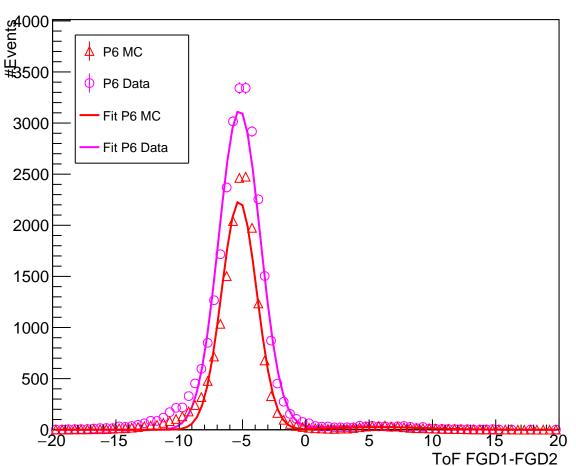
Fgd1Fwd_ToF_FGD1_FGD2



 1.632 ± 0.010 33.64 ± 1.68 4.126 ± 0.429

1505 / 68

 3122 ± 26.6

 -5.237 ± 0.011

 χ^2 / ndf

p0

p1

p2

p3

p4

p5

 4.133 ± 0.300

p0 -5.265 ± 0.004 p1 p2 1.384 ± 0.004

 χ^2 / ndf 1.122e+04 / 74

 24.3 ± 0.6 p3

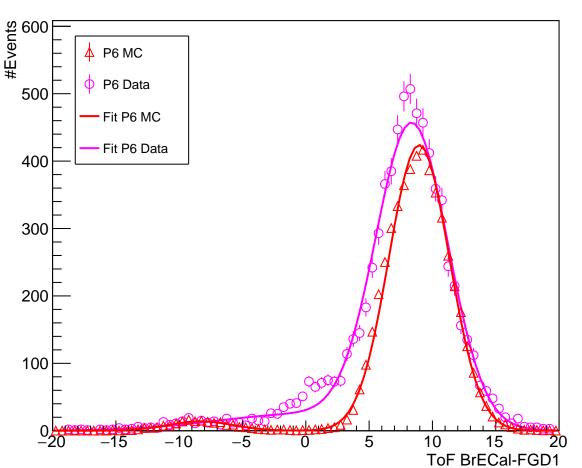
 5.992 ± 0.073

p4 **p5**

 3.652 ± 0.086

 2235 ± 8.3

Fgd1Fwd_ToF_ECal_FGD1_track



 $-1.196e-09 \pm 8.246e-02$ p2 6.886 ± 0.311 p3 445.4 ± 7.7 8.384 ± 0.041 p4 p5 2.852 ± 0.036 χ^2 / ndf 382.1 / 74 p0 13.9 ± 0.4 p1 -8.322 ± 0.064 p2 -2.571 ± 0.055 р3 423.9 ± 2.3 p4 8.95 ± 0.01 **p5** 2.387 ± 0.007

184.5 / 70

 24.95 ± 1.52

 χ^2 / ndf

p0

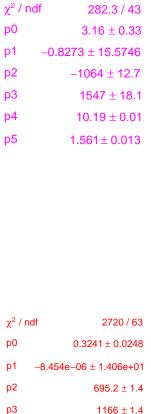
χ^2 / ndf Fgd1Fwd_ToF_ECal_FGD1_shower 70.19 / 70 p0 13.77 ± 1.12 #Events **p1** -5.923 ± 0.412 4.332 ± 0.367 p2 ▲ P6 MC 90 p3 77.4 ± 2.8 P6 Data p4 8.007 ± 0.114 80 **p5** 3.403 ± 0.093 Fit P6 MC 70 Fit P6 Data 60 50 40 χ^2 / ndf 307.6 / 74 30 p0 12.07 ± 0.39 -8.332 ± 0.081 p1 20 p2 3.104 ± 0.074 67.34 ± 0.85 p3 10 p4 8.385 ± 0.032 p5 2.942 ± 0.022 -10 -5 10 15 ToF BrECal-FGD1

Fgd1Fwd_ToF_DSECal_FGD1_track 2000 第 800 #Event& 900 800 ▲ P6 MC P6 Data 1600 Fit P6 MC 1400 Fit P6 Data 1200 1000 800

600

400

200



 9.694 ± 0.005

 1.141 ± 0.003

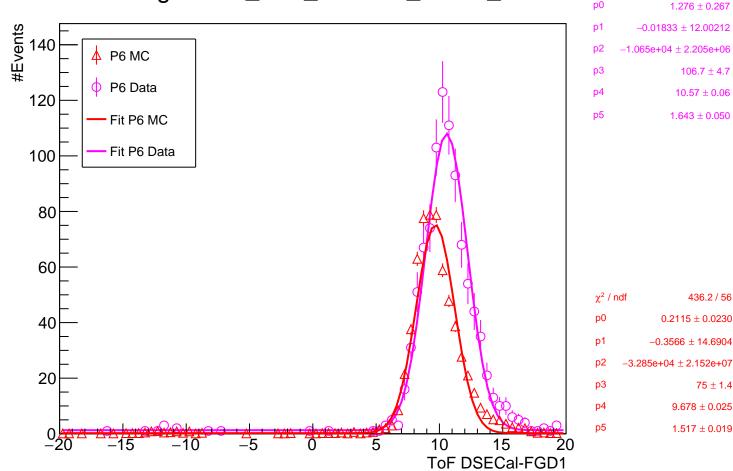
p5

10

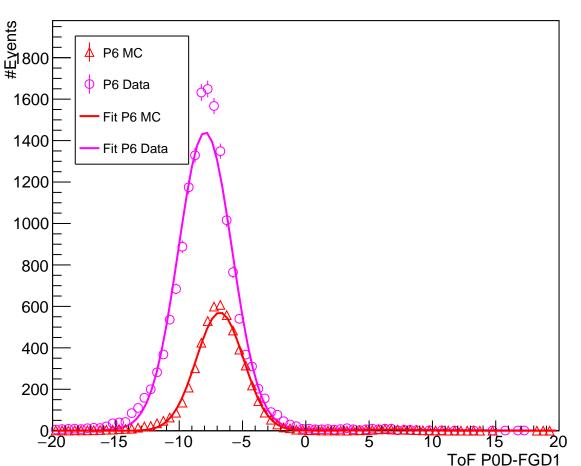
15 ToF DSECal-FGD1

Fgd1Fwd_ToF_DSECal_FGD1_shower

43.18 / 33



Fgd1Bwd_ToF_P0D_FGD1_track



 -7.947 ± 0.018 2.118 ± 0.017 p2 p3 6.592 ± 0.835

467.4 / 60

 1436 ± 16.3

 $3.009e-13 \pm 7.257e-02$ -10.11 ± 1.45

 χ^2 / ndf

p0

p4

p5

 χ^2 / ndf

p0 570.6 ± 3.4 p1 -6.785 ± 0.009 p2 1.865 ± 0.007

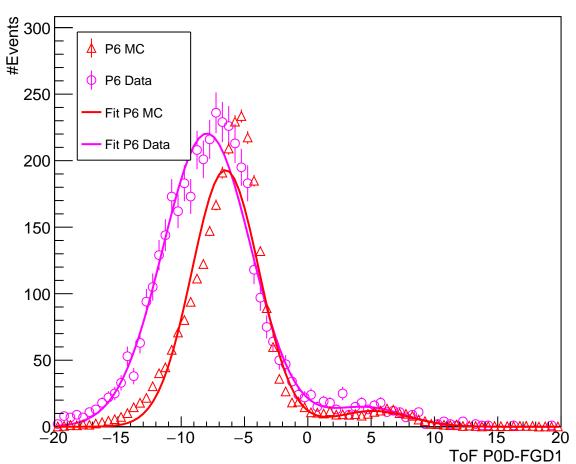
1325 / 66

 5.911 ± 0.378 p3 p4

 6.657 ± 0.081 **p5**

 1.809 ± 0.085

Fgd1Bwd_ToF_P0D_FGD1_shower



p4 4.564 ± 0.364 p5 3.094 ± 0.327

107.6 / 63

 220.5 ± 4.7

 -7.965 ± 0.059

 3.498 ± 0.054

 14.62 ± 1.39

1686 / 74

 193 ± 1.8

 -6.5 ± 0.0

 2.658 ± 0.019

 11.85 ± 0.38

 5.167 ± 0.106

 2.897 ± 0.084

 χ^2 / ndf

p0

p1

p2

p3

 χ^2 / ndf

p0

p1

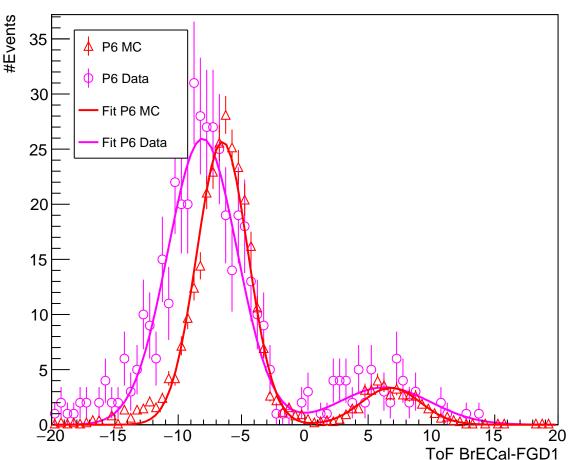
p2

р3

p4

p5

Fgd1Bwd_ToF_ECal_FGD1_track



 3.392 ± 0.618 p3 p4 6.316 ± 0.766 **p5** -3.629 ± 0.676 χ^2 / ndf 155.7 / 66 p0 25.69 ± 0.70 -6.502 ± 0.043 p1 p2 2.03 ± 0.04 3.346 ± 0.227 p3 p4 6.796 ± 0.124 **p5** 2.338 ± 0.105

 χ^2 / ndf

p0

p1

p2

49.64 / 52

 25.95 ± 1.83

 -8.076 ± 0.161

 2.742 ± 0.136

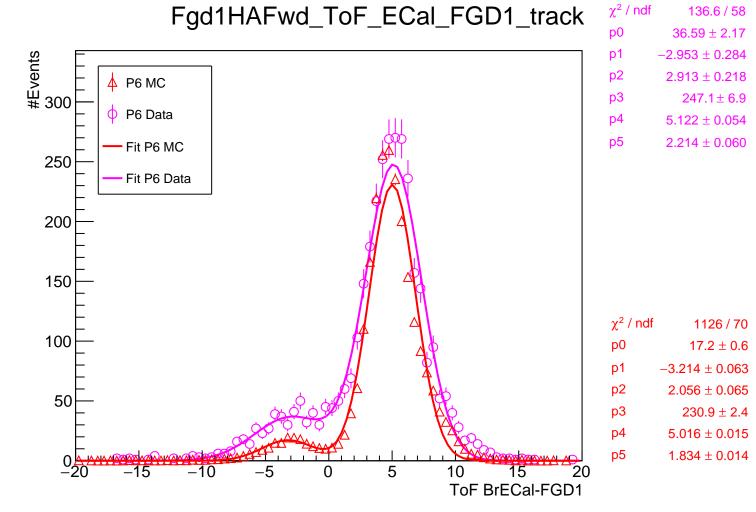
Fgd1Bwd_ToF_ECal_FGD1_shower χ^2 / ndf p0 p1 #Events p2 △ P6 MC р3 25 P6 Data p4 **p5** Fit P6 MC Fit P6 Data 20 15 10 5 -15 -10-5 15 ToF BrECal-FGD1

 4.173 ± 0.293 1.433 ± 0.474 9.524 ± 3.543 5.294 ± 3.506 χ^2 / ndf 159.7 / 62 p0 20.07 ± 0.56 -6.672 ± 0.058 **p1** p2 2.468 ± 0.049 1.875 ± 0.168 p3 p4 5.722 ± 0.184 **p5** 2.448 ± 0.166

54.28 / 53

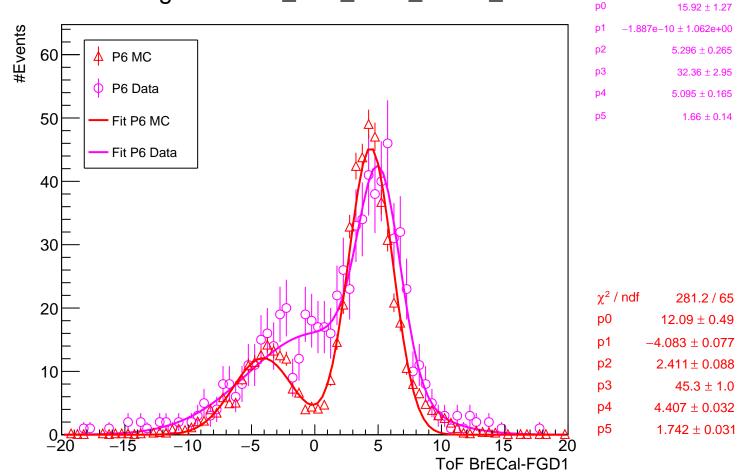
 18.03 ± 1.39

 -6.743 ± 0.256

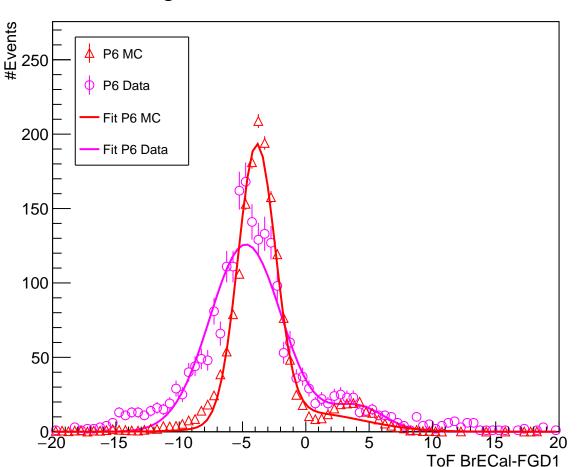


Fgd1HAFwd_ToF_ECal_FGD1_shower

33.51 / 53



Fgd1HABwd_ToF_ECal_FGD1_track



1039 / 62

 184.9 ± 2.2 -3.878 ± 0.015

 1.468 ± 0.014

 12.68 ± 0.44

 4.413 ± 0.065

1.111e-12 ± 7.923e-03

242 / 69

 125.9 ± 4.9

 -4.736 ± 0.078

 2.851 ± 0.105

 χ^2 / ndf

p0

p1

p2

 χ^2 / ndf

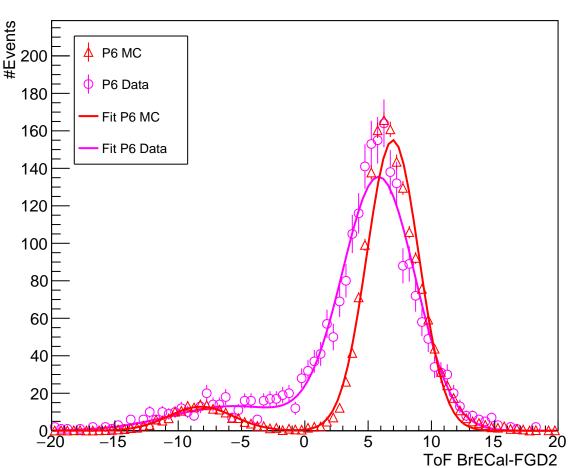
p0

p2 p3

p5

χ^2 / ndf Fgd1HABwd_ToF_ECal_FGD1_shower 92.95 / 56 p0 58.87 ± 2.87 #Events **p1** -4.059 ± 0.108 100 p2 3.364 ± 0.144 ▲ P6 MC p3 4.646 ± 1.733 P6 Data p4 4.646 ± 0.505 **p5** 1.598 ± 0.544 Fit P6 MC 80 Fit P6 Data 60 40 χ^2 / ndf 183.8 / 56 p0 73.13 ± 1.22 p1 -4.175 ± 0.025 20 p2 1.9 ± 0.0 7.253 ± 0.378 p3 p4 3.402 ± 0.103 **p5** 1.861 ± 0.084 -10 -5 ToF BrECal-FGD1

Fgd2Fwd_ToF_ECal_FGD2_track



p4 5.845 ± 0.084 p5 2.887 ± 0.083 χ^2 / ndf 612.7 / 73

 χ^2 / ndf

p0

p1

p2

p3

p0

p1

p2

р3

p4

p5

96.69 / 65

 13.1 ± 1.0

 -5.704 ± 0.776

 4.864 ± 0.592

 134.8 ± 4.2

 12.8 ± 0.4

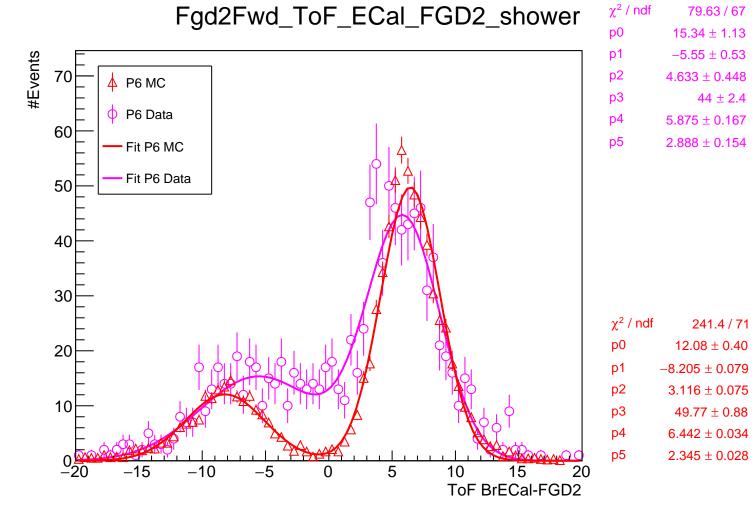
 2.56 ± 0.06

 155.1 ± 1.7

 2.05 ± 0.01

 6.951 ± 0.019

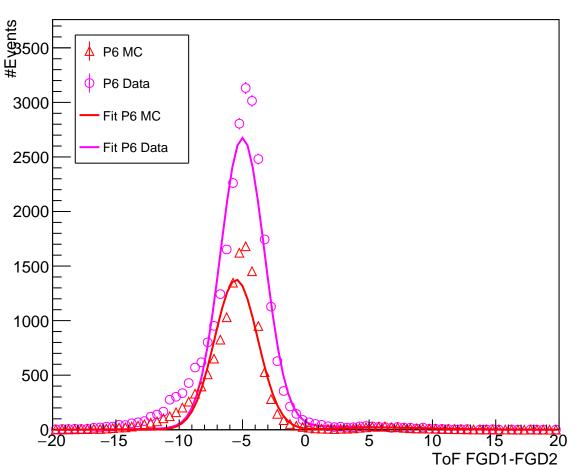
 -8.208 ± 0.065



Fgd2Fwd_ToF_DSECal_FGD2_track χ^2 / ndf 447.4 / 55 p0 10.86 ± 1.07 #Events 000 p1 -4.2e-11± 3.9e-02 p2 -7.561 ± 0.576 ▲ P6 MC p3 2375 ± 23.5 P6 Data p4 5.454 ± 0.012 2500 1.607 ± 0.011 **p5** Fit P6 MC Fit P6 Data 2000 1500 χ^2 / ndf 3612 / 68 1000 7.432 ± 0.379 p0 -5.956 ± 0.172 p1 p2 3.437 ± 0.171 500 1711 ± 7.2 p3 5.104 ± 0.004 p4 **p5** 1.306 ± 0.004 ToF DSECal-FGD2

χ^2 / ndf Fgd2Fwd_ToF_DSECal_FGD2_shower 148.9 / 59 p0 10.6 ± 1.0 -4.406 ± 0.499 #Events p2 4.098 ± 0.470 ▲ P6 MC 400 339.7 ± 8.2 p3 P6 Data p4 5.732 ± 0.037 350 **p5** 1.905 ± 0.034 Fit P6 MC 300 Fit P6 Data 250 200 150 χ^2 / ndf 1587 / 69 p0 12.51 ± 0.44 100 -7.574 ± 0.078 p1 p2 2.922 ± 0.080 286.8 ± 2.8 50 p3 p4 4.73 ± 0.01 **p5** 1.554 ± 0.011 -10 ToF DSECal-FGD2

Fgd2Bwd_ToF_FGD1_FGD2



p2 1.733 ± 0.014 p3 30.75 ± 1.70 1.11e-11 ± 1.05e-02 p4

2482 / 70

 2650 ± 27.3

 -5.002 ± 0.014

 χ^2 / ndf

p0

p1

p5

 -7.585 ± 0.214

 χ^2 / ndf 1.364e+04 / 74 p0 1376 ± 6.1

p1 -5.501 ± 0.006 1.704 ± 0.006

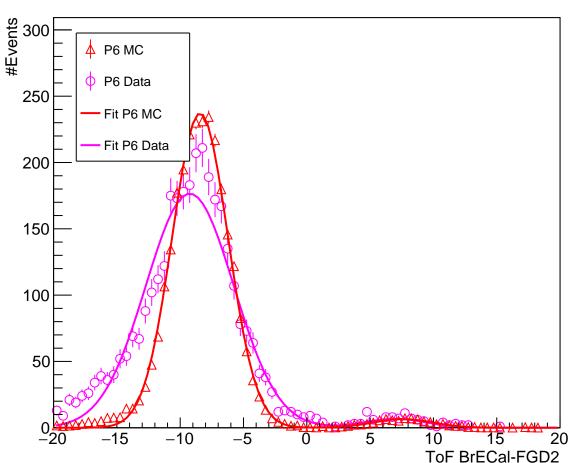
p2 p3

 19.65 ± 0.51

p4 6.197 ± 0.069 **p5**

 3.389 ± 0.080

Fgd2Bwd_ToF_ECal_FGD2_track



p2 3.475 ± 0.064 p3 6.725 ± 1.234 p4 6.973 ± 0.308 **p5** 2.402 ± 0.427

170.7 / 59

 176.5 ± 4.5

 -9.243 ± 0.069

 χ^2 / ndf

p0

p1

 237.1 ± 1.9 -8.429 ± 0.014

441 / 69

p2 2.206 ± 0.011

 χ^2 / ndf

p0

p1

 6.461 ± 0.306 p3

p4

 7.595 ± 0.089

p5 -2.366 ± 0.070

Fgd2Bwd_ToF_ECal_FGD2_shower χ^2 / ndf p0 #Events p1 120 p2 ▲ P6 MC p3 P6 Data p4 100 0.8842 ± 1.4142 **p5** Fit P6 MC Fit P6 Data 80 60 χ^2 / ndf 40 p0 p1 p2 20 p3 p4 p5 15 -15 -10 -5 ToF BrECal-FGD2

140.1 / 57

 81.2 ± 1.2

 -8.526 ± 0.108

 3.972 ± 0.071

 2.633 ± 1.414

 19.73 ± 15.25

396.4 / 66

 77.26 ± 0.98

 -8.82 ± 0.03

 4.176 ± 0.265

 6.933 ± 0.118

 2.395 ± 0.113

 3 ± 0.0

Fgd2HAFwd_ToF_ECal_FGD2_track χ^2 / ndf 92.54 / 55 p0 34.36 ± 2.30 -2.629 ± 0.416 #Events p2 3.085 ± 0.352 ▲ P6 MC p3 190.3 ± 6.2 250 P6 Data p4 4.497 ± 0.075 **p5** 2.012 ± 0.063 Fit P6 MC 200 Fit P6 Data 150 100 χ^2 / ndf 241.1 / 61 p0 12.1 ± 0.5 p1 -2.998 ± 0.094 50 p2 2.25 ± 0.08 212.2 ± 2.2 p3 p4 4.666 ± 0.013 **p5** 1.572 ± 0.012 ToF BrECal-FGD2

χ^2 / ndf Fgd2HAFwd_ToF_ECal_FGD2_shower 63.95 / 47 p0 9.381 ± 1.139 #Events **p1** -3.495 ± 0.459 45 p2 2.944 ± 0.438 ▲ P6 MC 24.54 ± 2.03 p3 P6 Data 40 p4 4.781 ± 0.192 **p5** 2.129 ± 0.162 Fit P6 MC 35 Fit P6 Data 30 25 20 χ^2 / ndf 140.2 / 55 15 p0 5.976 ± 0.325 -4.391 ± 0.098 p1 10 p2 2.187 ± 0.093 р3 30.98 ± 0.87 5 p4 4.44 ± 0.04 **p5** 1.654 ± 0.033 -5 5 ToF BrECal-FGD2

Fgd2HABwd_ToF_ECal_FGD2_track χ^2 / ndf 172.4 / 60 p0 168.1 ± 5.2 **p1** -4.908 ± 0.061 240 #Events p2 2.635 ± 0.066 △ P6 MC 220 p3 15.7 ± 2.0 P6 Data p4 3.905 ± 0.246 200 **p5** 1.923 ± 0.262 Fit P6 MC 180 Fit P6 Data 160 140 120 100 χ^2 / ndf 517.4 / 61 80 p0 180.5 ± 1.8 60 -4.709 ± 0.016 **p1** p2 2.018 ± 0.013 40 14.48 ± 0.59 p3 20 p4 3.882 ± 0.061 **p5** 1.727 ± 0.062 0<u>20</u> -10-5-15 ToF BrECal-FGD2

χ^2 / ndf Fgd2HABwd_ToF_ECal_FGD2_shower 54.83 / 44 p0 35.5 ± 2.2 **p1** -4.386 ± 0.156 #Events p2 3.442 ± 0.182 ▲ P6 MC p3 2.435 ± 1.159 50 P6 Data p4 4.774 ± 0.856 **p5** 1.566 ± 0.764 Fit P6 MC Fit P6 Data 40 30 20 χ^2 / ndf 257.8 / 54 p0 37.07 ± 0.82 -5.031 ± 0.041 p1 10 p2 2.307 ± 0.037 3.156 ± 0.293 p3 p4 4.283 ± 0.118 **p5** 1.481 ± 0.114 -10 -5 15 ToF BrECal-FGD2