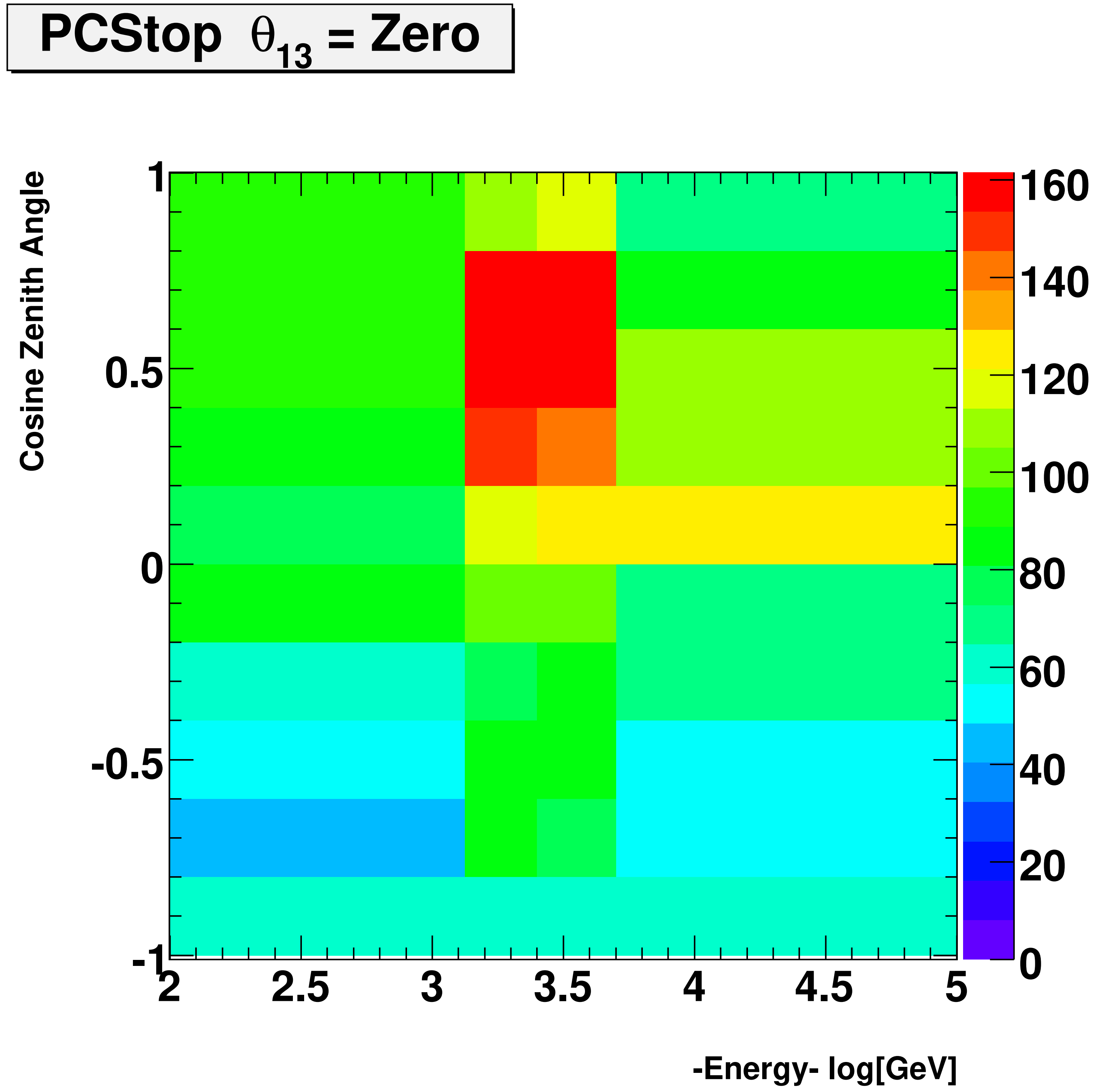


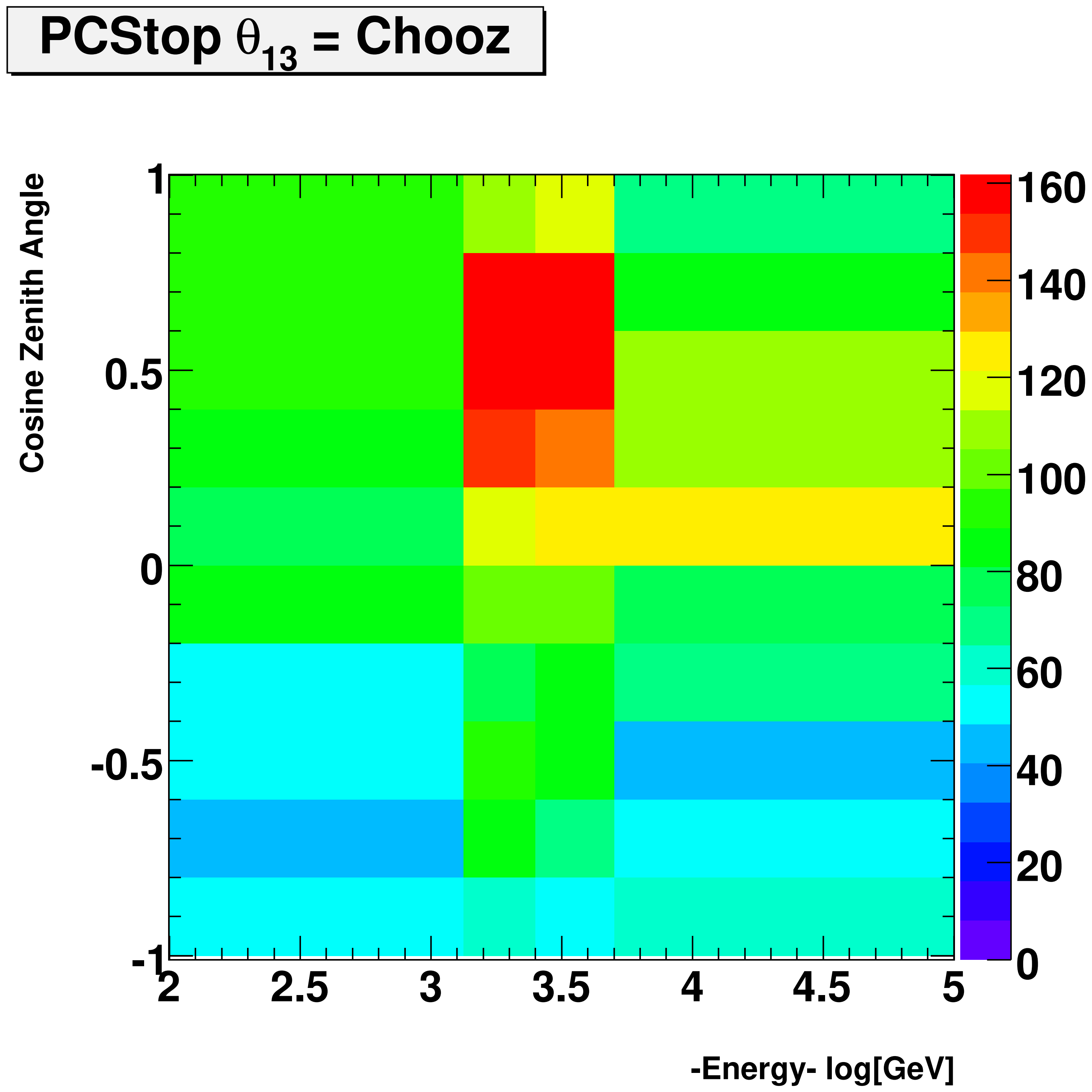
UpStop μ like (θ13 = Chooz)/(θ13 = 0) - 1
Cosine Zenith Angle
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
-Energy- log[GeV]
0.01
0
-0.01
-0.02
-0.03
-0.04


UpStop μ like $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
0.01
0
-0.01
-0.02
-0.03
-0.04

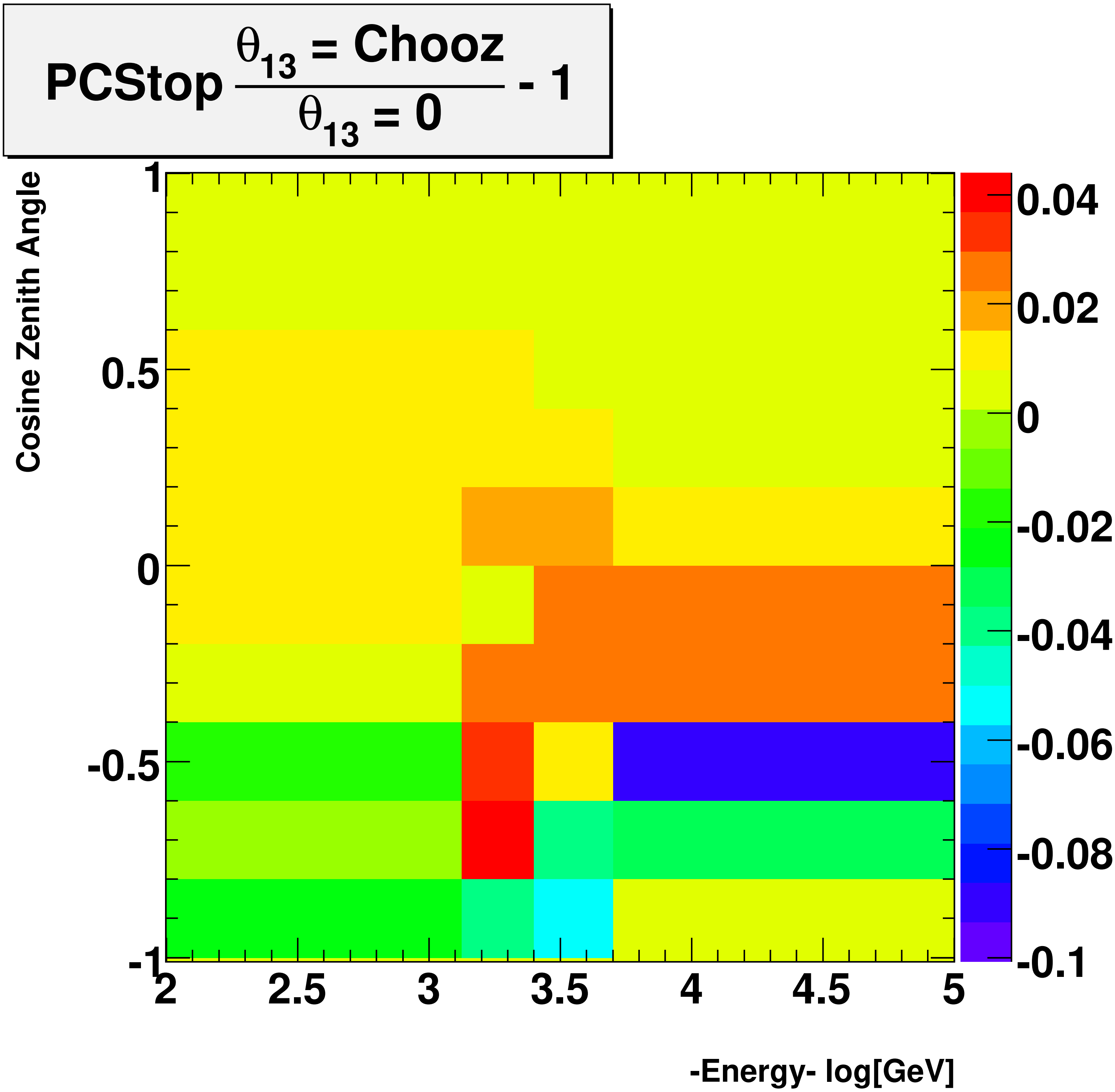

UpStop μ like θ_{13} = Chooz
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
1600
1400
1200
1000
800
600
400
200
0


UpStop μ like θ_{13} = Zero
0
-0.2
-0.4
-0.6
-0.8
-1
2
3
4
5
6
7
8
1600
1400
1200
1000
800
600
400
200
0

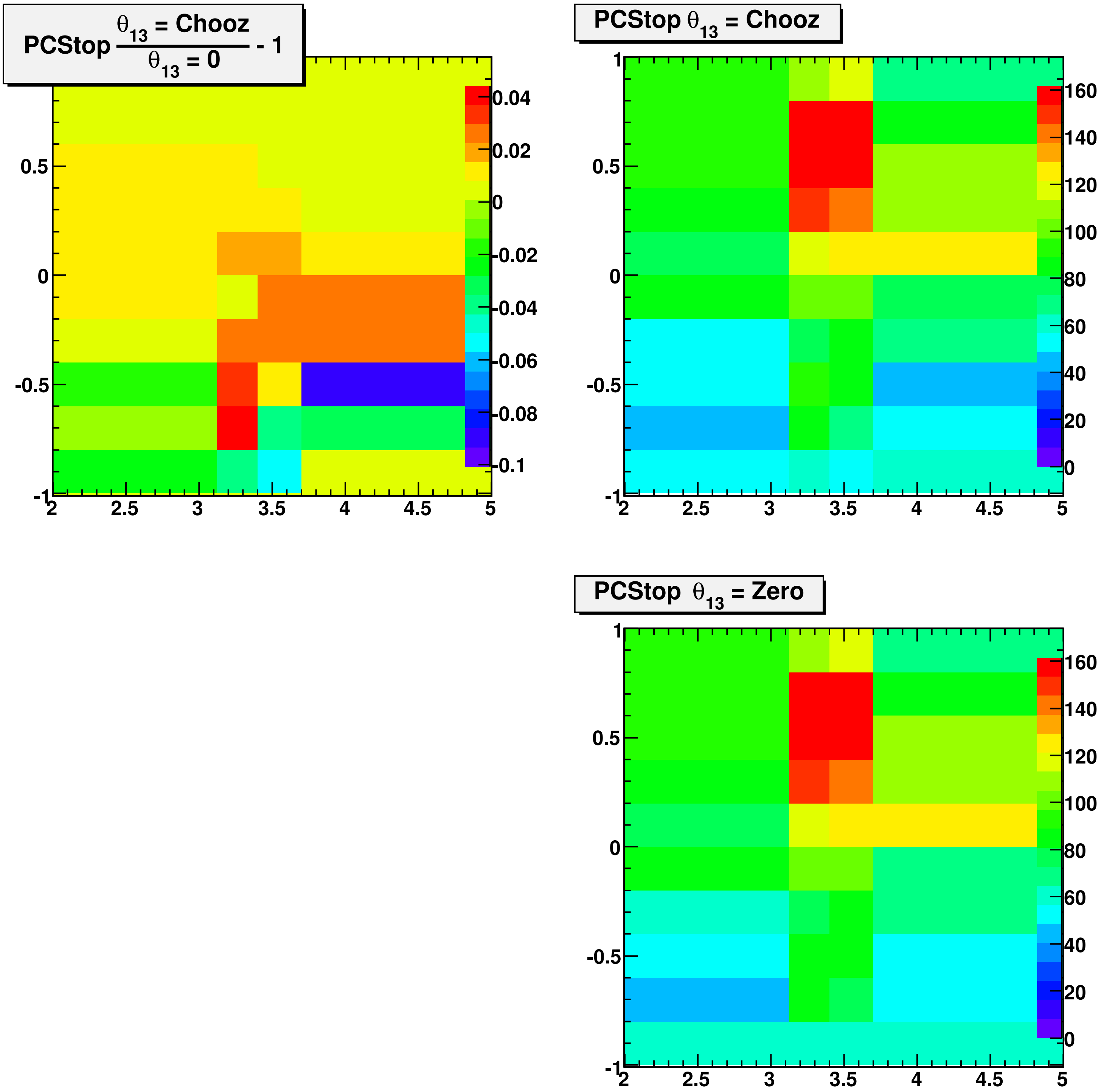

PCStop θ_{13} = Zero
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
-Energy- log[GeV]
160
140
120
100
80
60
40
20
0



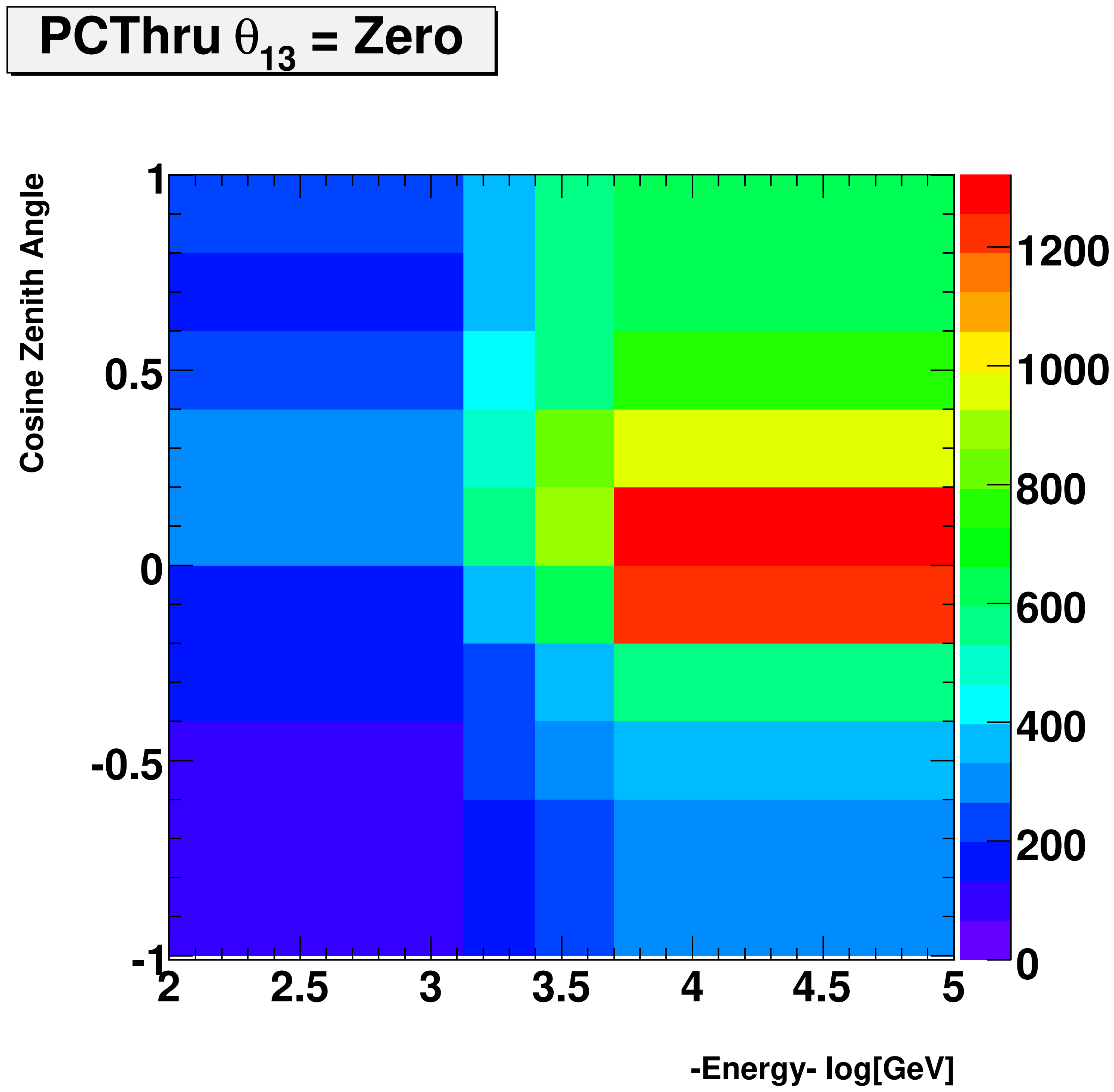
PCStop θ_{13} = Chooz
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
-Energy- log[GeV]
160
140
120
100
80
60
40
20
0

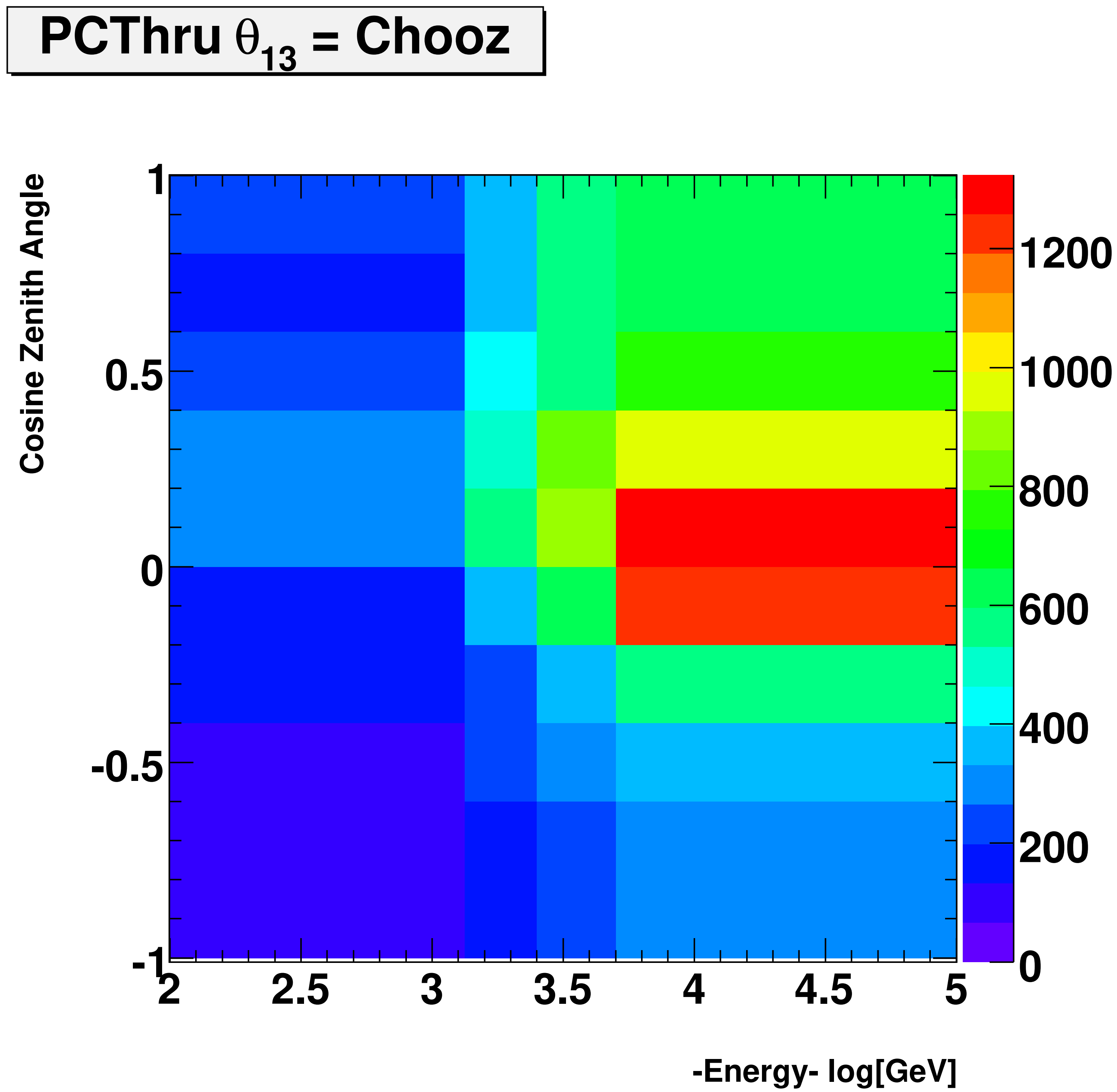


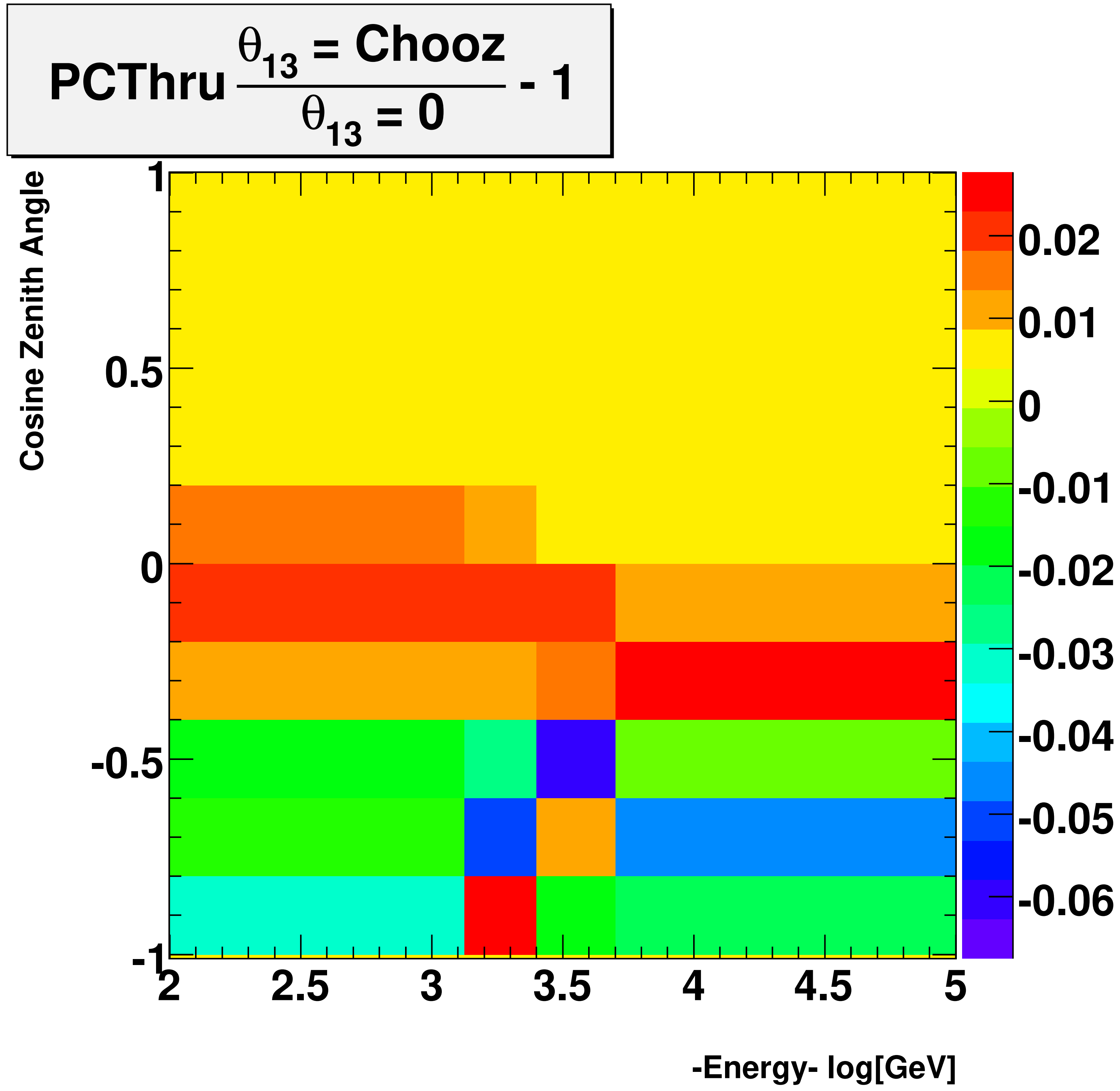
PCStop $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
Cosine Zenith Angle
-Energy- log[GeV]
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1



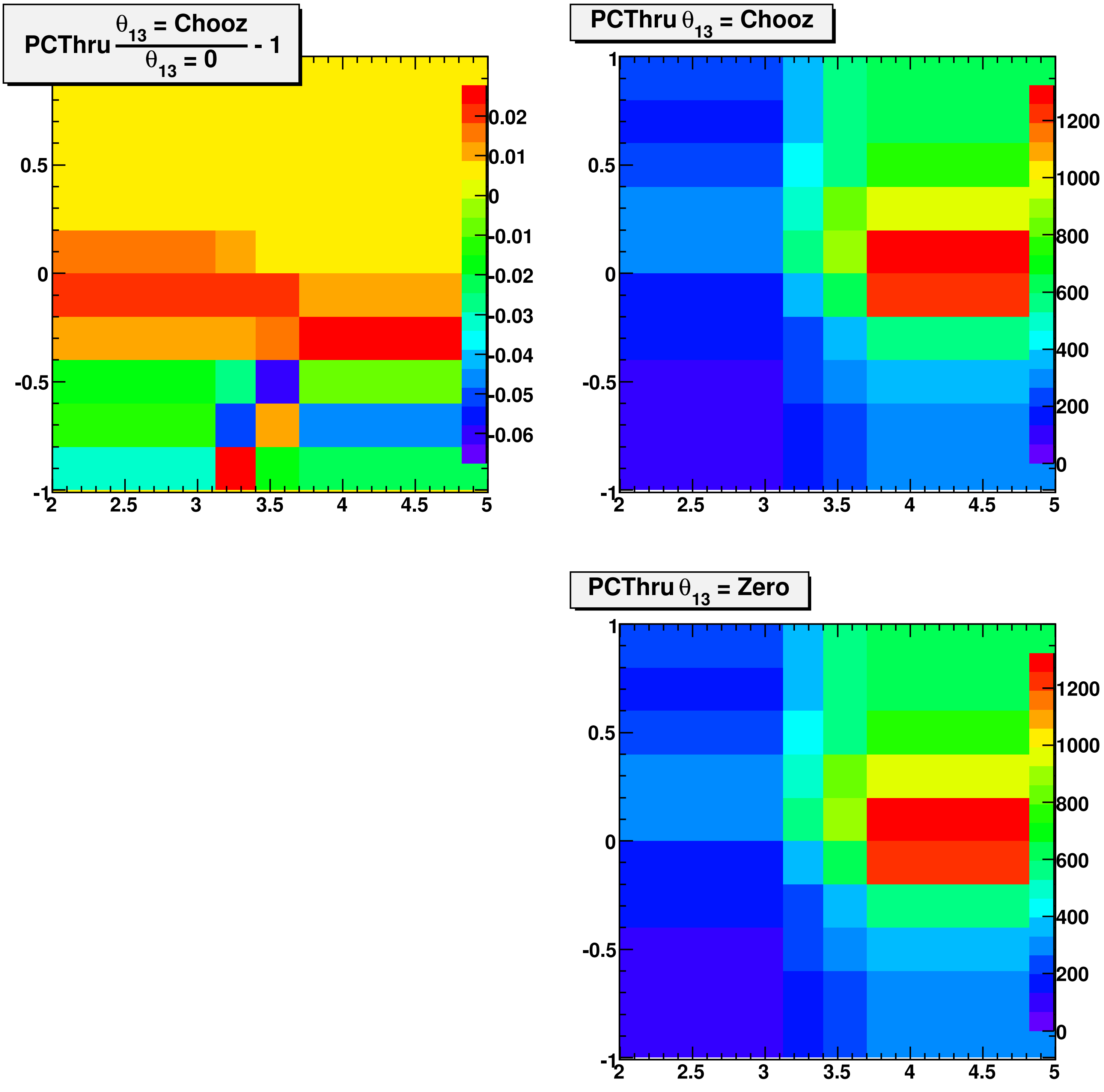
PCStop $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
PCStop θ_{13} = Chooz
PCStop θ_{13} = Zero
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
160
140
120
100
80
60
40
20
0
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5


PCThru θ_{13} = Zero
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
-Energy- log[GeV]
1200
1000
800
600
400
200
0


PCThru θ_{13} = Chooz
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
-Energy- log[GeV]
1200
1000
800
600
400
200
0



PCThru $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
Cosine Zenith Angle
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5
-Energy- log[GeV]
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
-0.05
-0.06


PCThru $\frac{\theta_{13} = \text{Chooz}}{\theta_{13} = 0} - 1$
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
-0.05
-0.06
PCThru θ_{13} = Chooz
1200
1000
800
600
400
200
0
PCThru θ_{13} = Zero
1
0.5
0
-0.5
-1
2
2.5
3
3.5
4
4.5
5