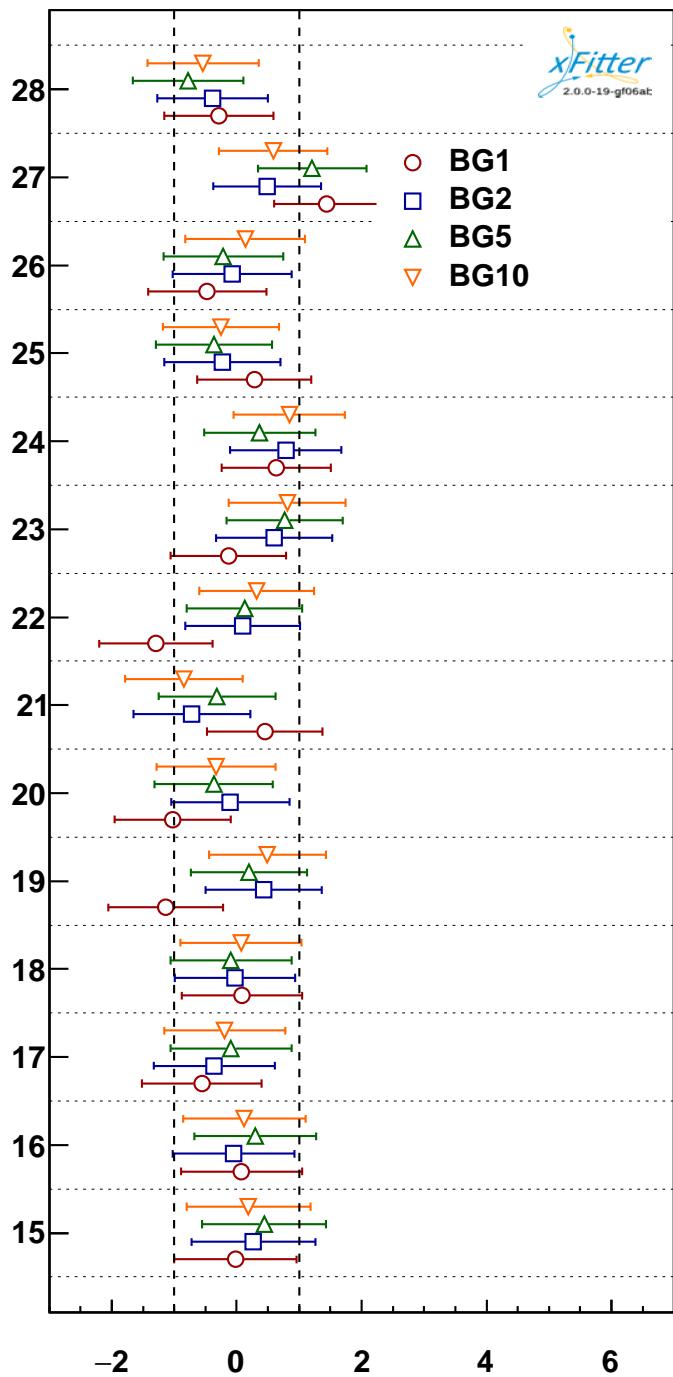
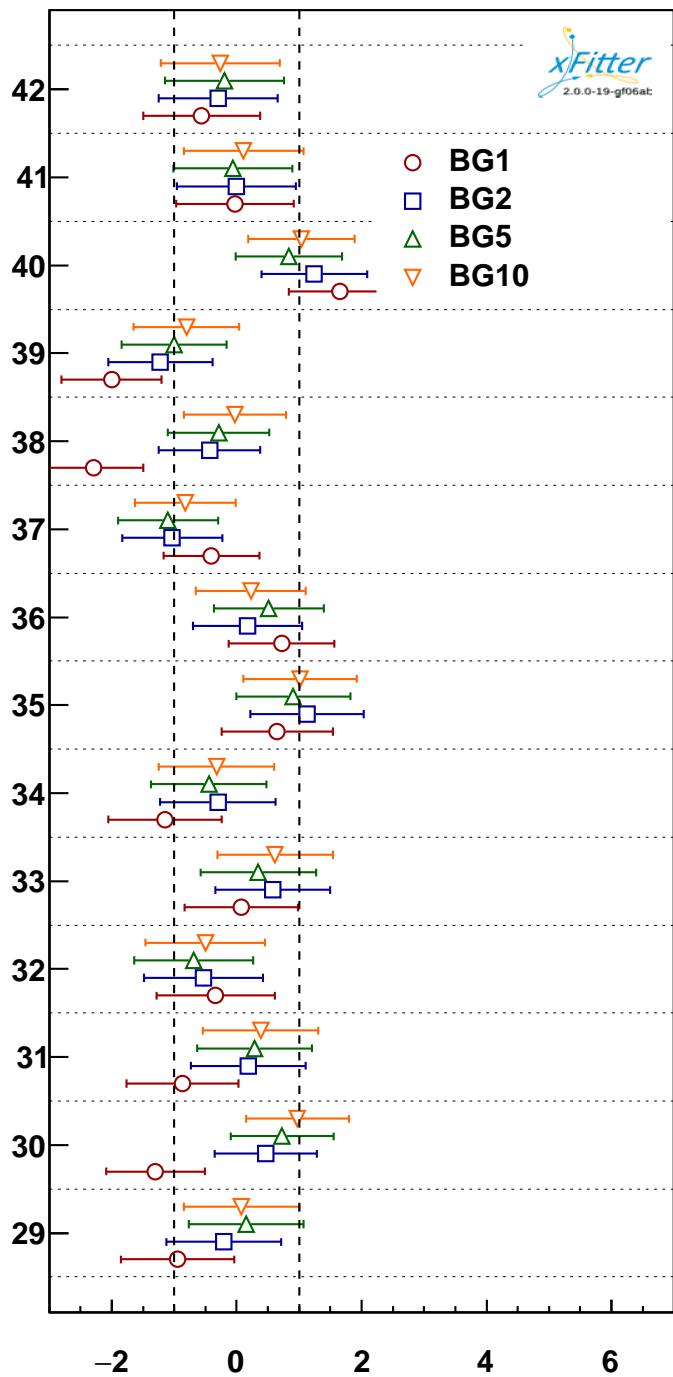


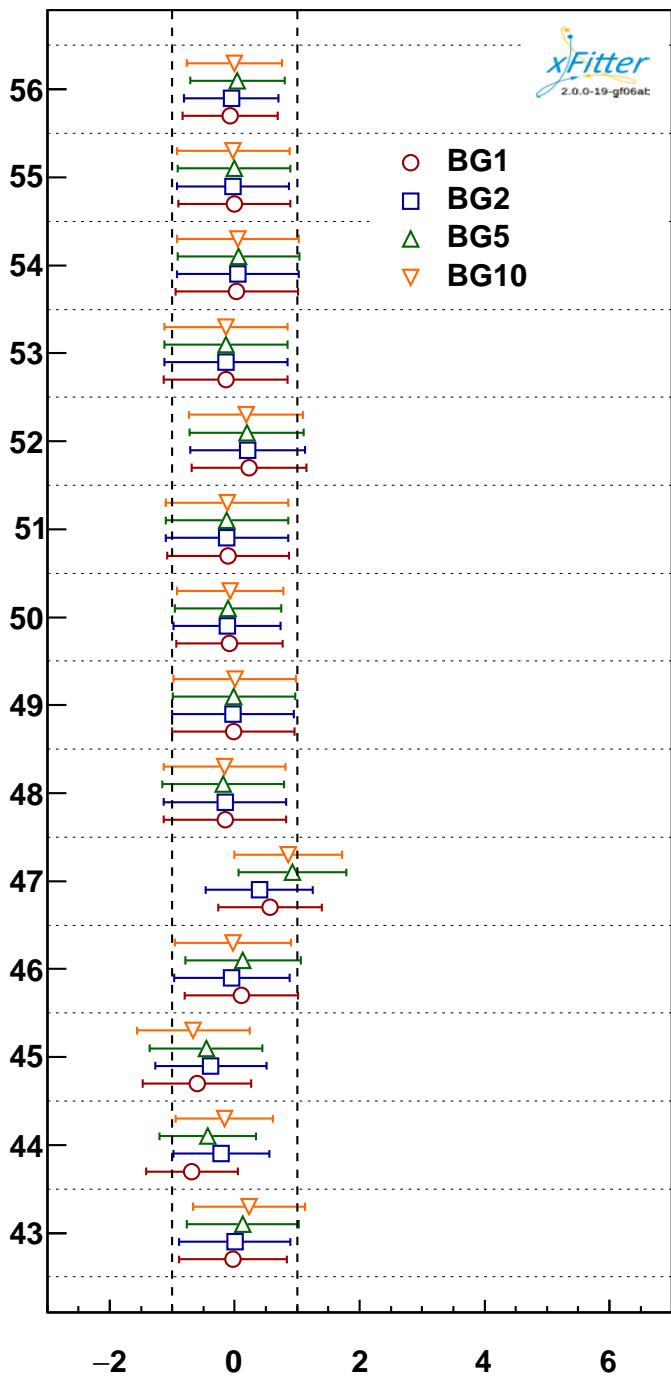
- 14 HERA\_Charm\_Source\_09
- 13 HERA\_Charm\_Source\_08
- 12 HERA\_Charm\_Source\_07
- 11 HERA\_Charm\_Source\_06
- 10 HERA\_Charm\_Source\_05
- 9 HERA\_Charm\_Source\_04
- 8 HERA\_Charm\_Source\_03
- 7 HERA\_Charm\_Source\_02
- 6 HERA\_Charm\_Source\_01
- 5 HERA\_Charm\_Proced\_02
- 4 HERA\_Charm\_Proced\_01
- 3 CST
- 2 BFDp
- 1 BFD0



- 28 HERA\_Charm\_Source\_23  
27 HERA\_Charm\_Source\_22  
26 HERA\_Charm\_Source\_21  
25 HERA\_Charm\_Source\_20  
24 HERA\_Charm\_Source\_19  
23 HERA\_Charm\_Source\_18  
22 HERA\_Charm\_Source\_17  
21 HERA\_Charm\_Source\_16  
20 HERA\_Charm\_Source\_15  
19 HERA\_Charm\_Source\_14  
18 HERA\_Charm\_Source\_13  
17 HERA\_Charm\_Source\_12  
16 HERA\_Charm\_Source\_11  
15 HERA\_Charm\_Source\_10



- 42 HERA\_Chang\_Source\_37  
41 HERA\_Chang\_Source\_36  
40 HERA\_Chang\_Source\_35  
39 HERA\_Chang\_Source\_34  
38 HERA\_Chang\_Source\_33  
37 HERA\_Chang\_Source\_32  
36 HERA\_Chang\_Source\_31  
35 HERA\_Chang\_Source\_30  
34 HERA\_Chang\_Source\_29  
33 HERA\_Chang\_Source\_28  
32 HERA\_Chang\_Source\_27  
31 HERA\_Chang\_Source\_26  
30 HERA\_Chang\_Source\_25  
29 HERA\_Chang\_Source\_24



56 mulB

55 hadE

54 gp

53 fragc

52 fragb

51 etac

50 etab

49 dF2

48 cjc

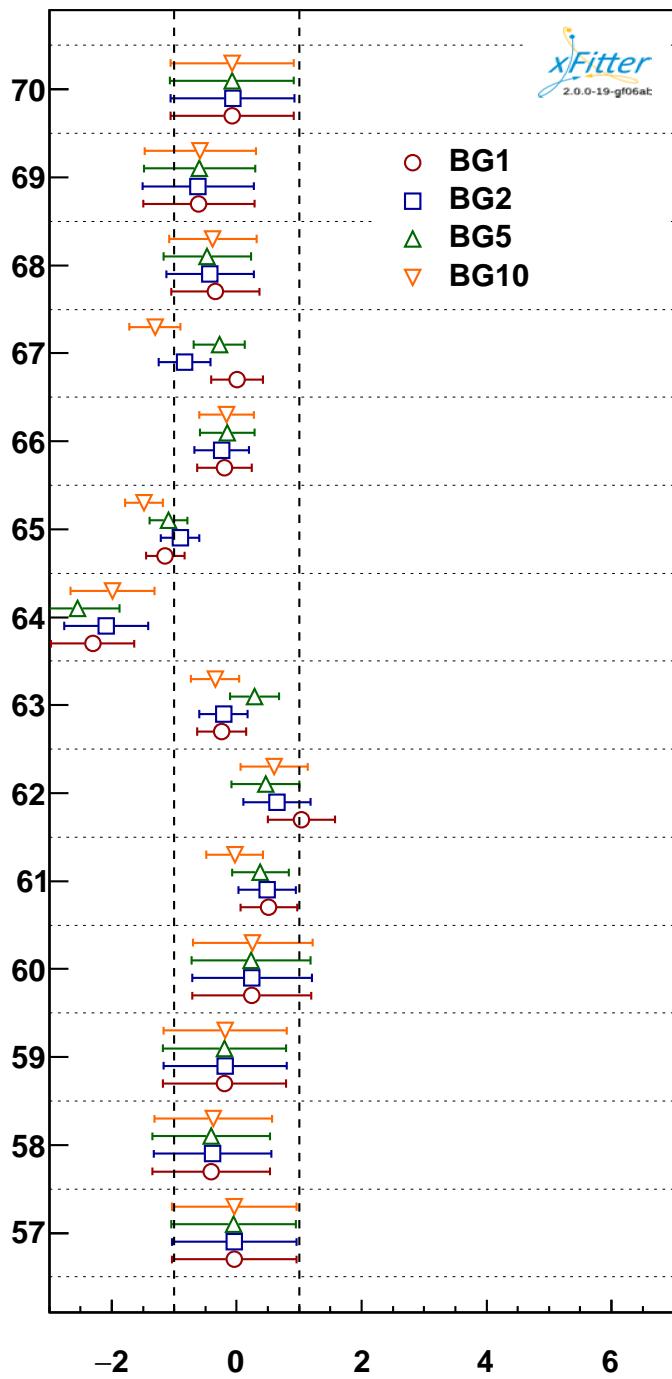
47 HERA\_Chang\_Source\_42

46 HERA\_Chang\_Source\_41

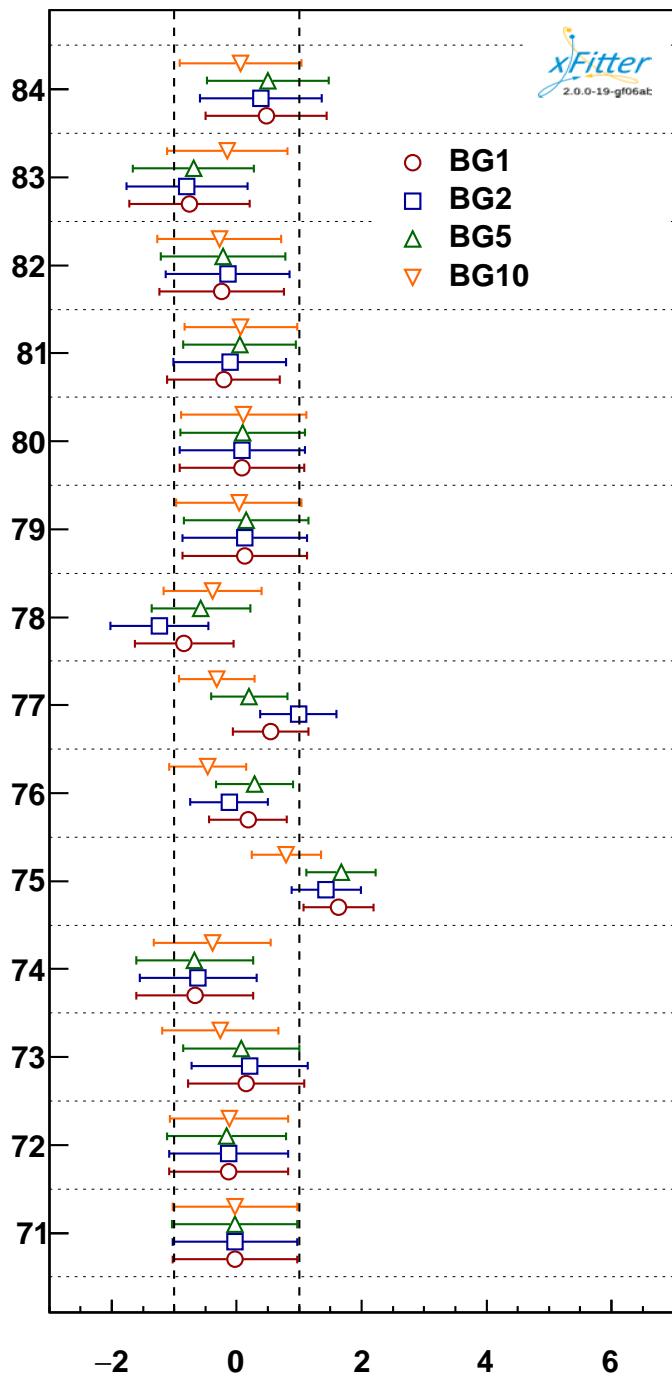
45 HERA\_Chang\_Source\_40

44 HERA\_Chang\_Source\_39

43 HERA\_Chang\_Source\_38



- 70 q2b
- 69 ptc
- 68 ptb
- 67 proc\_tb24
- 66 proc\_tb23
- 65 proc\_tb22
- 64 proc\_tb21
- 63 proc\_nrl
- 62 proc\_had
- 61 proc\_gp
- 60 phiq
- 59 mulDs
- 58 mulDp
- 57 mulD0



84 sysHZComb1012

83 sysHZComb1011

82 sysHZComb1010

81 sysHZComb1009

80 sysHZComb1008

79 sysHZComb1007

78 sysHZComb1006

77 sysHZComb1005

76 sysHZComb1004

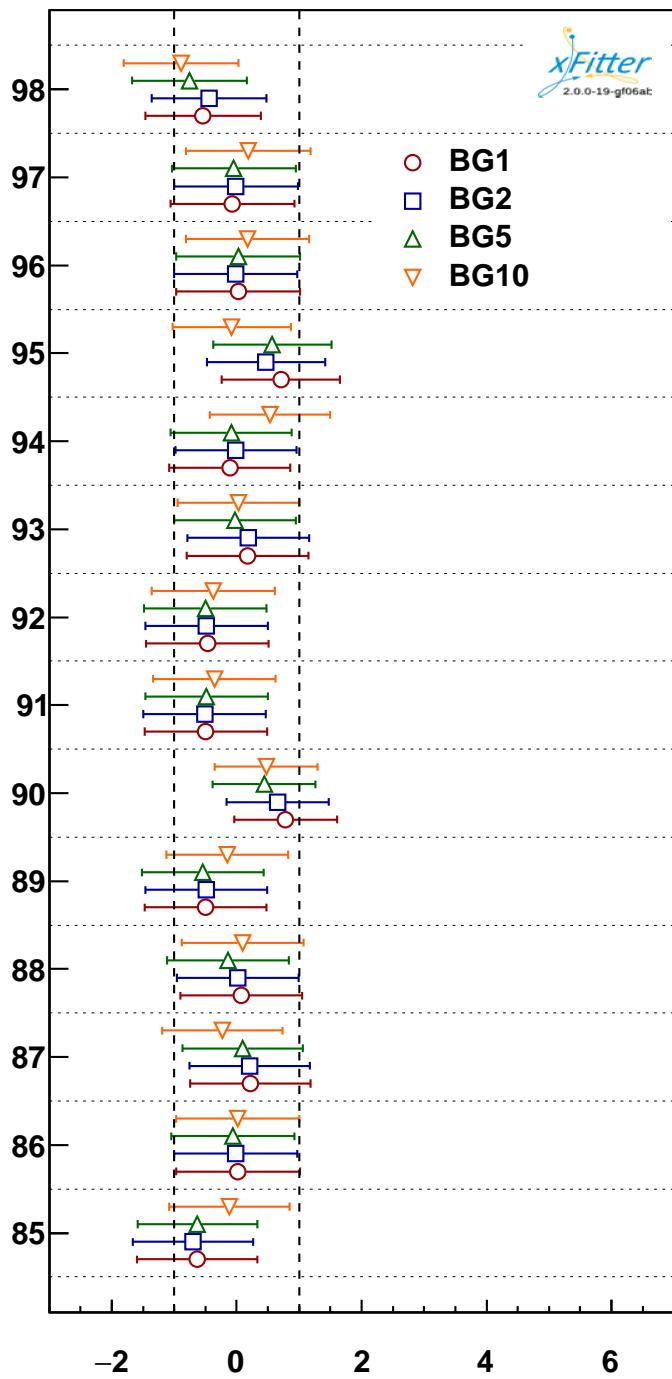
75 sysHZComb1003

74 sysHZComb1002

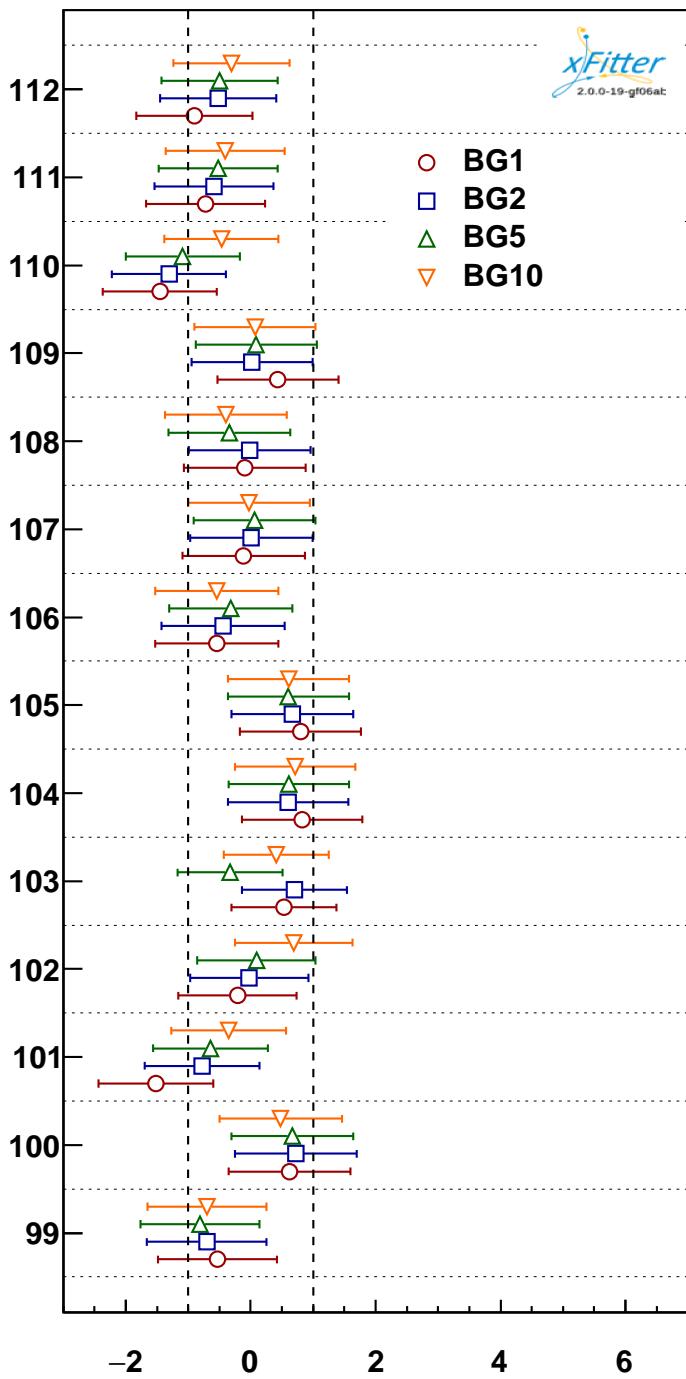
73 sysHZComb1001

72 res

71 q2c



- 98 sysHZComb1026
- 97 sysHZComb1025
- 96 sysHZComb1024
- 95 sysHZComb1023
- 94 sysHZComb1022
- 93 sysHZComb1021
- 92 sysHZComb1020
- 91 sysHZComb1019
- 90 sysHZComb1018
- 89 sysHZComb1017
- 88 sysHZComb1016
- 87 sysHZComb1015
- 86 sysHZComb1014
- 85 sysHZComb1013



112 sysHZComb1040

111 sysHZComb1039

110 sysHZComb1038

109 sysHZComb1037

108 sysHZComb1036

107 sysHZComb1035

106 sysHZComb1034

105 sysHZComb1033

104 sysHZComb1032

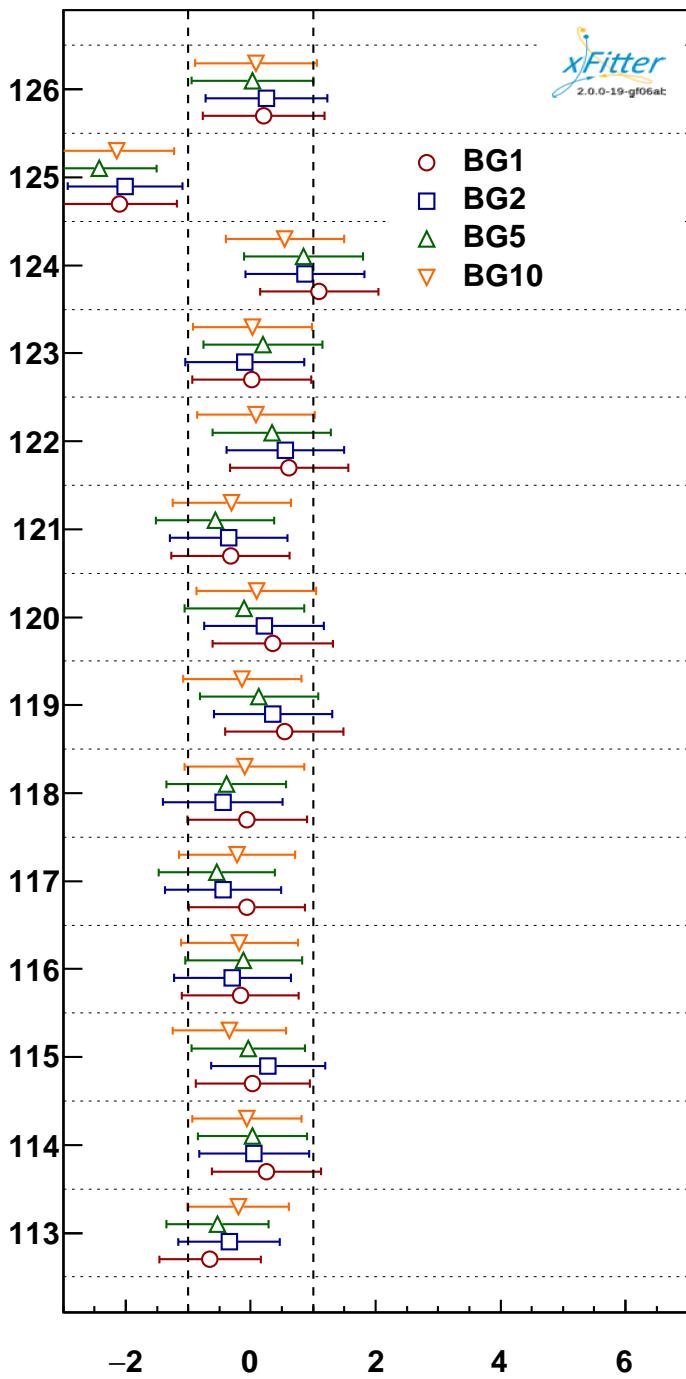
103 sysHZComb1031

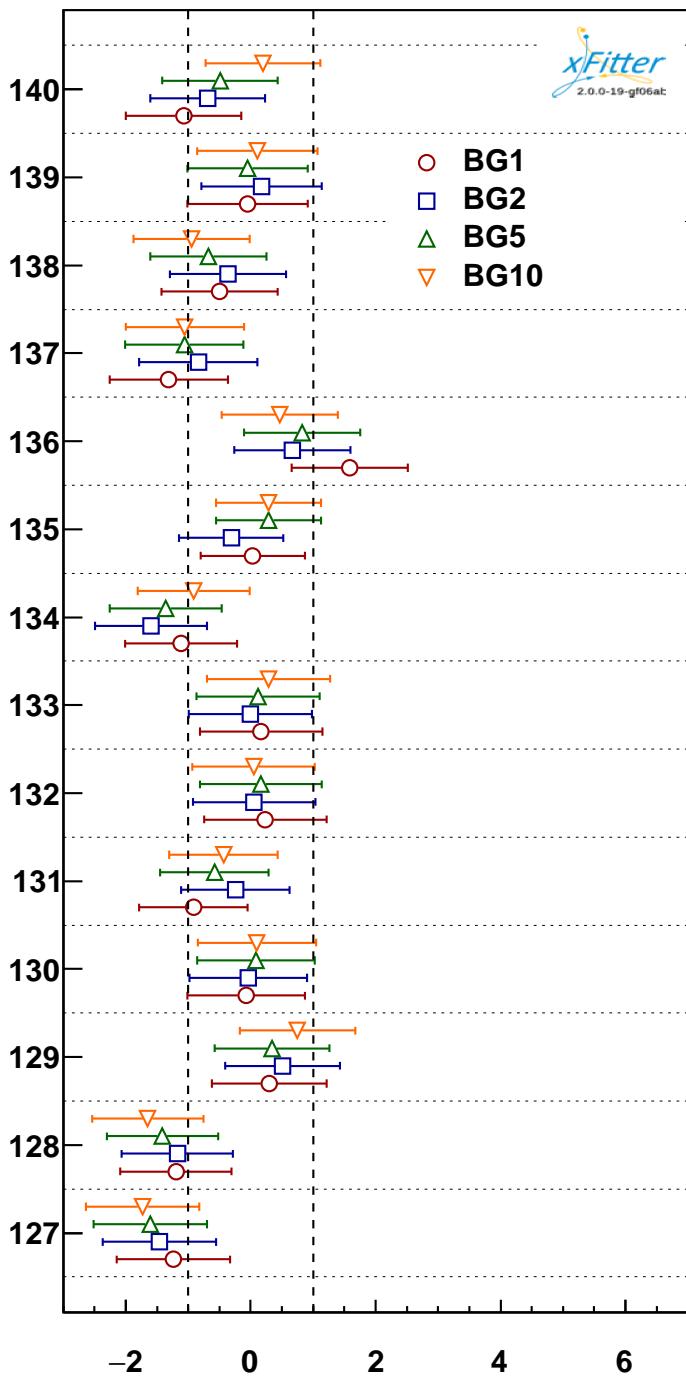
102 sysHZComb1030

101 sysHZComb1029

100 sysHZComb1028

99 sysHZComb1027





140 sysHZComb1068

139 sysHZComb1067

138 sysHZComb1066

137 sysHZComb1065

136 sysHZComb1064

135 sysHZComb1063

134 sysHZComb1062

133 sysHZComb1061

132 sysHZComb1060

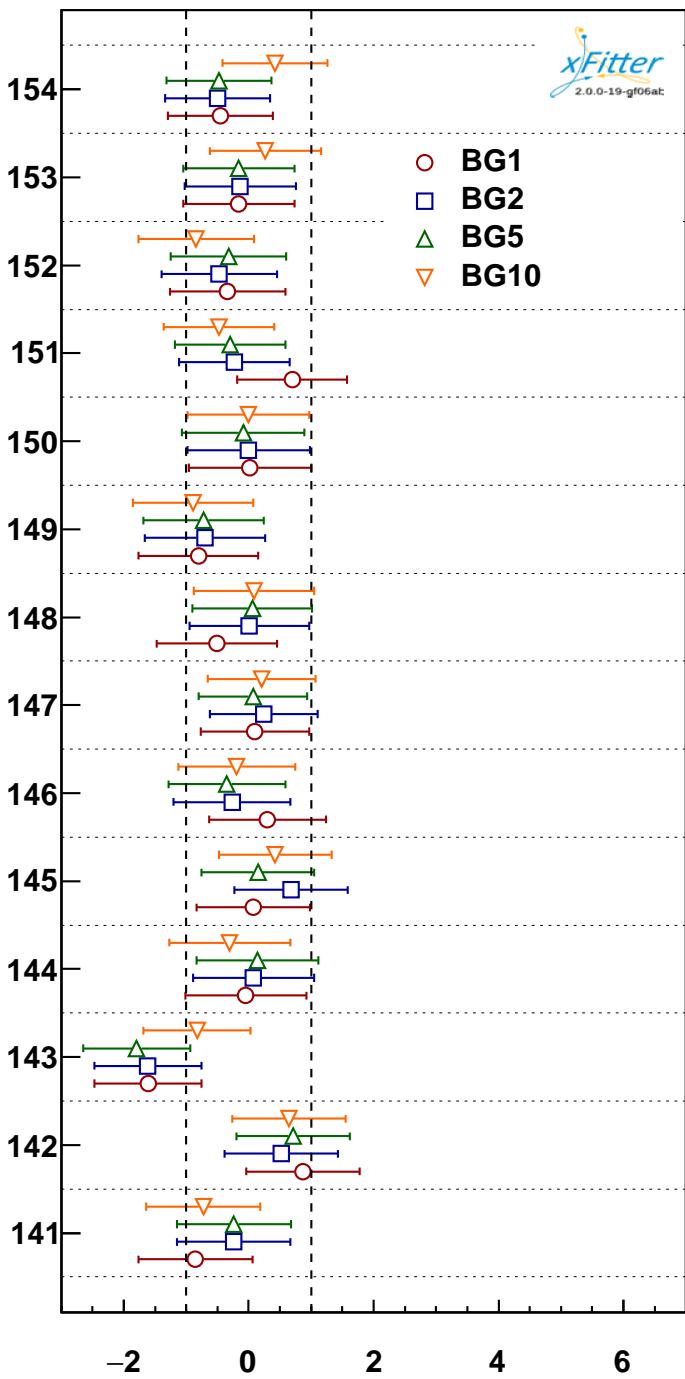
131 sysHZComb1059

130 sysHZComb1058

129 sysHZComb1057

128 sysHZComb1056

127 sysHZComb1055



154 sysHZComb1082

153 sysHZComb1081

152 sysHZComb1080

151 sysHZComb1079

150 sysHZComb1078

149 sysHZComb1077

148 sysHZComb1076

147 sysHZComb1075

146 sysHZComb1074

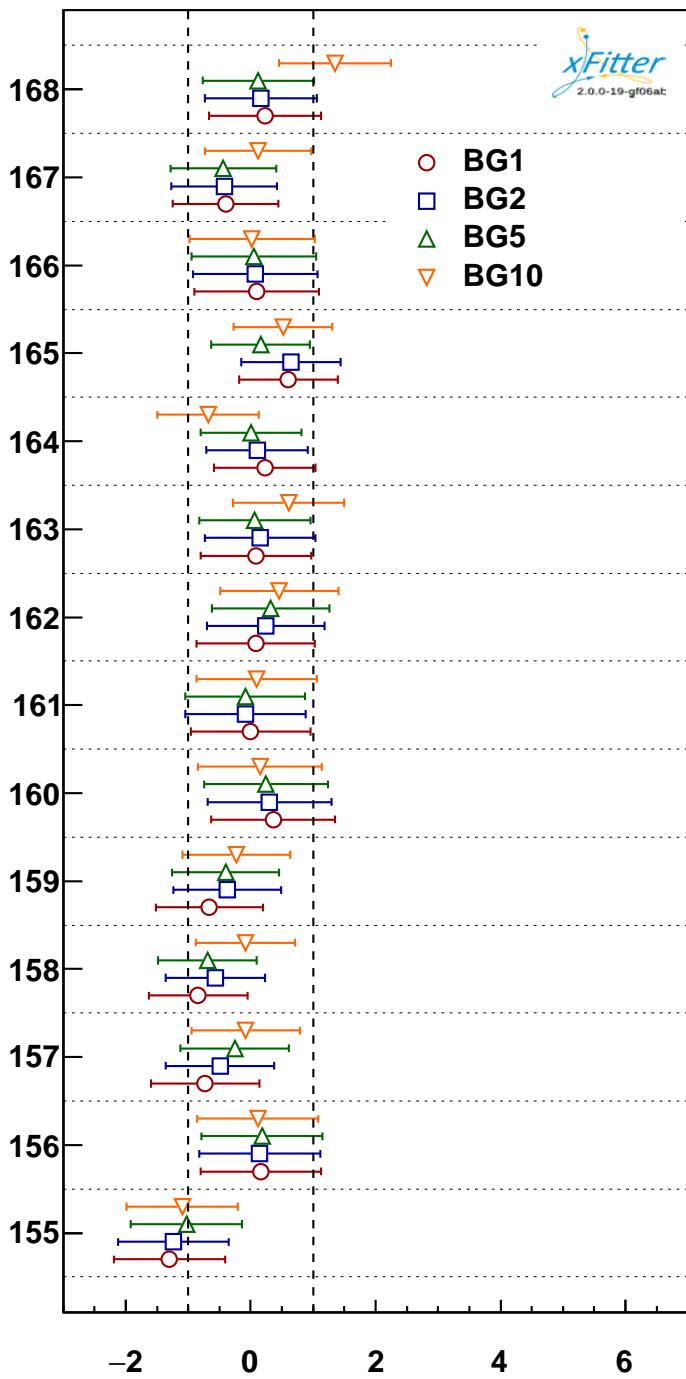
145 sysHZComb1073

144 sysHZComb1072

143 sysHZComb1071

142 sysHZComb1070

141 sysHZComb1069



168 sysHZComb1096

167 sysHZComb1095

166 sysHZComb1094

165 sysHZComb1093

164 sysHZComb1092

163 sysHZComb1091

162 sysHZComb1090

161 sysHZComb1089

160 sysHZComb1088

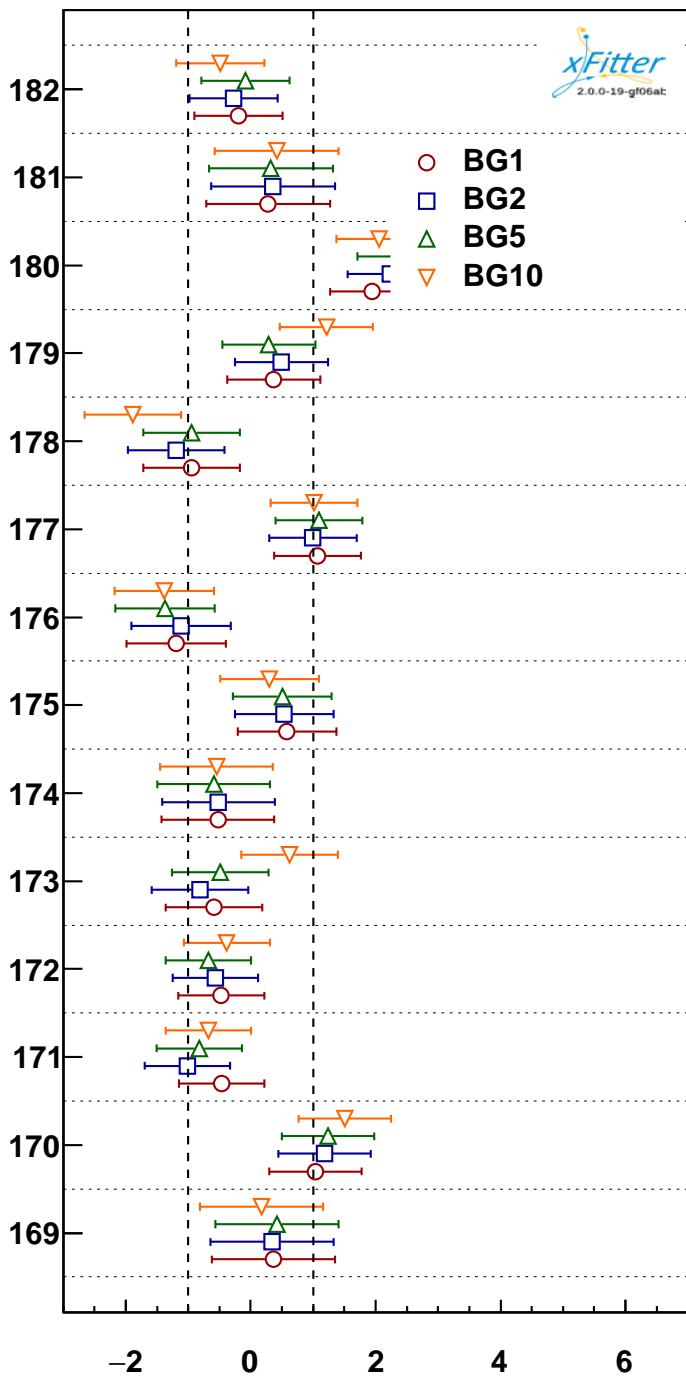
159 sysHZComb1087

158 sysHZComb1086

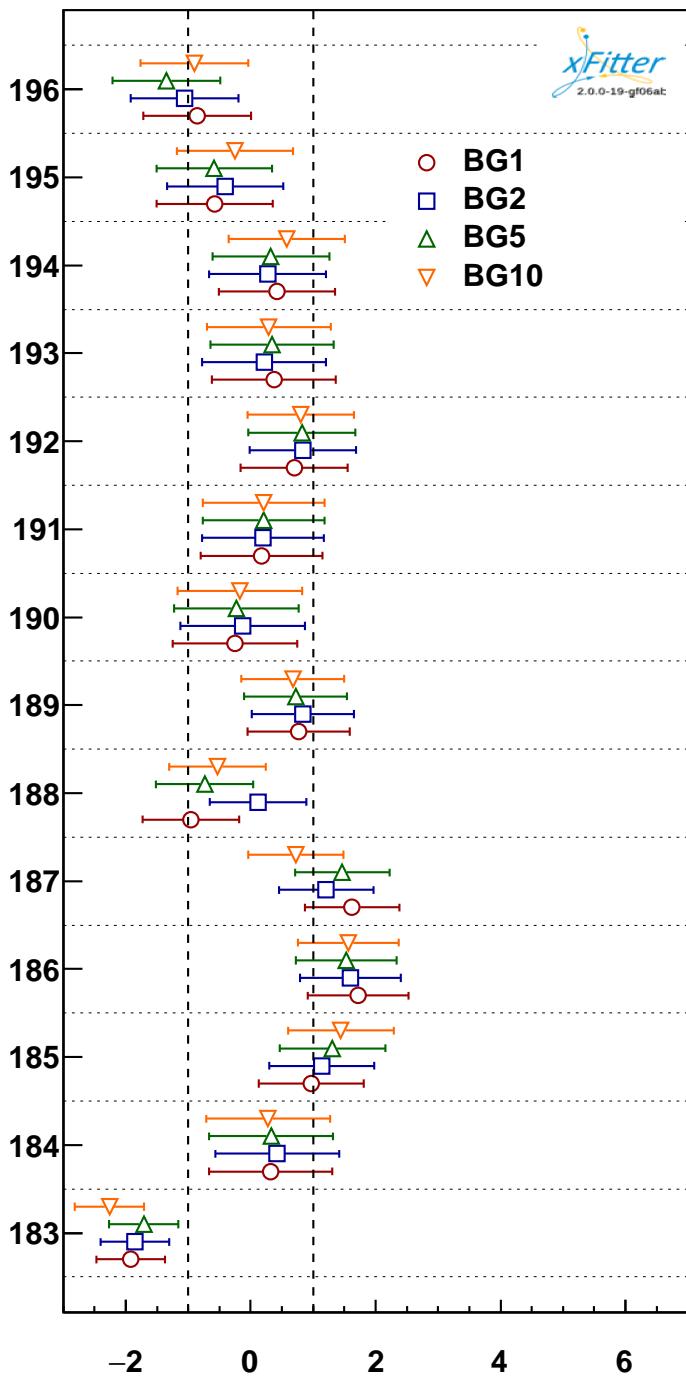
157 sysHZComb1085

156 sysHZComb1084

155 sysHZComb1083



- 182 sysHZComb1110
- 181 sysHZComb1109
- 180 sysHZComb1108
- 179 sysHZComb1107
- 178 sysHZComb1106
- 177 sysHZComb1105
- 176 sysHZComb1104
- 175 sysHZComb1103
- 174 sysHZComb1102
- 173 sysHZComb1101
- 172 sysHZComb1100
- 171 sysHZComb1099
- 170 sysHZComb1098
- 169 sysHZComb1097



196 sysHZComb1124

195 sysHZComb1123

194 sysHZComb1122

193 sysHZComb1121

192 sysHZComb1120

191 sysHZComb1119

190 sysHZComb1118

189 sysHZComb1117

188 sysHZComb1116

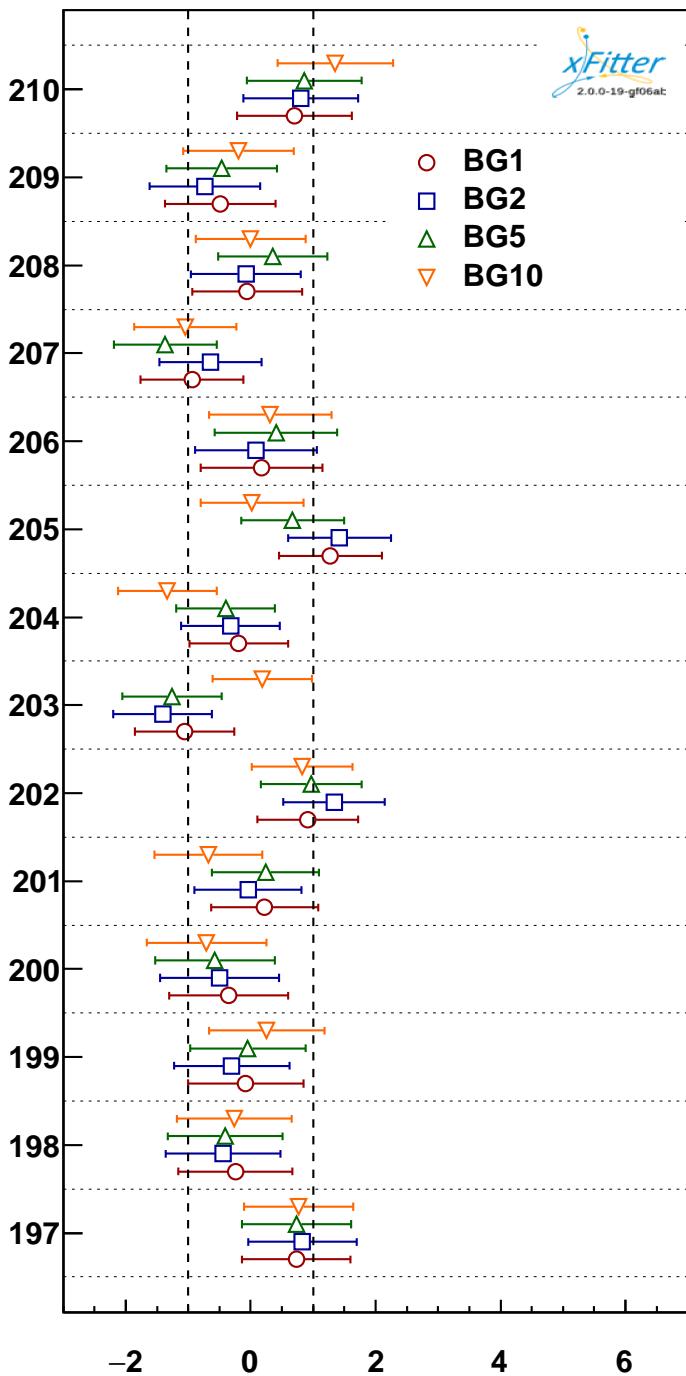
187 sysHZComb1115

186 sysHZComb1114

185 sysHZComb1113

184 sysHZComb1112

183 sysHZComb1111



210 sysHZComb1138

209 sysHZComb1137

208 sysHZComb1136

207 sysHZComb1135

206 sysHZComb1134

205 sysHZComb1133

204 sysHZComb1132

203 sysHZComb1131

202 sysHZComb1130

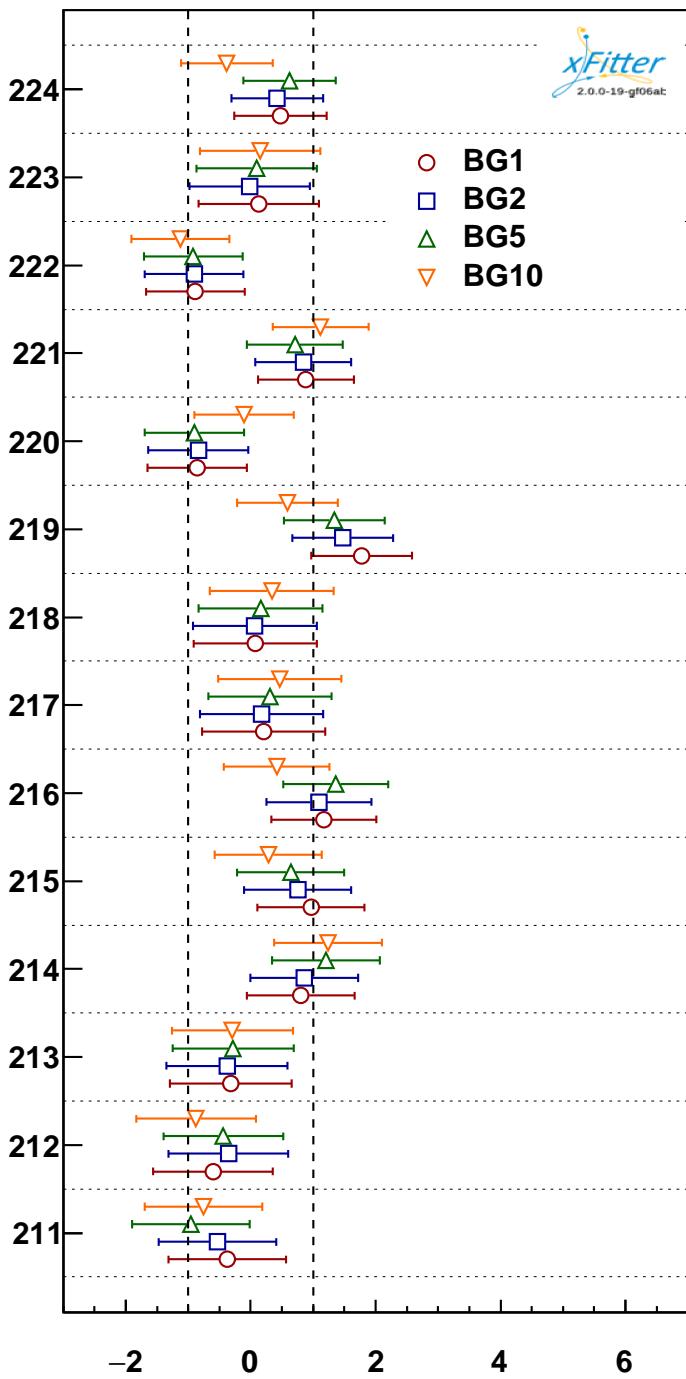
201 sysHZComb1129

200 sysHZComb1128

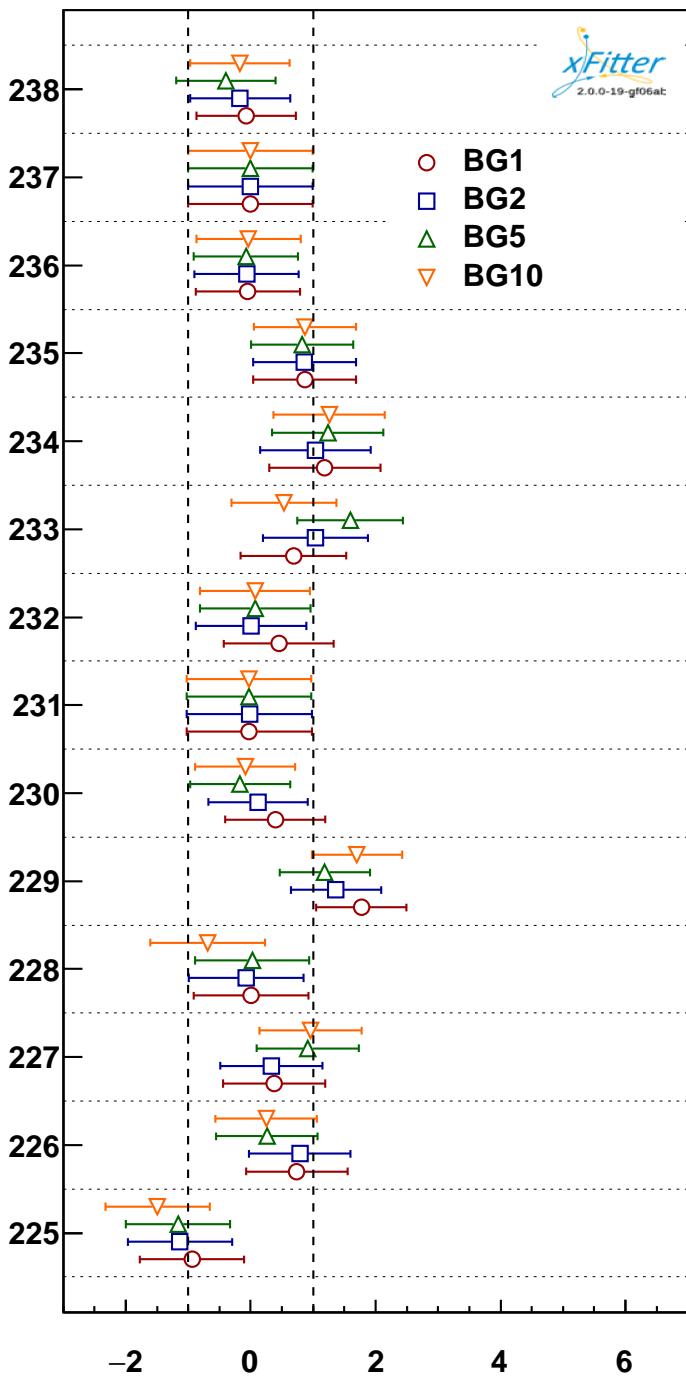
199 sysHZComb1127

198 sysHZComb1126

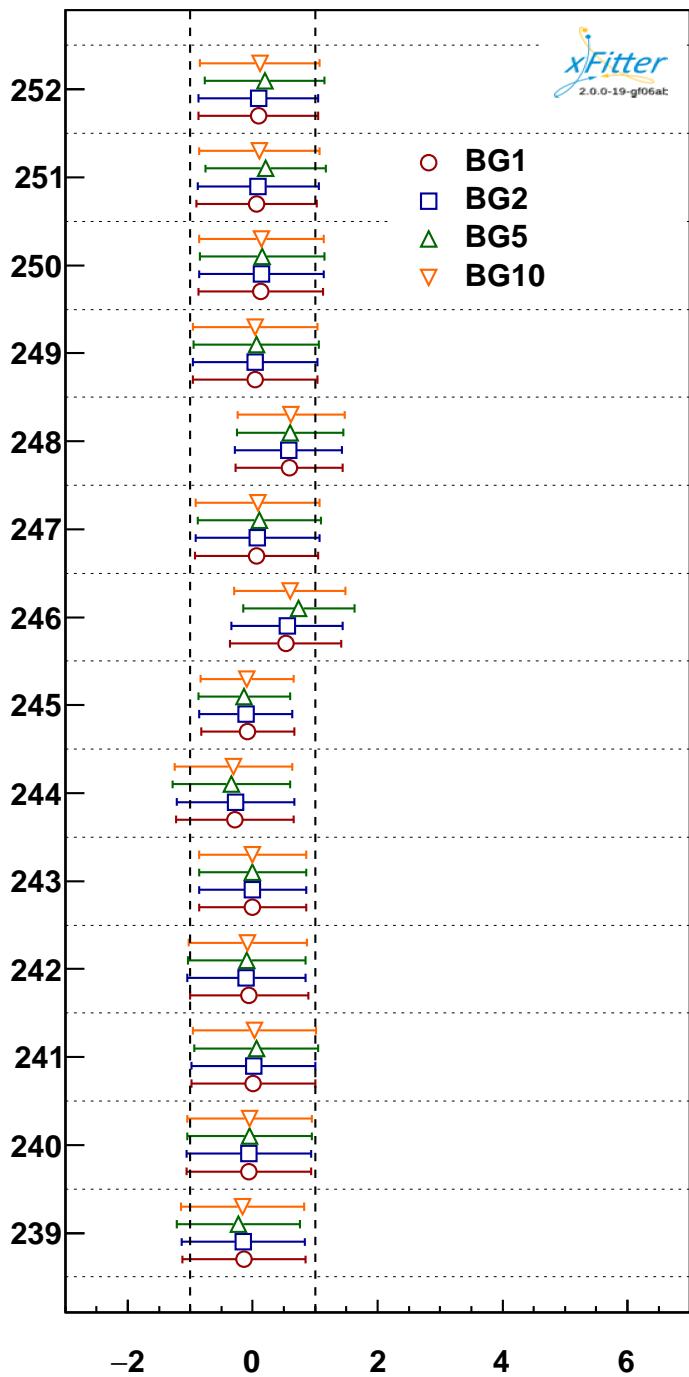
197 sysHZComb1125



224 sysHZComb1152  
223 sysHZComb1151  
222 sysHZComb1150  
221 sysHZComb1149  
220 sysHZComb1148  
219 sysHZComb1147  
218 sysHZComb1146  
217 sysHZComb1145  
216 sysHZComb1144  
215 sysHZComb1143  
214 sysHZComb1142  
213 sysHZComb1141  
212 sysHZComb1140  
211 sysHZComb1139



238 zbv\_MCmodelenjetb  
237 xc  
236 xb  
235 uds  
234 sysHZComb1162  
233 sysHZComb1161  
232 sysHZComb1160  
231 sysHZComb1159  
230 sysHZComb1158  
229 sysHZComb1157  
228 sysHZComb1156  
227 sysHZComb1155  
226 sysHZComb1154  
225 sysHZComb1153



252 zbv\_trackingef

251 zbv\_renfacscale

250 zbv\_mbeauty

249 zbv\_lumi

248 zbv\_lfas

247 zbv\_jetenscale

246 zbv\_fragfrac

245 zbv\_emscale

244 zbv\_core

243 zbv\_beauty

242 zbv\_asvar

241 zbv\_MCmodetab

240 zbv\_MCmodelq2b

239 zbv\_MCmodelenjetc

Dataset	BG1	BG2	BG5	BG10
Beauty cross section ZEUS Vertex	12 / 17	12 / 17	12 / 17	12 / 17
Charm cross section H1-ZEUS combined	41 / 47	53 / 47	61 / 47	59 / 47
HERA1+2 CCep	45 / 39	45 / 39	47 / 39	49 / 39
HERA1+2 CCem	50 / 42	52 / 42	51 / 42	52 / 42
HERA1+2 NCem	228 / 159	221 / 159	227 / 159	273 / 159
HERA1+2 NCep 820	69 / 70	64 / 70	65 / 70	73 / 70
HERA1+2 NCep 920	494 / 377	477 / 377	523 / 377	516 / 377
HERA1+2 NCep 460	220 / 204	242 / 204	229 / 204	233 / 204
HERA1+2 NCep 575	224 / 254	225 / 254	226 / 254	217 / 254
H1 F2 Beauty Vertex	3.1 / 12	2.9 / 12	2.8 / 12	2.9 / 12
Correlated $\chi^2$	129	102	112	104
Log penalty $\chi^2$	-0.10	+0.42	-5.09	-16.01
Total $\chi^2$ / dof	1515 / 1207	1496 / 1207	1548 / 1207	1576 / 1207
$\chi^2$ p-value	0.00	0.00	0.00	0.00

Parameter	BG1	BG2	BG5	BG10
'Bg'	$0.014 \pm 0.016$	$-0.031 \pm 0.090$	$-0.079 \pm 0.082$	$-0.15 \pm 0.11$
'Cg'	$10.27 \pm 0.29$	$10.3 \pm 1.2$	$11.0 \pm 1.1$	$7.9 \pm 1.1$
'Aprig'	$2.28 \pm 0.18$	$4.0 \pm 1.3$	$4.2 \pm 1.0$	$2.34 \pm 0.64$
'Bprig'	$-0.1340 \pm 0.0094$	$-0.063 \pm 0.079$	$-0.132 \pm 0.057$	$-0.197 \pm 0.091$
'Cprig'	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>
'Buv'	$0.713 \pm 0.015$	$0.746 \pm 0.038$	$0.720 \pm 0.038$	$0.673 \pm 0.039$
'Cuv'	$4.904 \pm 0.074$	$4.681 \pm 0.084$	$4.697 \pm 0.077$	$4.774 \pm 0.077$
'Euv'	$15.1 \pm 1.1$	$11.9 \pm 2.0$	$13.3 \pm 2.0$	$16.3 \pm 2.6$
'Bdv'	$0.876 \pm 0.049$	$0.915 \pm 0.100$	$0.919 \pm 0.093$	$0.843 \pm 0.096$
'Cdv'	$4.91 \pm 0.30$	$4.38 \pm 0.39$	$4.42 \pm 0.37$	$4.10 \pm 0.40$
'CUbar'	$8.57 \pm 0.40$	$7.84 \pm 0.81$	$8.49 \pm 0.70$	$8.19 \pm 0.66$
'DUbar'	$32.0 \pm 2.6$	$13.9 \pm 3.3$	$24.9 \pm 4.0$	$19.5 \pm 3.7$
'ADbar'	$0.0785 \pm 0.0034$	$0.157 \pm 0.012$	$0.1169 \pm 0.0092$	$0.140 \pm 0.011$
'BDbar'	$-0.2582 \pm 0.0050$	$-0.1710 \pm 0.0093$	$-0.2076 \pm 0.0094$	$-0.1864 \pm 0.0095$
'CDbar'	$1.22 \pm 0.22$	$5.3 \pm 1.6$	$5.2 \pm 1.6$	$6.3 \pm 2.0$
'alphas'	<b>0.1180</b>	<b>0.1180</b>	<b>0.1180</b>	<b>0.1180</b>
'fs'	<b>0.4000</b>	<b>0.4000</b>	<b>0.4000</b>	<b>0.4000</b>
Fit status	<b>not-a-fit</b>	converged	converged	converged
Uncertainties	not-a-fit	migrad-hesse	migrad-hesse	migrad-hesse