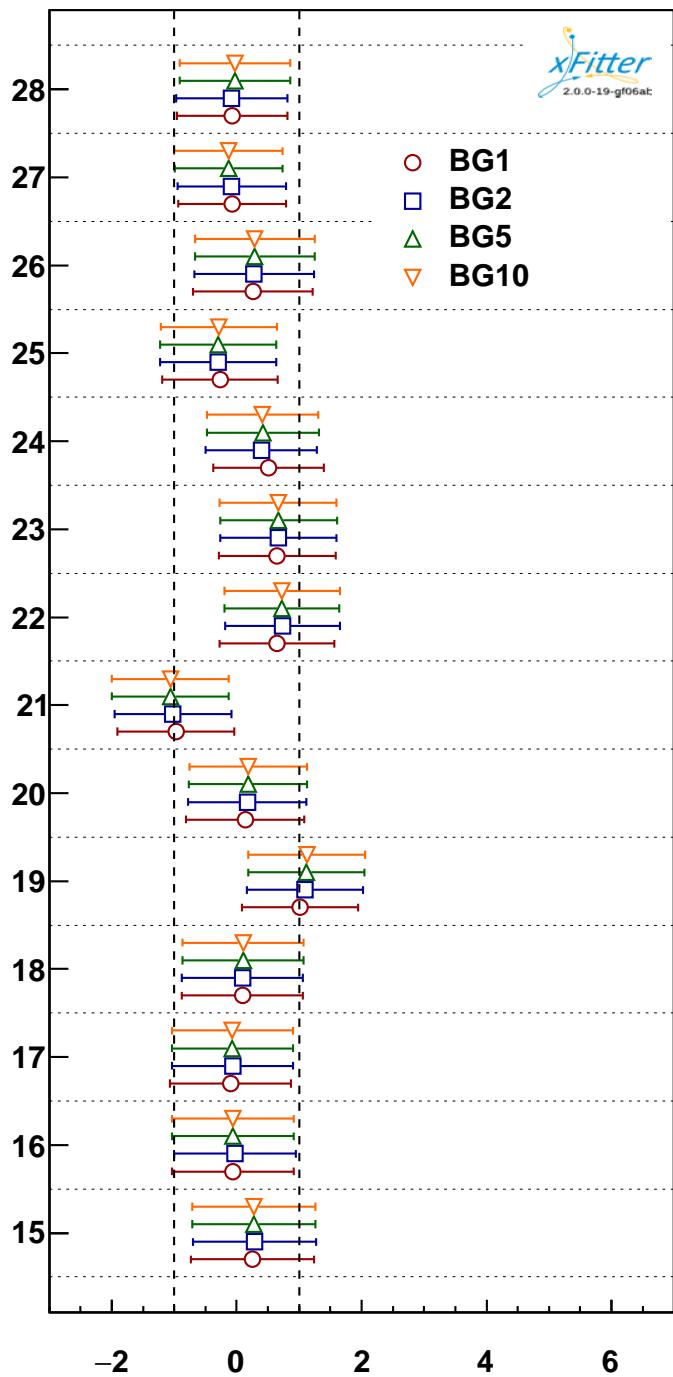
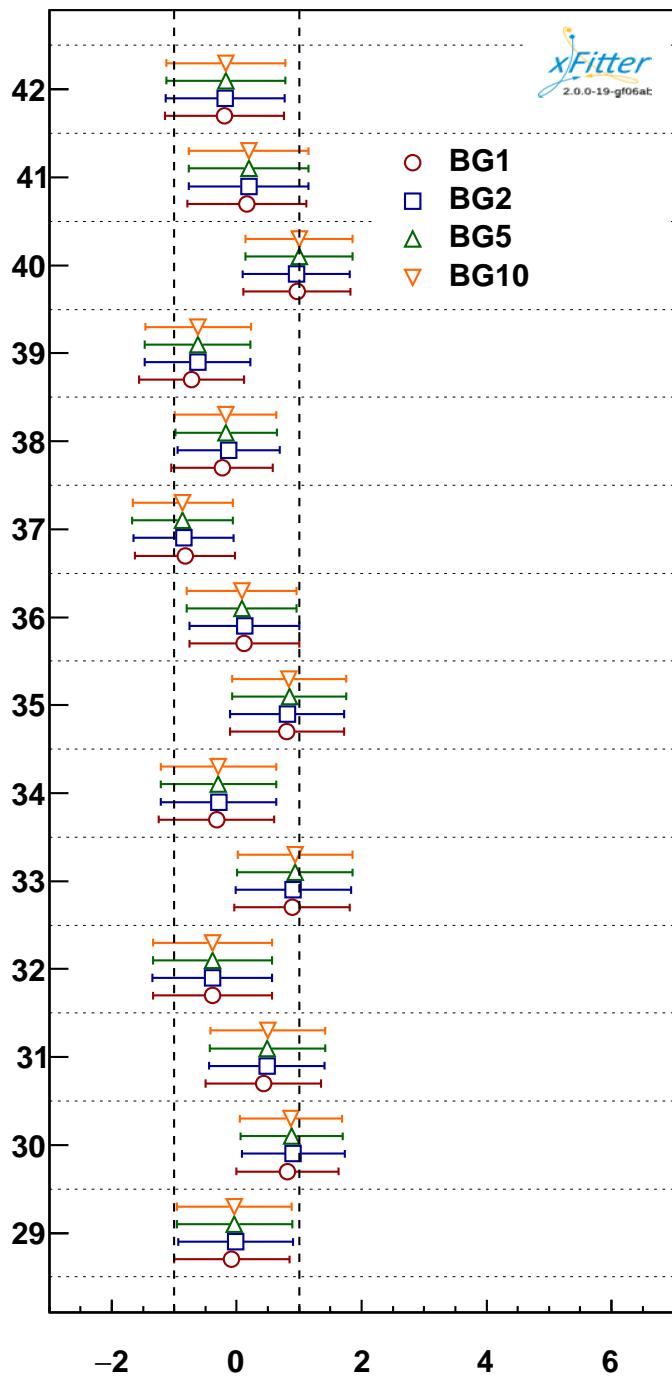


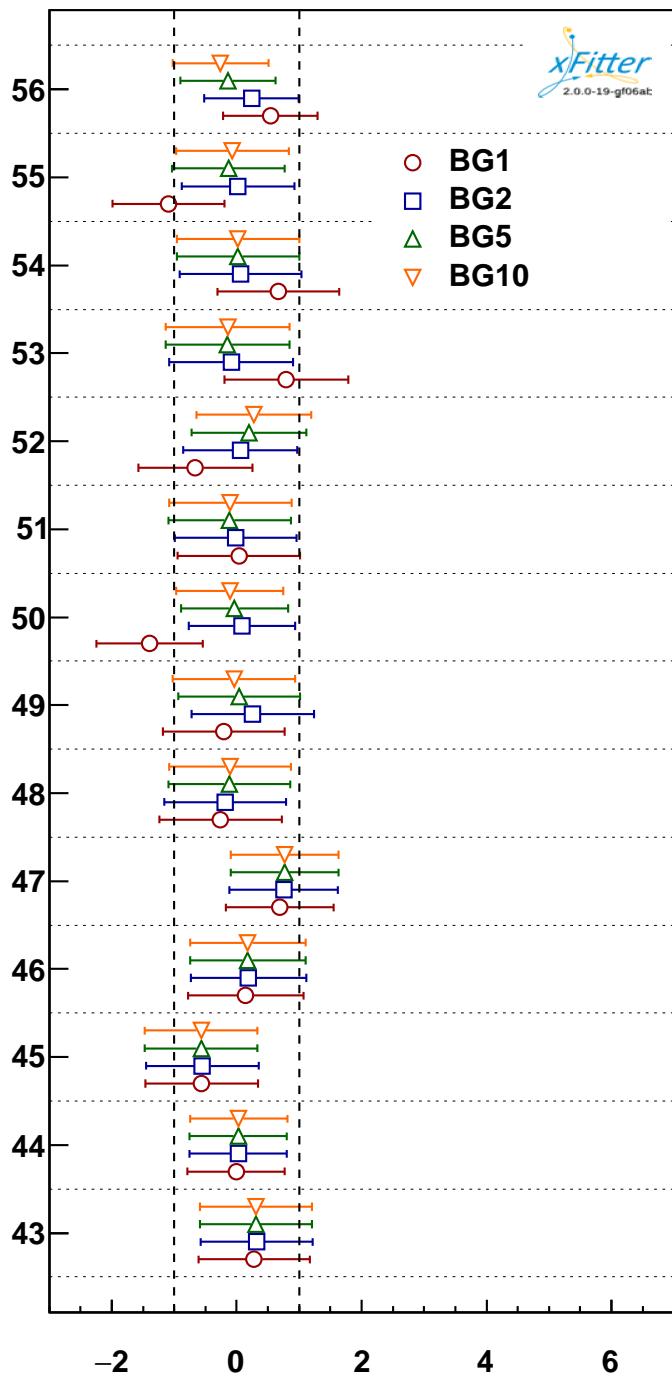
- 14 HERA_Charm_Source_09
- 13 HERA_Charm_Source_08
- 12 HERA_Charm_Source_07
- 11 HERA_Charm_Source_06
- 10 HERA_Charm_Source_05
- 9 HERA_Charm_Source_04
- 8 HERA_Charm_Source_03
- 7 HERA_Charm_Source_02
- 6 HERA_Charm_Source_01
- 5 HERA_Charm_Proced_02
- 4 HERA_Charm_Proced_01
- 3 CST
- 2 BFDp
- 1 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

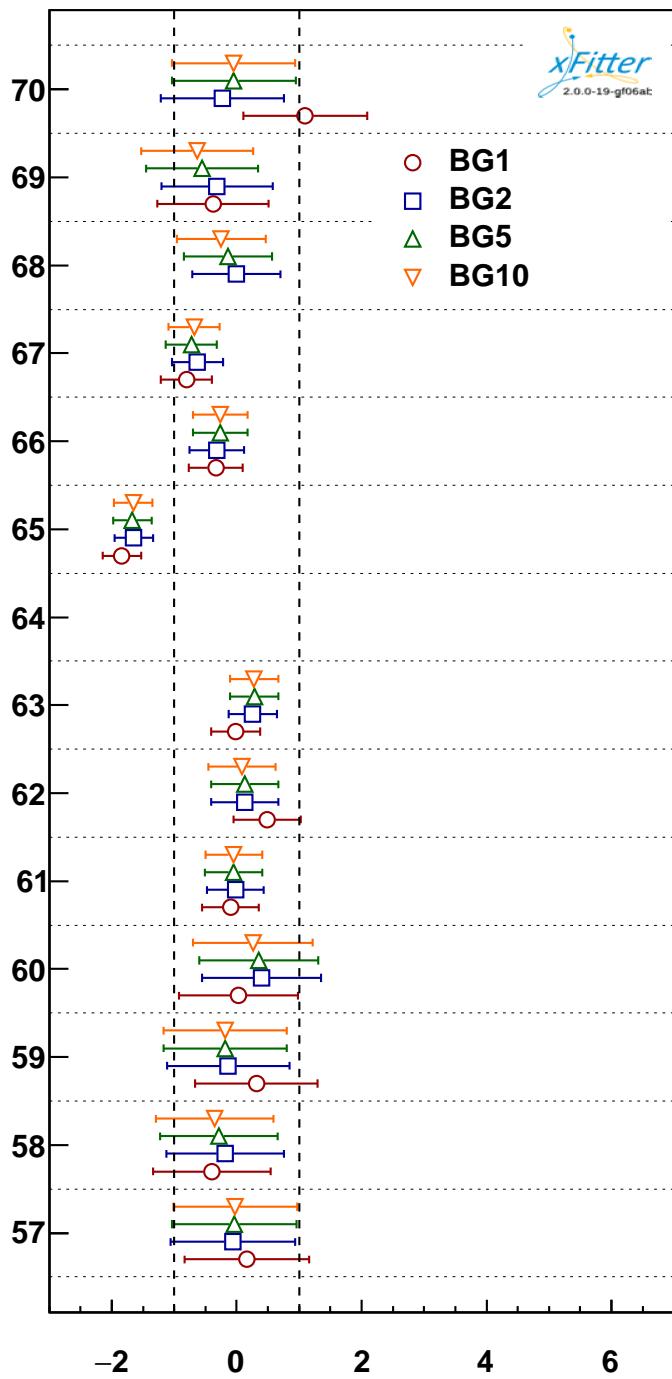
47 HERA_Chang_Source_42

46 HERA_Chang_Source_41

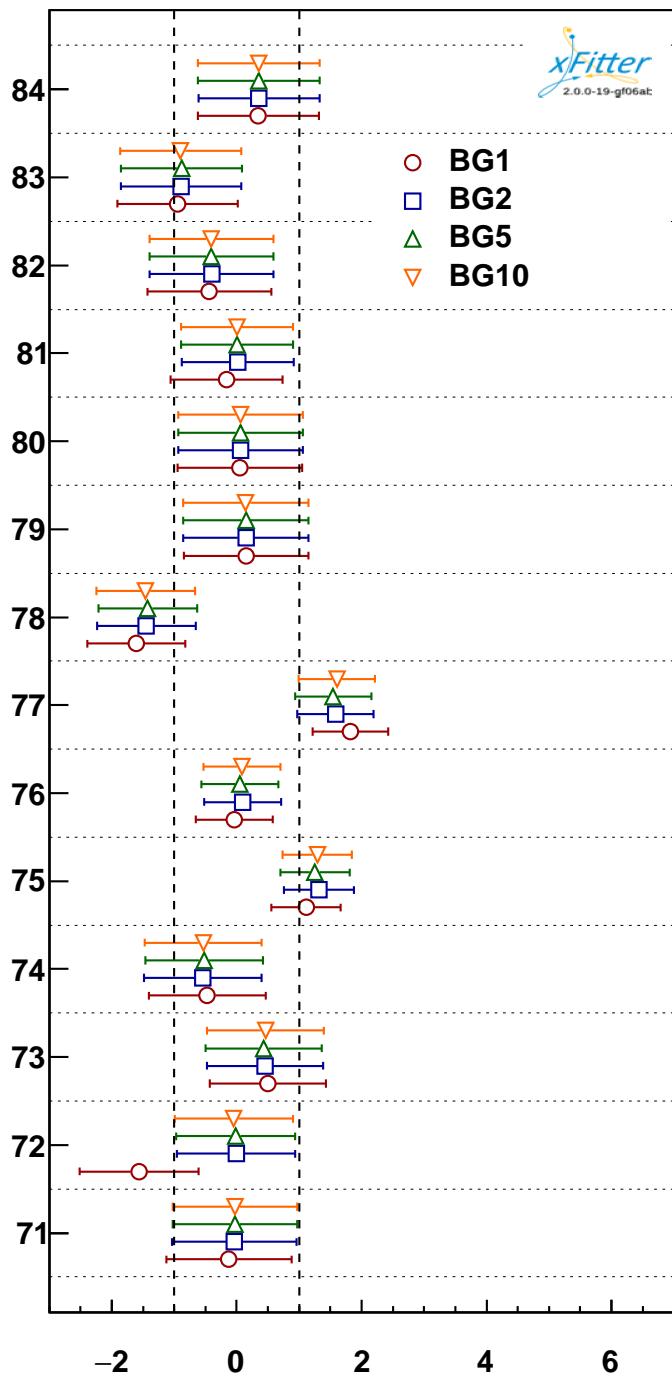
45 HERA_Chang_Source_40

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

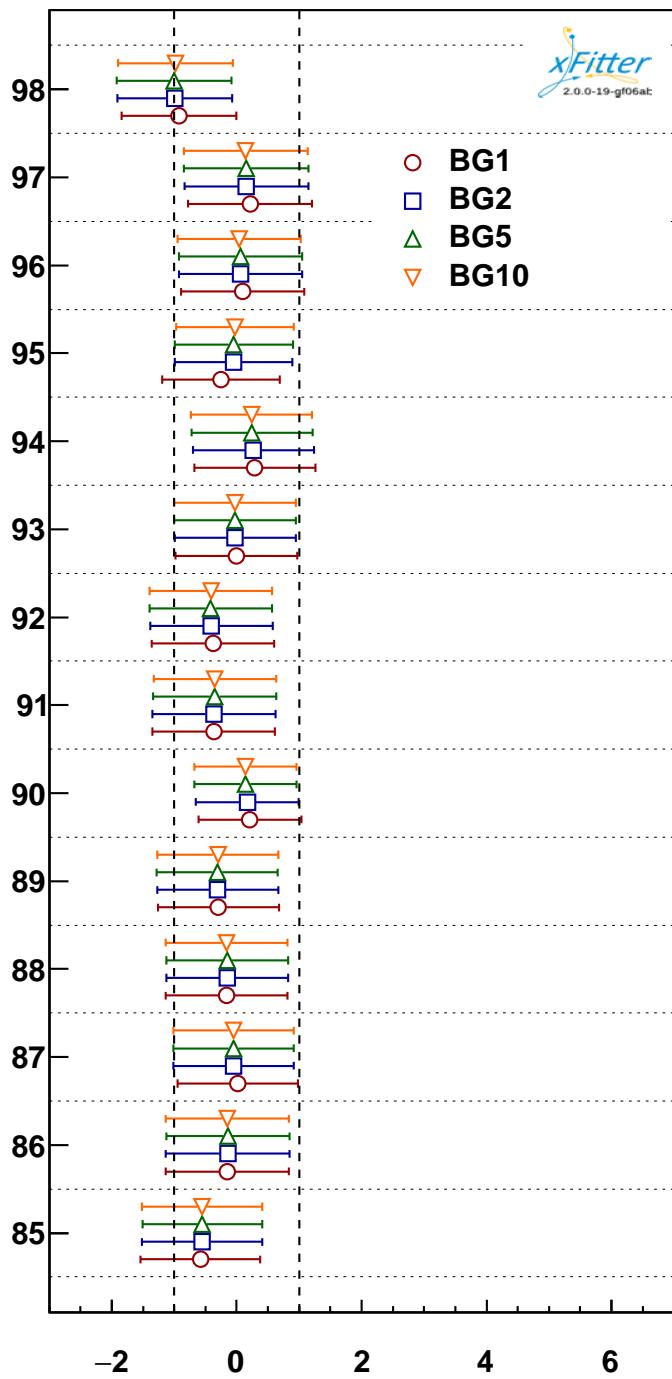
75 sysHZComb1003

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

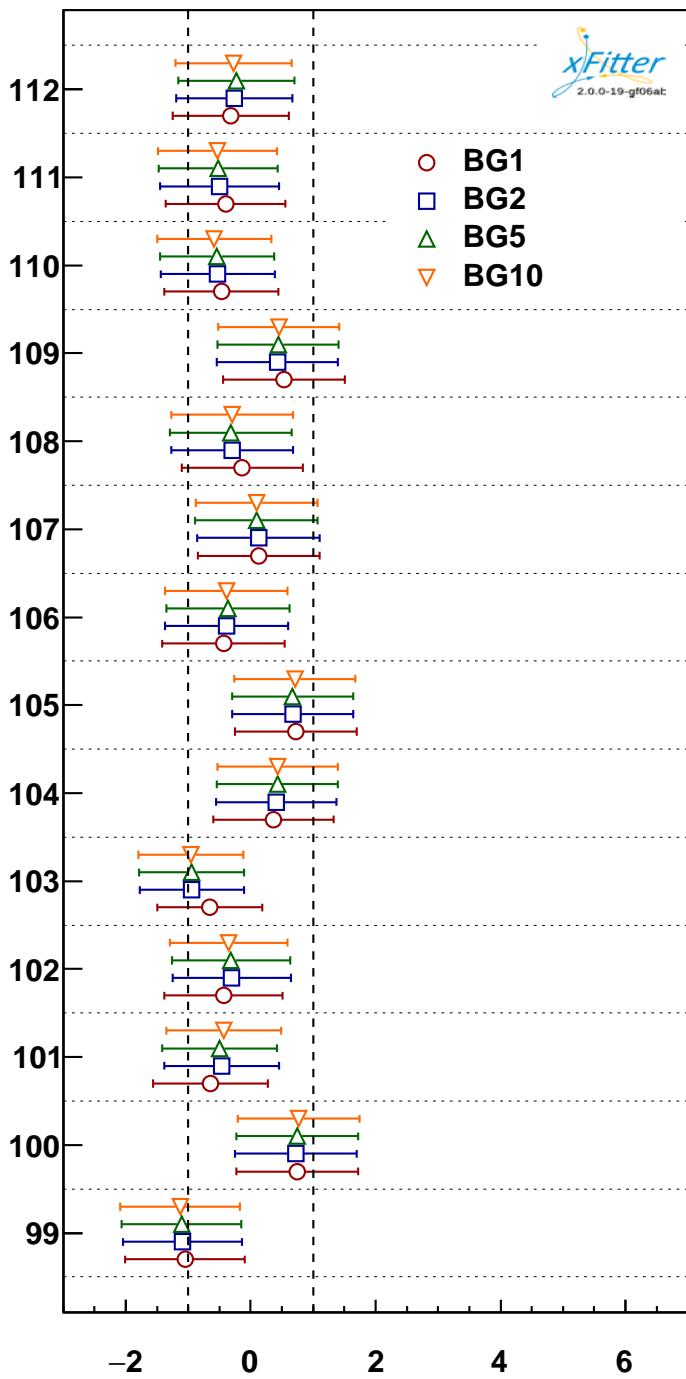
89 sysHZComb1017

88 sysHZComb1016

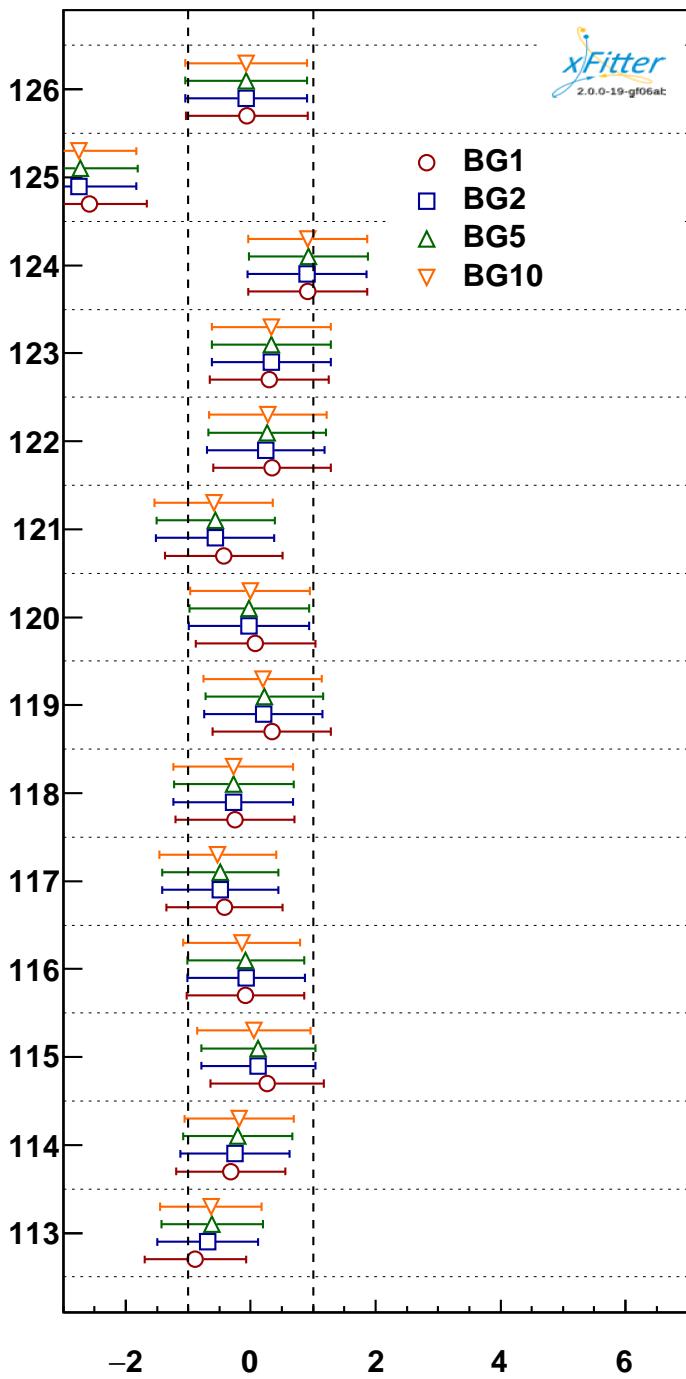
87 sysHZComb1015

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



126 sysHZComb1054

125 sysHZComb1053

124 sysHZComb1052

123 sysHZComb1051

122 sysHZComb1050

121 sysHZComb1049

120 sysHZComb1048

119 sysHZComb1047

118 sysHZComb1046

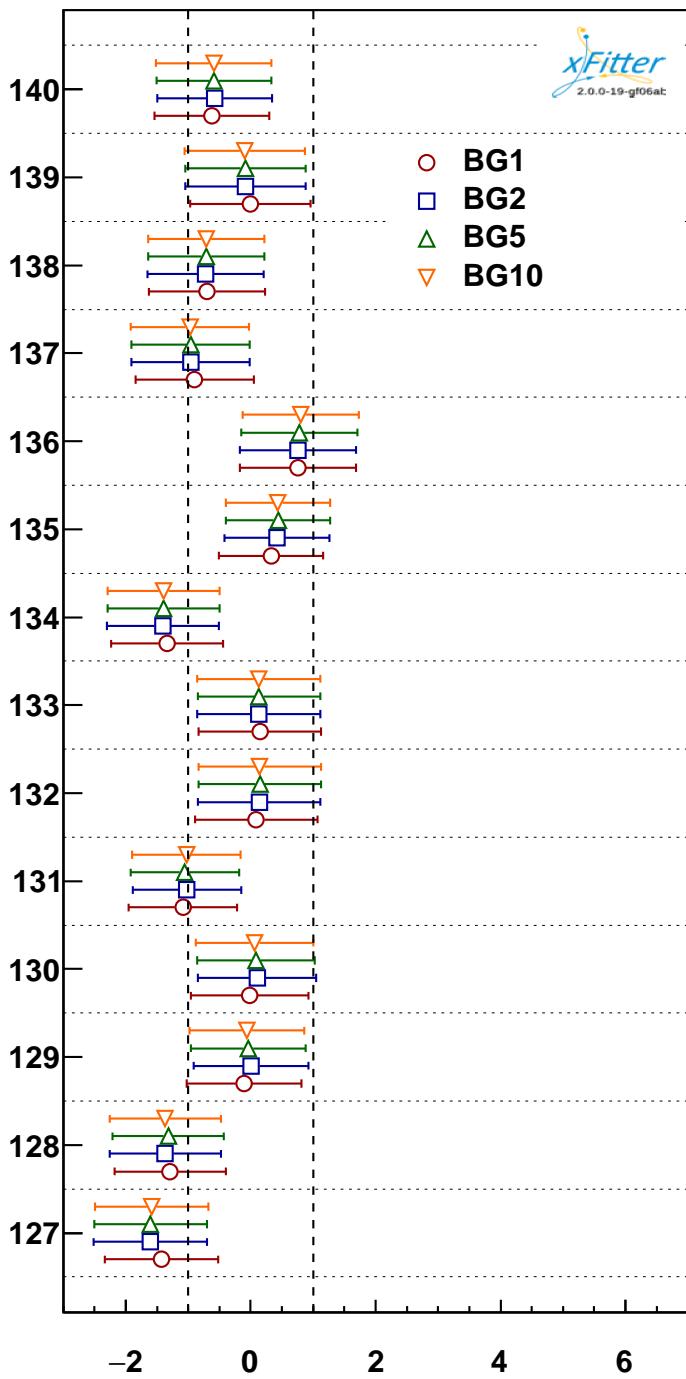
117 sysHZComb1045

116 sysHZComb1044

115 sysHZComb1043

114 sysHZComb1042

113 sysHZComb1041



140 sysHZComb1068

139 sysHZComb1067

138 sysHZComb1066

137 sysHZComb1065

136 sysHZComb1064

135 sysHZComb1063

134 sysHZComb1062

133 sysHZComb1061

132 sysHZComb1060

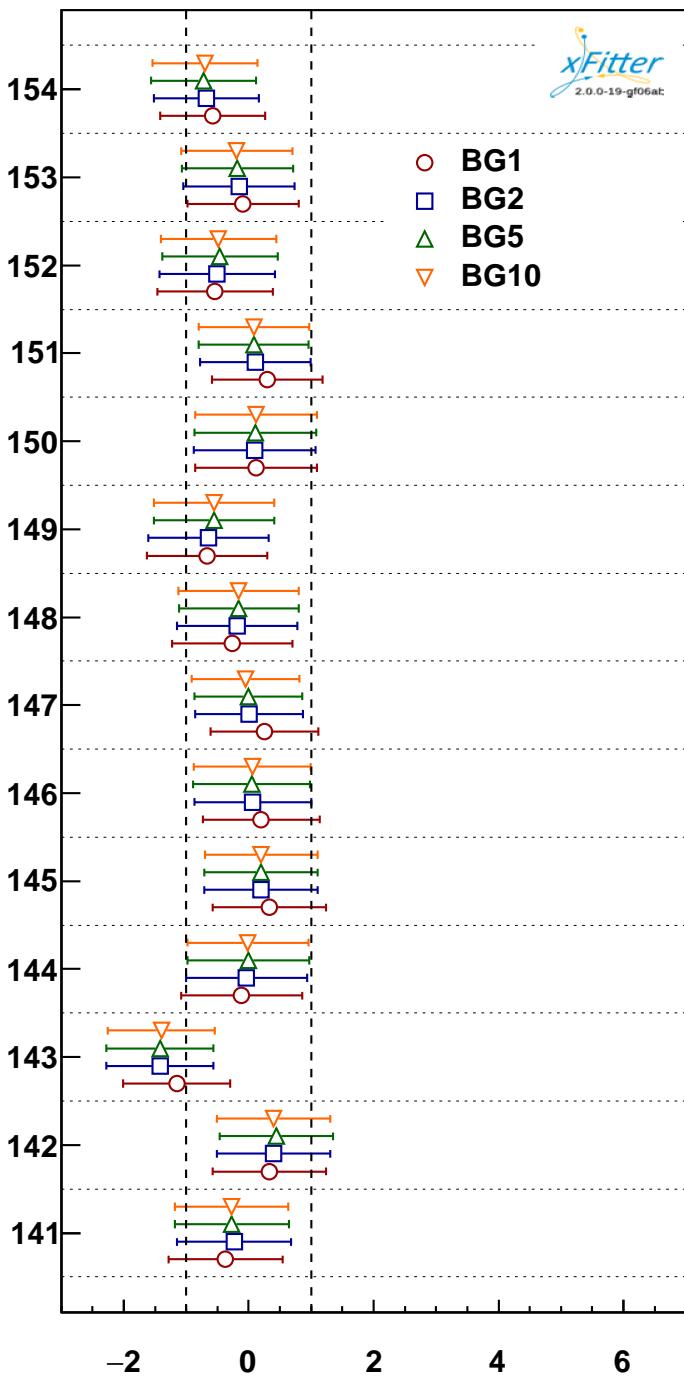
131 sysHZComb1059

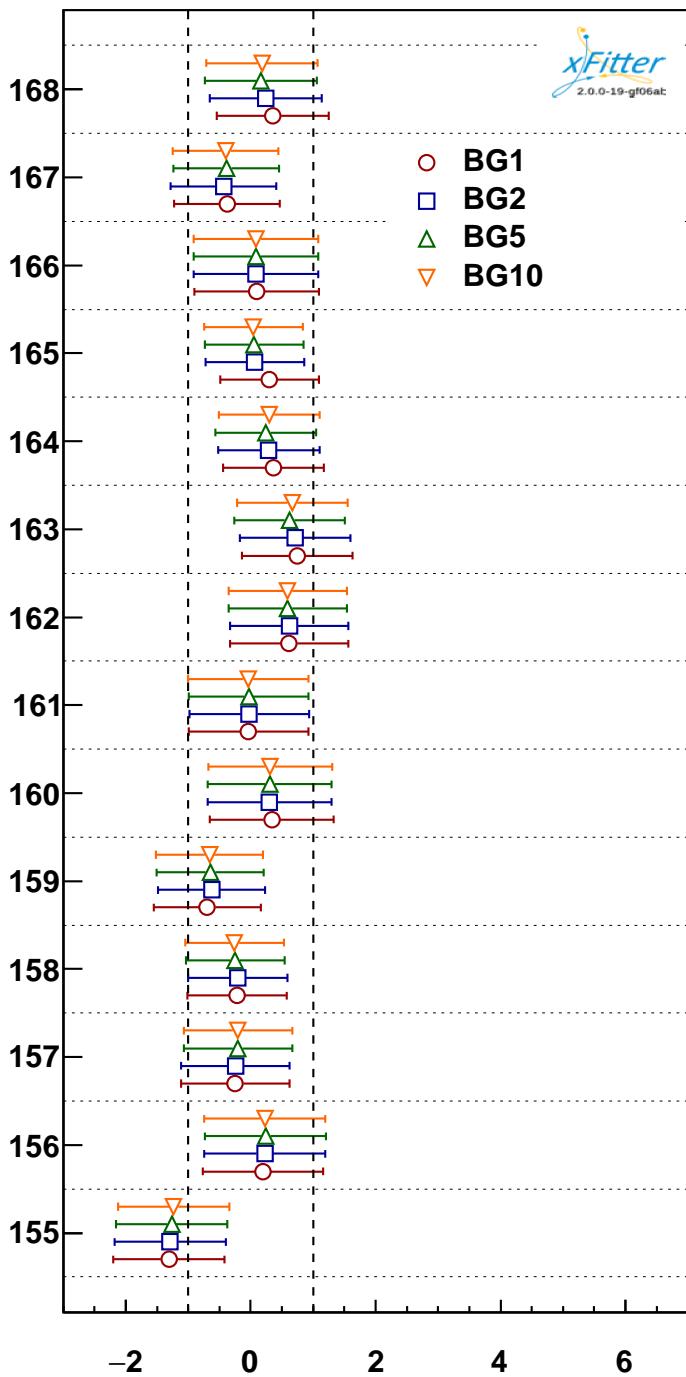
130 sysHZComb1058

129 sysHZComb1057

128 sysHZComb1056

127 sysHZComb1055





168 sysHZComb1096

167 sysHZComb1095

166 sysHZComb1094

165 sysHZComb1093

164 sysHZComb1092

163 sysHZComb1091

162 sysHZComb1090

161 sysHZComb1089

160 sysHZComb1088

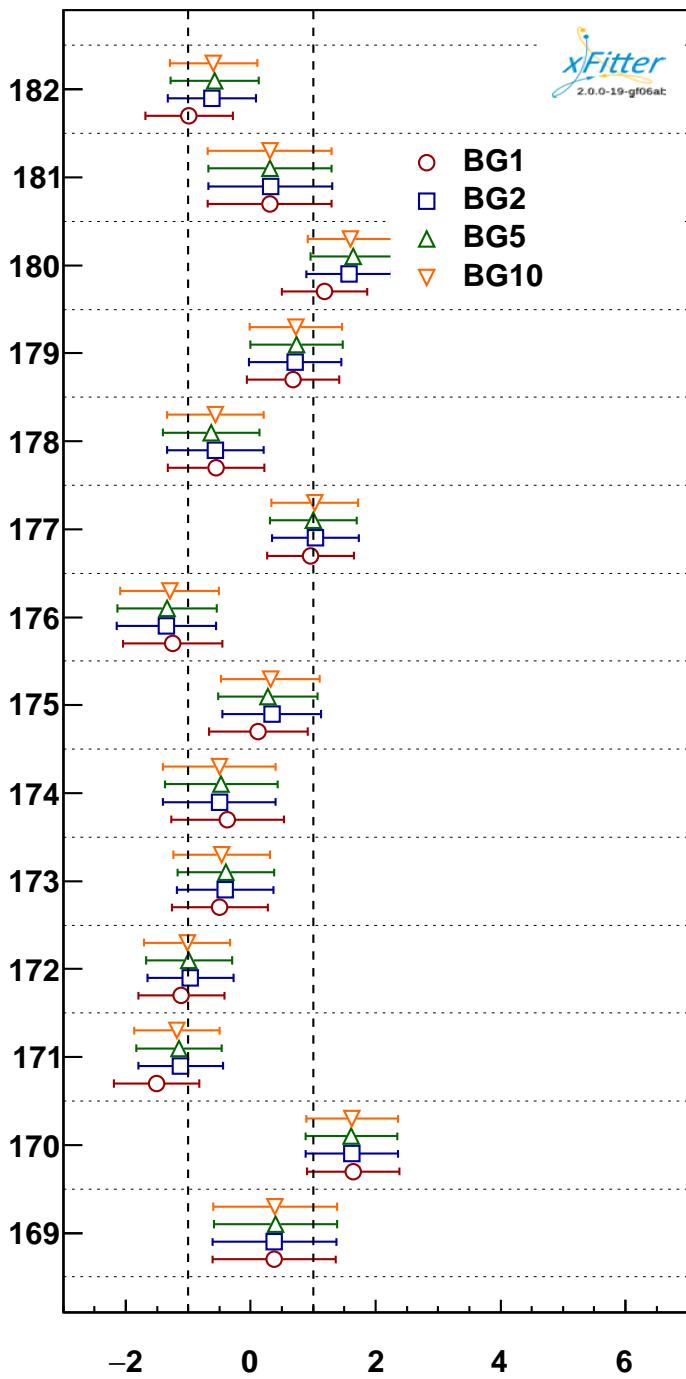
159 sysHZComb1087

158 sysHZComb1086

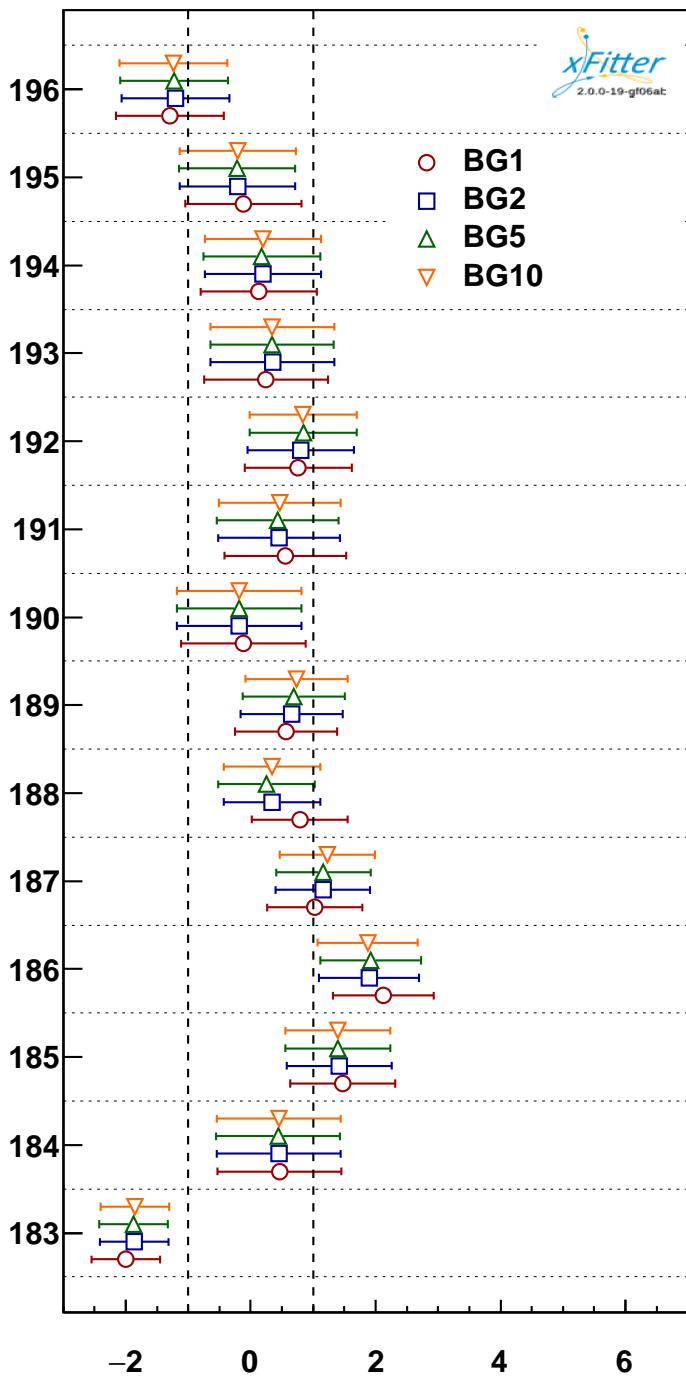
157 sysHZComb1085

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

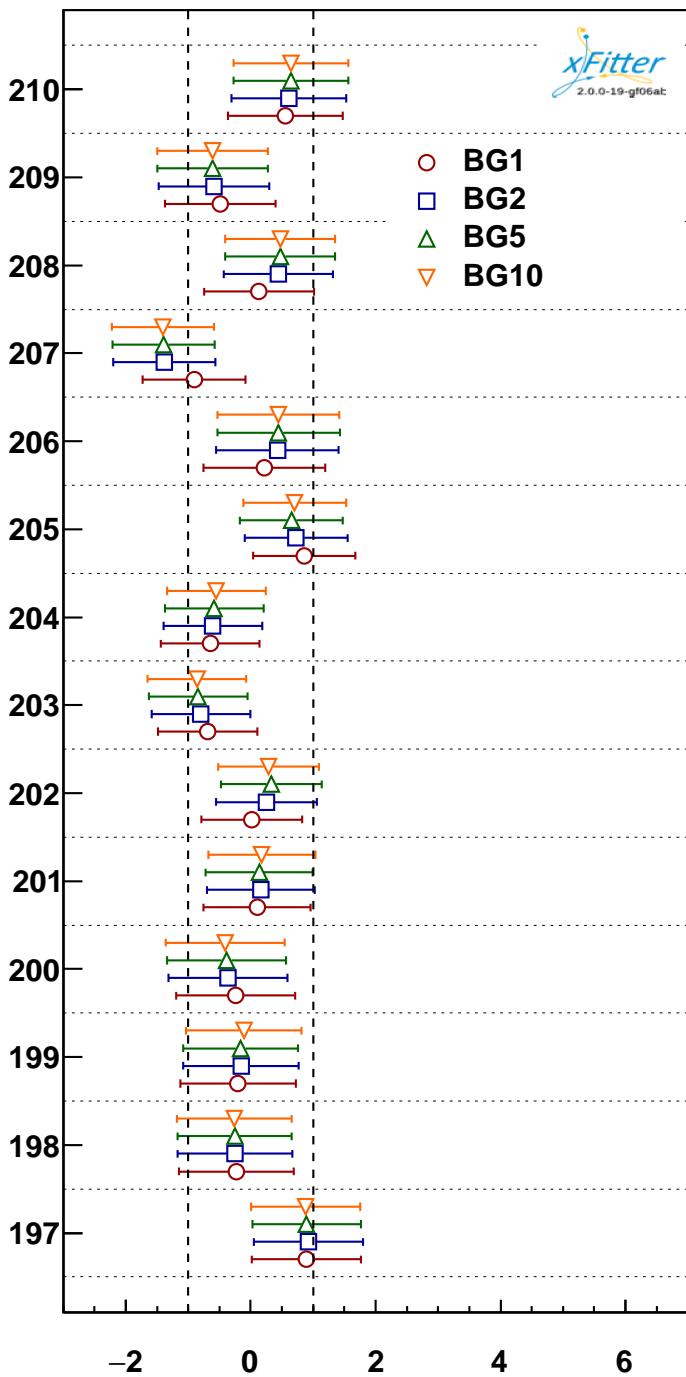
187 sysHZComb1115

186 sysHZComb1114

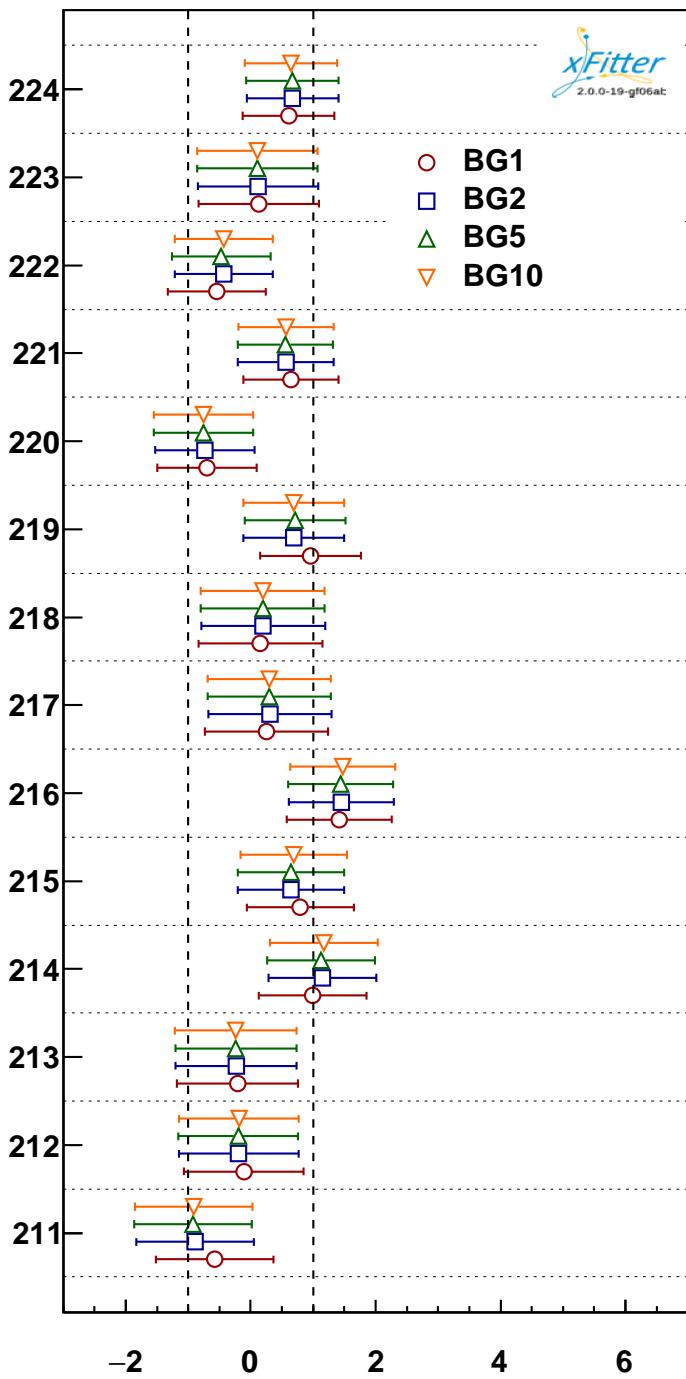
185 sysHZComb1113

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

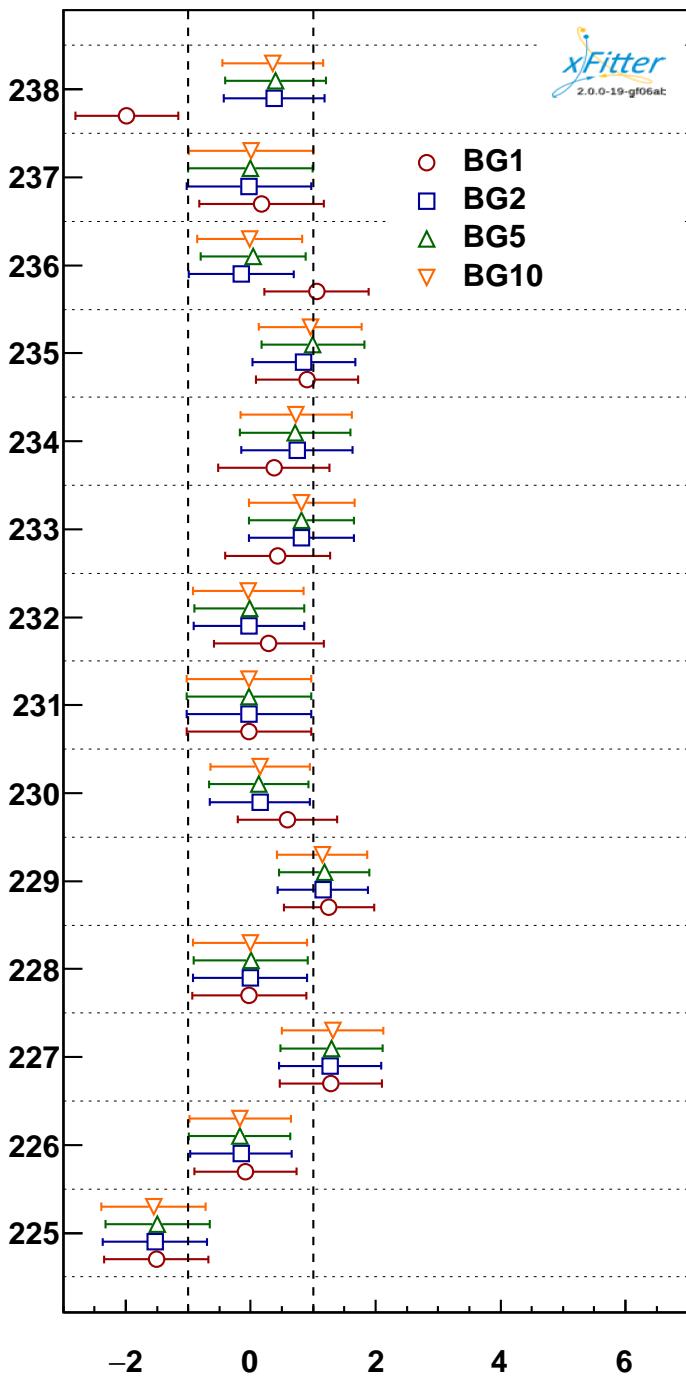
215 sysHZComb1143

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

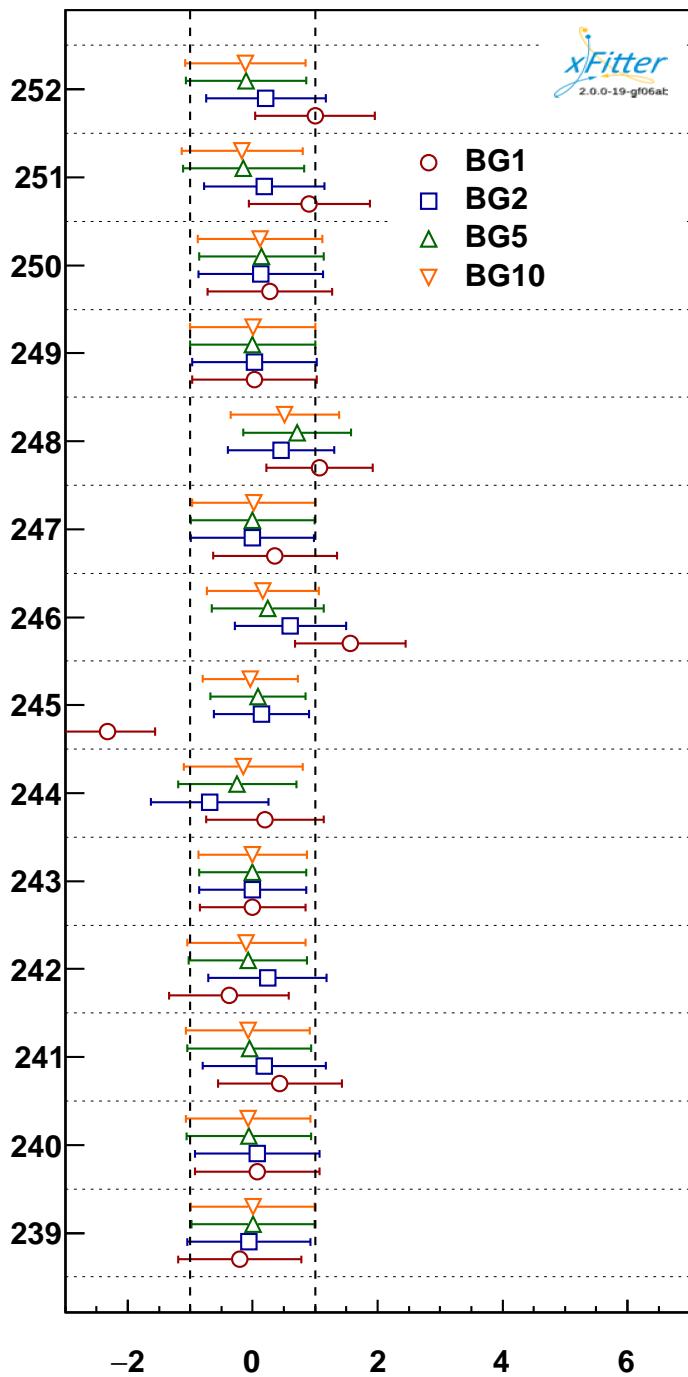
229 sysHZComb1157

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	299 / 17	17 / 17	14 / 17	13 / 17
Charm cross section H1-ZEUS combined	44 / 47	45 / 47	45 / 47	45 / 47
HERA1+2 CCep	43 / 39	43 / 39	43 / 39	42 / 39
HERA1+2 CCem	53 / 42	56 / 42	55 / 42	55 / 42
HERA1+2 NCem	221 / 159	221 / 159	217 / 159	218 / 159
HERA1+2 NCep 820	71 / 70	67 / 70	66 / 70	66 / 70
HERA1+2 NCep 920	464 / 377	446 / 377	445 / 377	451 / 377
HERA1+2 NCep 460	222 / 204	218 / 204	219 / 204	217 / 204
HERA1+2 NCep 575	229 / 254	220 / 254	219 / 254	219 / 254
H1 F2 Beauty Vertex	230 / 12	5.4 / 12	4.0 / 12	3.6 / 12
Correlated χ^2	154	113	113	114
Log penalty χ^2	+19	+19	+18	+18
Total χ^2 / dof	2049 / 1207	1470 / 1207	1458 / 1207	1462 / 1207
χ^2 p-value	0.00	0.00	0.00	0.00

Parameter	BG1	BG2	BG5	BG10
'Bg'	-0.11 ± 0.29	-0.08 ± 0.43	-0.077 ± 0.025	-0.091 ± 0.025
'Cg'	5.35 ± 0.86	5.5 ± 1.2	5.62 ± 0.31	5.57 ± 0.30
'Aprig'	0.26 ± 0.57	0.30 ± 0.94	0.374 ± 0.056	0.420 ± 0.059
'Bprig'	-0.39 ± 0.11	-0.35 ± 0.15	-0.327 ± 0.016	-0.320 ± 0.015
'Cprig'	25.00	25.00	25.00	25.00
'Buv'	0.785 ± 0.039	0.799 ± 0.042	0.801 ± 0.017	0.800 ± 0.017
'Cuv'	4.811 ± 0.084	4.781 ± 0.092	4.772 ± 0.061	4.775 ± 0.061
'Euv'	12.7 ± 2.1	11.7 ± 2.3	11.58 ± 0.93	11.68 ± 0.93
'Bdv'	0.98 ± 0.11	0.97 ± 0.10	0.984 ± 0.063	0.978 ± 0.062
'Cdv'	4.39 ± 0.44	4.39 ± 0.43	4.43 ± 0.29	4.41 ± 0.28
'CUbar'	8.1 ± 1.1	7.5 ± 1.3	7.48 ± 0.62	7.51 ± 0.61
'DUbar'	6.6 ± 2.3	4.2 ± 2.3	4.4 ± 1.2	4.6 ± 1.1
'ADbar'	0.250 ± 0.013	0.262 ± 0.014	0.2576 ± 0.0094	0.2577 ± 0.0094
'BDbar'	-0.1218 ± 0.0066	-0.1181 ± 0.0069	-0.1204 ± 0.0046	-0.1203 ± 0.0047
'CDbar'	8.4 ± 2.0	7.9 ± 1.8	8.1 ± 1.2	8.2 ± 1.2
'alphas'	0.1180	0.1180	0.1180	0.1180
'fs'	0.4000	0.4000	0.4000	0.4000
Fit status	converged	converged	not-a-fit	not-a-fit
Uncertainties	migrad-hesse	migrad-hesse	not-a-fit	not-a-fit