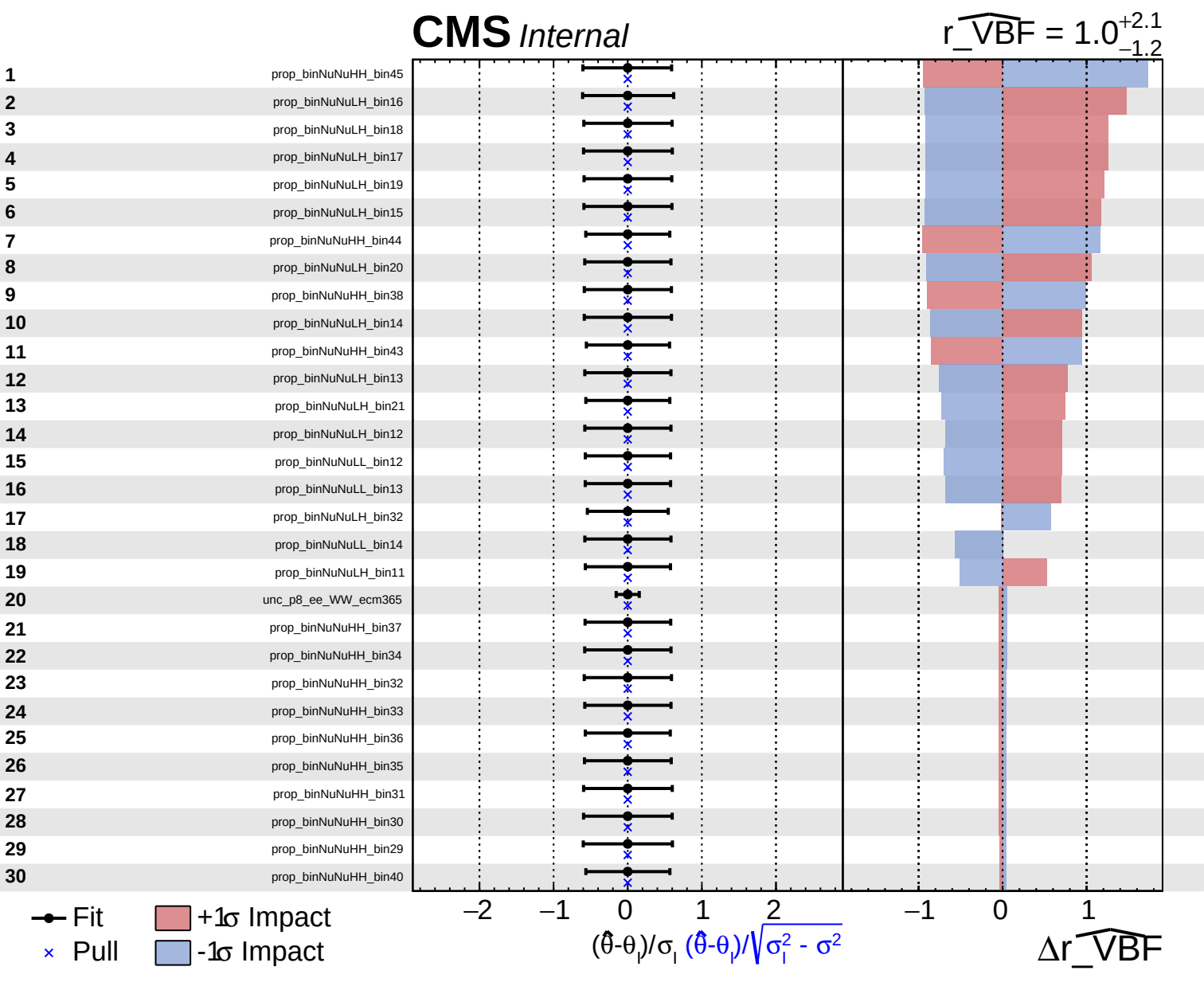
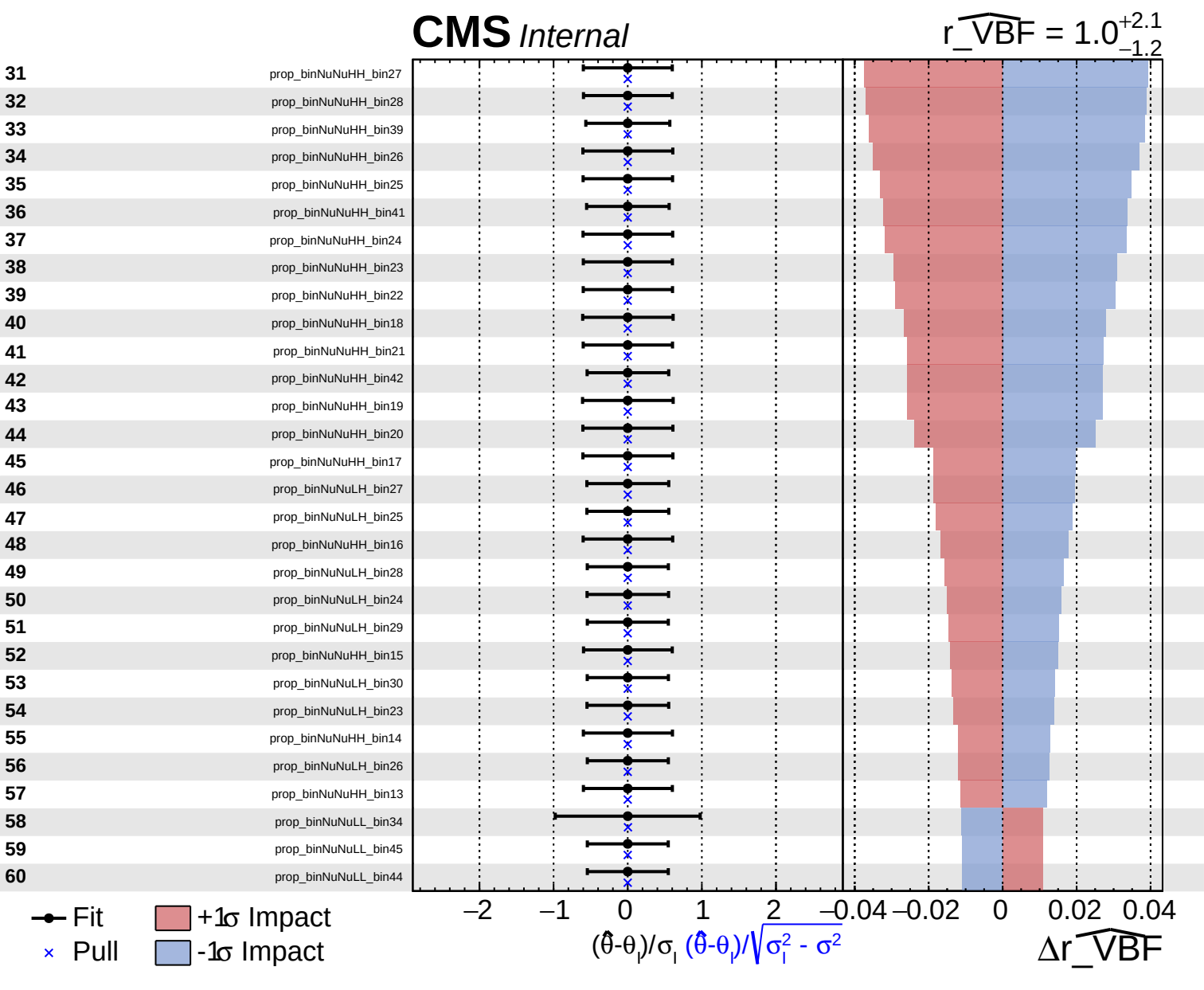
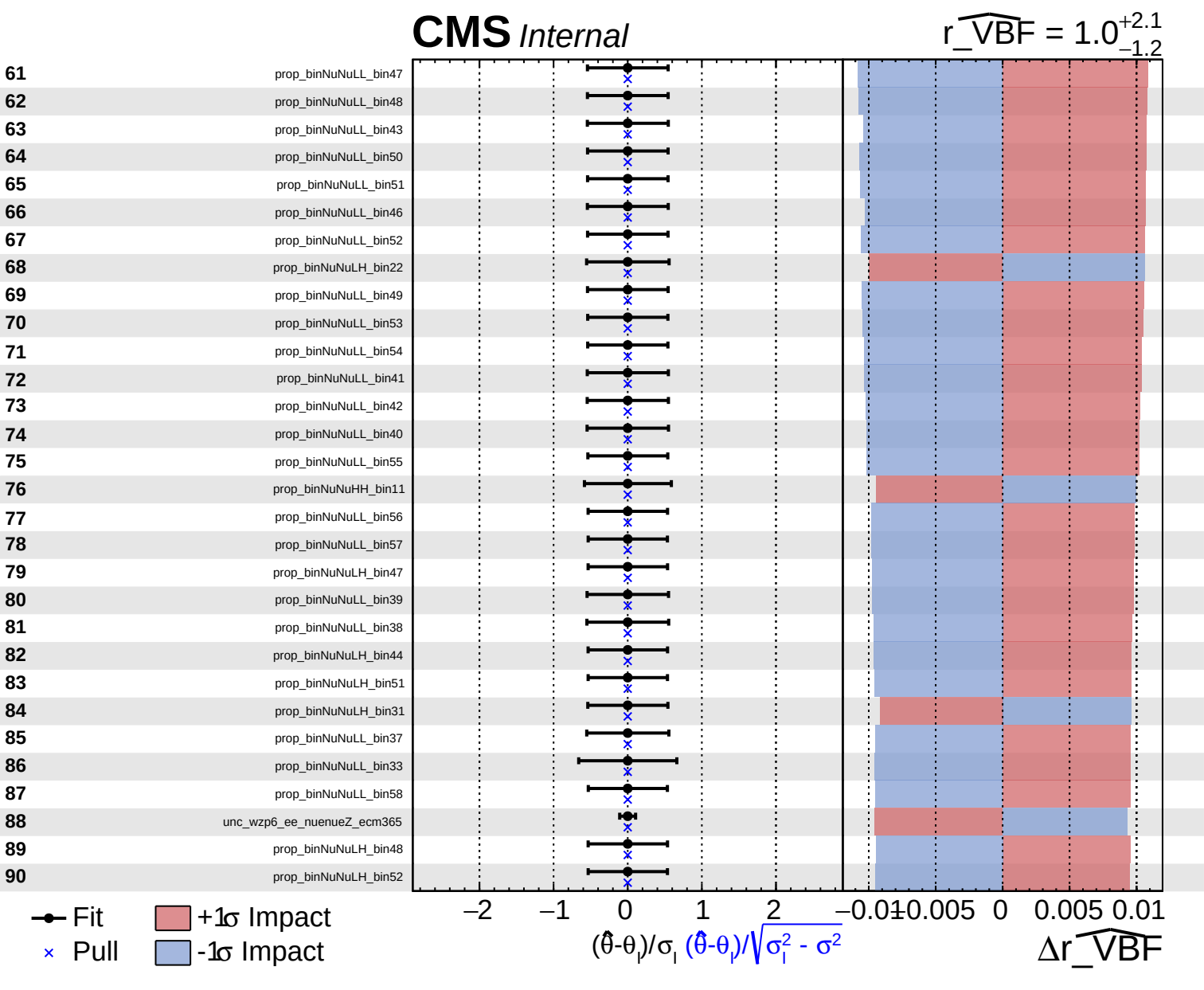
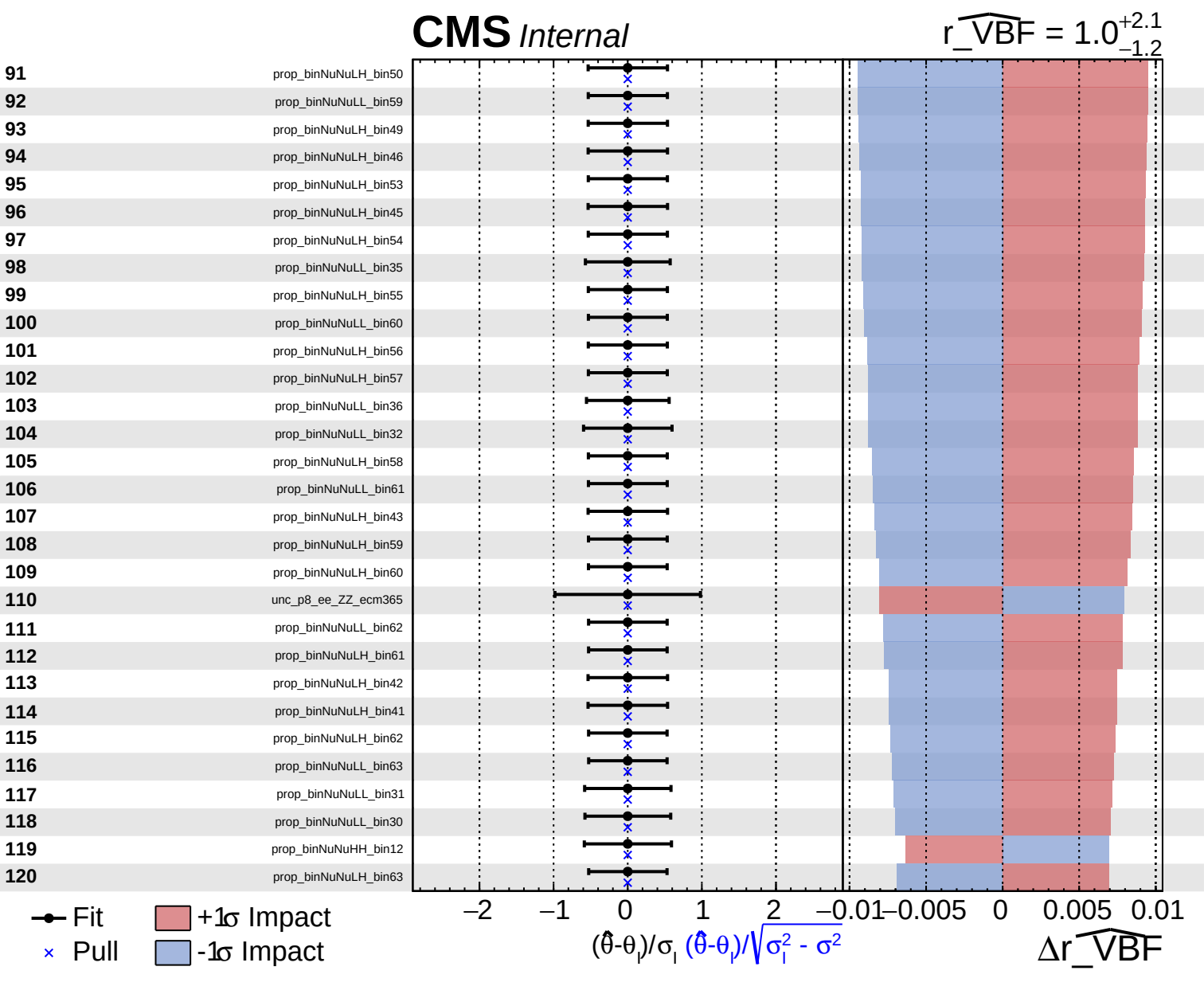
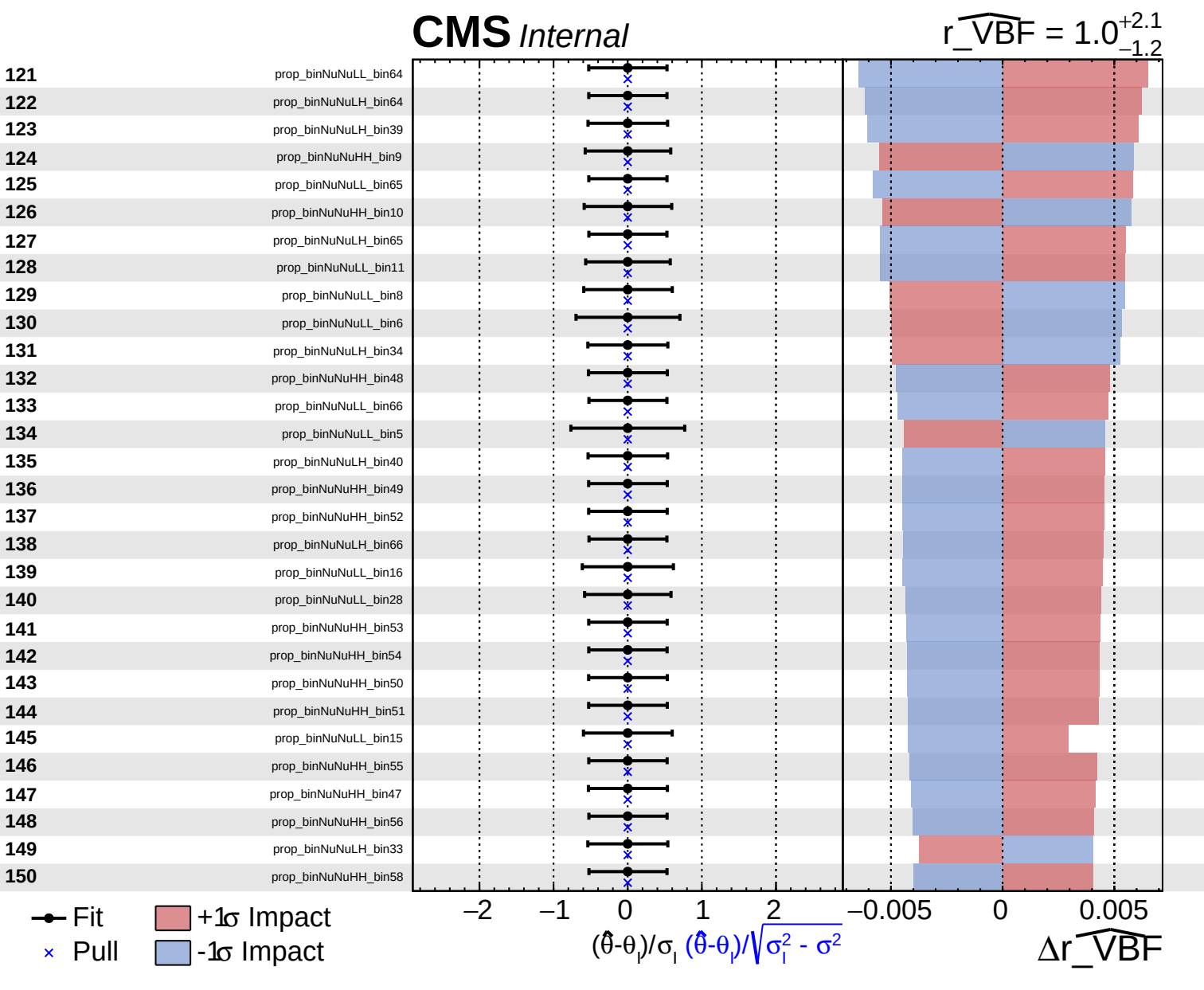
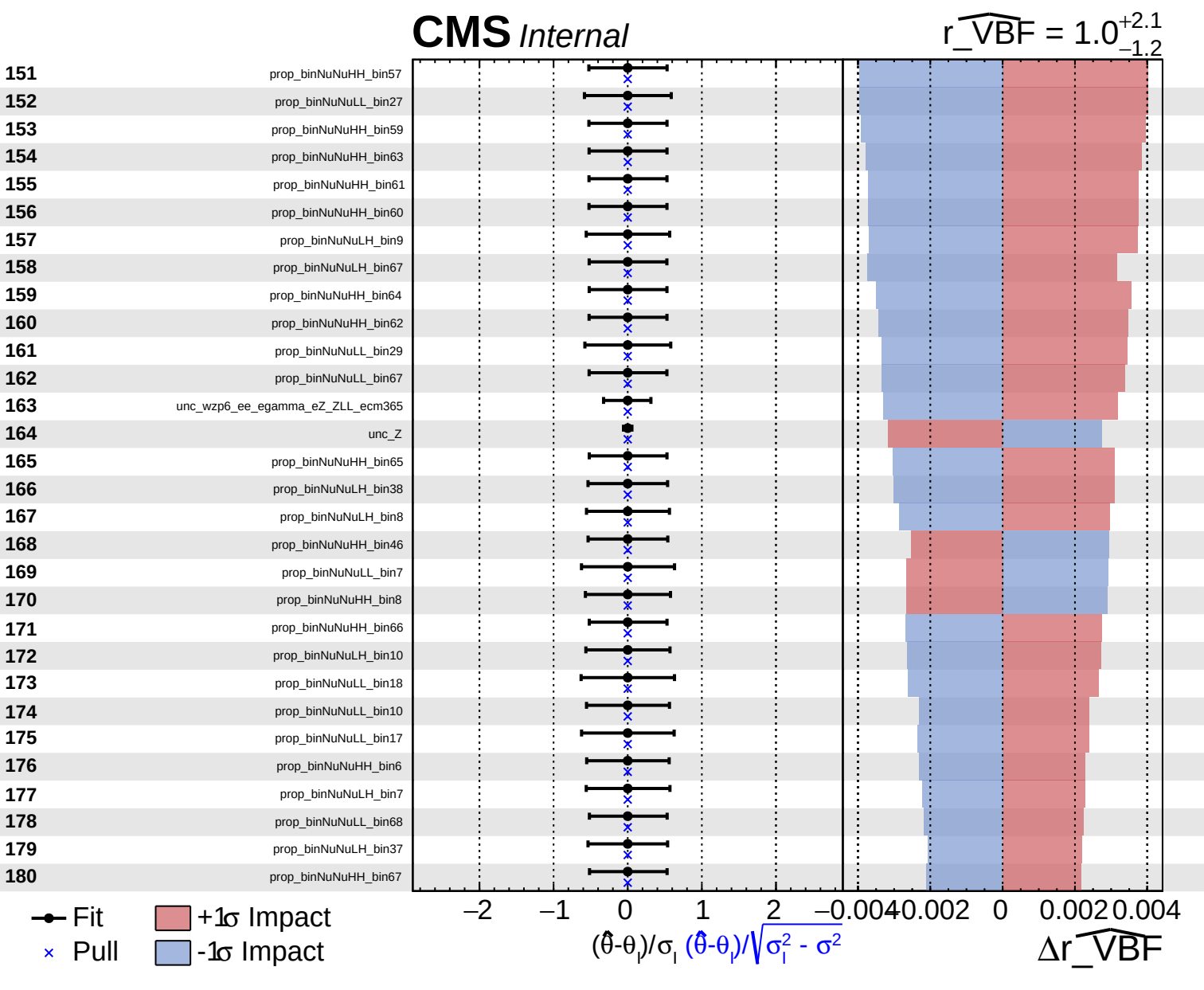

CMS Internal
r_VBF = 1.0 +2.1 −1.2
1 prop_binNuNuHH_bin45
2 prop_binNuNuLH_bin16
3 prop_binNuNuLH_bin18
4 prop_binNuNuLH_bin17
5 prop_binNuNuLH_bin19
6 prop_binNuNuLH_bin15
7 prop_binNuNuHH_bin44
8 prop_binNuNuLH_bin20
9 prop_binNuNuHH_bin38
10 prop_binNuNuLH_bin14
11 prop_binNuNuHH_bin43
12 prop_binNuNuLH_bin13
13 prop_binNuNuLH_bin21
14 prop_binNuNuLH_bin12
15 prop_binNuNuLL_bin12
16 prop_binNuNuLL_bin13
17 prop_binNuNuLH_bin32
18 prop_binNuNuLL_bin14
19 prop_binNuNuLH_bin11
20 unc_p8_ee_WW_ecm365
21 prop_binNuNuHH_bin37
22 prop_binNuNuHH_bin34
23 prop_binNuNuHH_bin32
24 prop_binNuNuHH_bin33
25 prop_binNuNuHH_bin36
26 prop_binNuNuHH_bin35
27 prop_binNuNuHH_bin31
28 prop_binNuNuHH_bin30
29 prop_binNuNuHH_bin29
30 prop_binNuNuHH_bin40
−2 −1 0 1 2
−1 0 1
Fit
Pull
+1σ Impact
-1σ Impact
(θ̂-θ_I)/σ_I (θ̂-θ_I)/√(σ_I² - σ²)
Δr_VBF

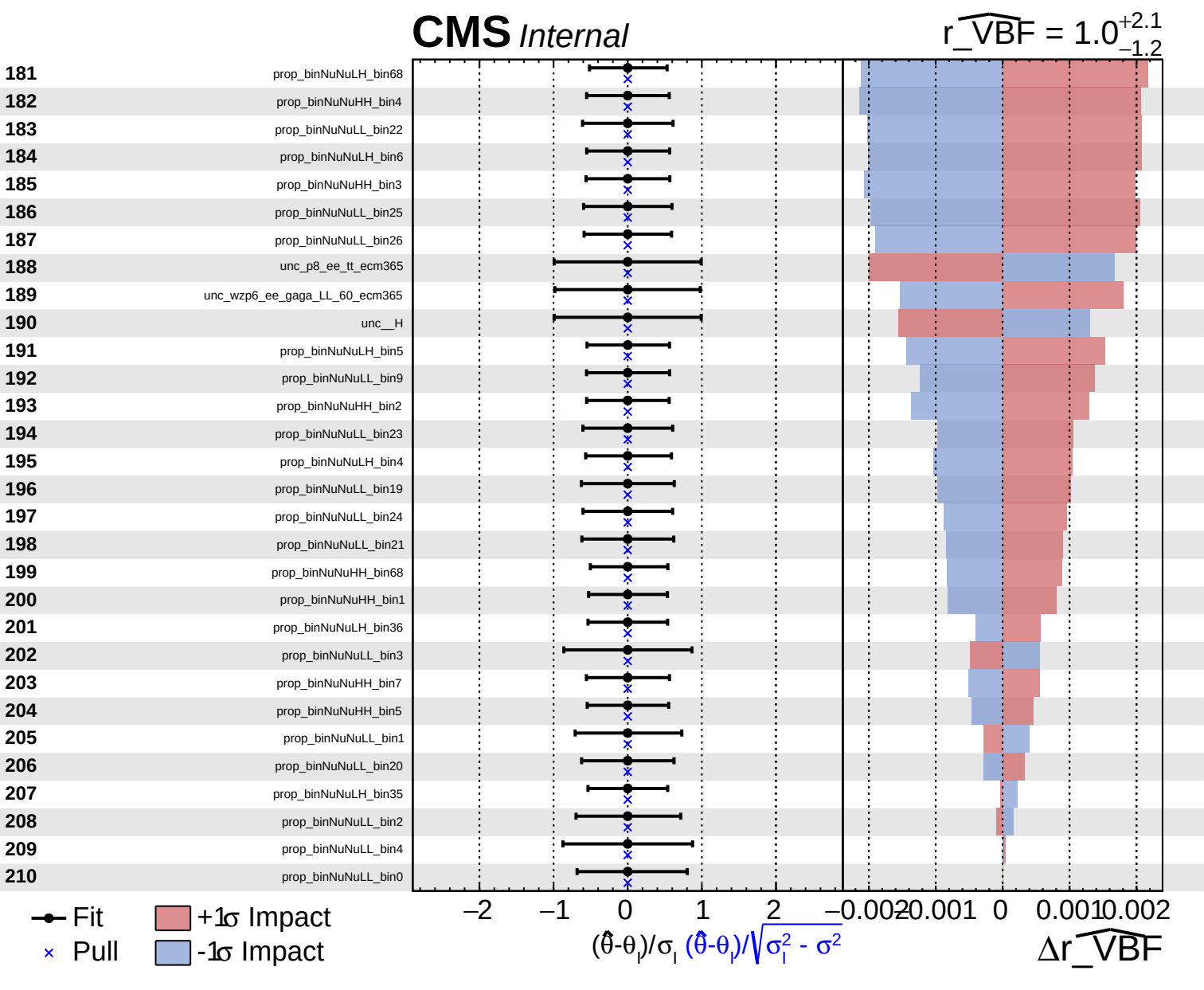

CMS Internal
r_VBF = 1.0 +2.1 −1.2
31 prop_binNuNuHH_bin27
32 prop_binNuNuHH_bin28
33 prop_binNuNuHH_bin39
34 prop_binNuNuHH_bin26
35 prop_binNuNuHH_bin25
36 prop_binNuNuHH_bin41
37 prop_binNuNuHH_bin24
38 prop_binNuNuHH_bin23
39 prop_binNuNuHH_bin22
40 prop_binNuNuHH_bin18
41 prop_binNuNuHH_bin21
42 prop_binNuNuHH_bin42
43 prop_binNuNuHH_bin19
44 prop_binNuNuHH_bin20
45 prop_binNuNuHH_bin17
46 prop_binNuNuLH_bin27
47 prop_binNuNuLH_bin25
48 prop_binNuNuHH_bin16
49 prop_binNuNuLH_bin28
50 prop_binNuNuLH_bin24
51 prop_binNuNuLH_bin29
52 prop_binNuNuHH_bin15
53 prop_binNuNuLH_bin30
54 prop_binNuNuLH_bin23
55 prop_binNuNuHH_bin14
56 prop_binNuNuLH_bin26
57 prop_binNuNuHH_bin13
58 prop_binNuNuLL_bin34
59 prop_binNuNuLL_bin45
60 prop_binNuNuLL_bin44
Fit
Pull
+1σ Impact
-1σ Impact
−2 −1 0 1 2
(θ̂-θ_I)/σ_I
−0.04 −0.02 0 0.02 0.04
(θ̂-θ_I)/√(σ_I² - σ²)
Δr_VBF

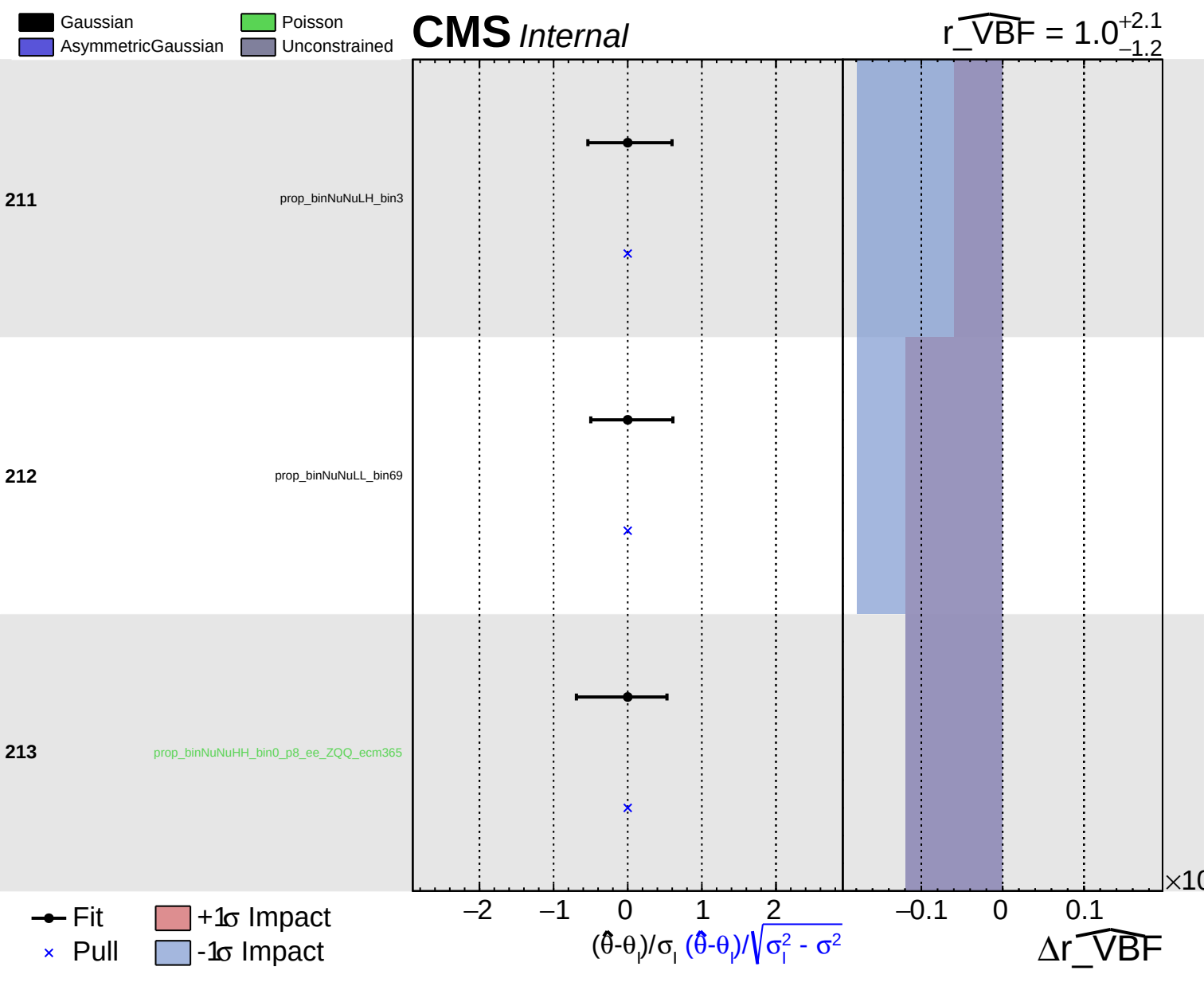

CMS Internal
r_VBF = 1.0 +2.1 −1.2
61 prop_binNuNuLL_bin47
62 prop_binNuNuLL_bin48
63 prop_binNuNuLL_bin43
64 prop_binNuNuLL_bin50
65 prop_binNuNuLL_bin51
66 prop_binNuNuLL_bin46
67 prop_binNuNuLL_bin52
68 prop_binNuNuLH_bin22
69 prop_binNuNuLL_bin49
70 prop_binNuNuLL_bin53
71 prop_binNuNuLL_bin54
72 prop_binNuNuLL_bin41
73 prop_binNuNuLL_bin42
74 prop_binNuNuLL_bin40
75 prop_binNuNuLL_bin55
76 prop_binNuNuHH_bin11
77 prop_binNuNuLL_bin56
78 prop_binNuNuLL_bin57
79 prop_binNuNuLH_bin47
80 prop_binNuNuLL_bin39
81 prop_binNuNuLL_bin38
82 prop_binNuNuLH_bin44
83 prop_binNuNuLH_bin51
84 prop_binNuNuLH_bin31
85 prop_binNuNuLL_bin37
86 prop_binNuNuLL_bin33
87 prop_binNuNuLL_bin58
88 unc_wzp6_ee_nuenueZ_ecm365
89 prop_binNuNuLH_bin48
90 prop_binNuNuLH_bin52
Fit
Pull
+1σ Impact
-1σ Impact
−2 −1 0 1 2
(θ̂-θ_I)/σ_I
−0.01 −0.005 0 0.005 0.01
(θ̂-θ_I)/√(σ_I² - σ²)
Δr_VBF


CMS Internal
r_VBF = 1.0 +2.1 −1.2
91 prop_binNuNuLH_bin50
92 prop_binNuNuLL_bin59
93 prop_binNuNuLH_bin49
94 prop_binNuNuLH_bin46
95 prop_binNuNuLH_bin53
96 prop_binNuNuLH_bin45
97 prop_binNuNuLH_bin54
98 prop_binNuNuLL_bin35
99 prop_binNuNuLH_bin55
100 prop_binNuNuLL_bin60
101 prop_binNuNuLH_bin56
102 prop_binNuNuLH_bin57
103 prop_binNuNuLL_bin36
104 prop_binNuNuLL_bin32
105 prop_binNuNuLH_bin58
106 prop_binNuNuLL_bin61
107 prop_binNuNuLH_bin43
108 prop_binNuNuLH_bin59
109 prop_binNuNuLH_bin60
110 unc_p8_ee_ZZ_ecm365
111 prop_binNuNuLL_bin62
112 prop_binNuNuLH_bin61
113 prop_binNuNuLH_bin42
114 prop_binNuNuLH_bin41
115 prop_binNuNuLH_bin62
116 prop_binNuNuLL_bin63
117 prop_binNuNuLL_bin31
118 prop_binNuNuLL_bin30
119 prop_binNuNuHH_bin12
120 prop_binNuNuLH_bin63
−2 −1 0 1 2
−0.01 −0.005 0 0.005 0.01
Fit
Pull
+1σ Impact
-1σ Impact
(θ̂-θ_I)/σ_I
(θ̂-θ_I)/√(σ_I² - σ²)
Δr_VBF


CMS Internal
r_VBF = 1.0 +2.1 −1.2
121 prop_binNuNuLL_bin64
122 prop_binNuNuLH_bin64
123 prop_binNuNuLH_bin39
124 prop_binNuNuHH_bin9
125 prop_binNuNuLL_bin65
126 prop_binNuNuHH_bin10
127 prop_binNuNuLH_bin65
128 prop_binNuNuLL_bin11
129 prop_binNuNuLL_bin8
130 prop_binNuNuLL_bin6
131 prop_binNuNuLH_bin34
132 prop_binNuNuHH_bin48
133 prop_binNuNuLL_bin66
134 prop_binNuNuLL_bin5
135 prop_binNuNuLH_bin40
136 prop_binNuNuHH_bin49
137 prop_binNuNuHH_bin52
138 prop_binNuNuLH_bin66
139 prop_binNuNuLL_bin16
140 prop_binNuNuLL_bin28
141 prop_binNuNuHH_bin53
142 prop_binNuNuHH_bin54
143 prop_binNuNuHH_bin50
144 prop_binNuNuHH_bin51
145 prop_binNuNuLL_bin15
146 prop_binNuNuHH_bin55
147 prop_binNuNuHH_bin47
148 prop_binNuNuHH_bin56
149 prop_binNuNuLH_bin33
150 prop_binNuNuHH_bin58
Fit
Pull
+1σ Impact
-1σ Impact
−2
−1
0
1
2
(θ̂-θ_I)/σ_I
−0.005
0
0.005
(θ̂-θ_I)/√(σ_I² - σ²)
Δr_VBF


CMS Internal
r_VBF = 1.0 +2.1 −1.2
151 prop_binNuNuHH_bin57
152 prop_binNuNuLL_bin27
153 prop_binNuNuHH_bin59
154 prop_binNuNuHH_bin63
155 prop_binNuNuHH_bin61
156 prop_binNuNuHH_bin60
157 prop_binNuNuLH_bin9
158 prop_binNuNuLH_bin67
159 prop_binNuNuHH_bin64
160 prop_binNuNuHH_bin62
161 prop_binNuNuLL_bin29
162 prop_binNuNuLL_bin67
163 unc_wzp6_ee_egamma_eZ_ZLL_ecm365
164 unc_Z
165 prop_binNuNuHH_bin65
166 prop_binNuNuLH_bin38
167 prop_binNuNuLH_bin8
168 prop_binNuNuHH_bin46
169 prop_binNuNuLL_bin7
170 prop_binNuNuHH_bin8
171 prop_binNuNuHH_bin66
172 prop_binNuNuLH_bin10
173 prop_binNuNuLL_bin18
174 prop_binNuNuLL_bin10
175 prop_binNuNuLL_bin17
176 prop_binNuNuHH_bin6
177 prop_binNuNuLH_bin7
178 prop_binNuNuLL_bin68
179 prop_binNuNuLH_bin37
180 prop_binNuNuHH_bin67
Fit
Pull
+1σ Impact
-1σ Impact
−2 −1 0 1 2
(θ̂-θ_I)/σ_I
−0.004 −0.002 0 0.002 0.004
(θ̂-θ_I)/√(σ_I² - σ²)
Δr_VBF


CMS Internal
r_VBF = 1.0 +2.1 −1.2
181 prop_binNuNuLH_bin68
182 prop_binNuNuHH_bin4
183 prop_binNuNuLL_bin22
184 prop_binNuNuLH_bin6
185 prop_binNuNuHH_bin3
186 prop_binNuNuLL_bin25
187 prop_binNuNuLL_bin26
188 unc_p8_ee_tt_ecm365
189 unc_wzp6_ee_gaga_LL_60_ecm365
190 unc__H
191 prop_binNuNuLH_bin5
192 prop_binNuNuLL_bin9
193 prop_binNuNuHH_bin2
194 prop_binNuNuLL_bin23
195 prop_binNuNuLH_bin4
196 prop_binNuNuLL_bin19
197 prop_binNuNuLL_bin24
198 prop_binNuNuLL_bin21
199 prop_binNuNuHH_bin68
200 prop_binNuNuHH_bin1
201 prop_binNuNuLH_bin36
202 prop_binNuNuLL_bin3
203 prop_binNuNuHH_bin7
204 prop_binNuNuHH_bin5
205 prop_binNuNuLL_bin1
206 prop_binNuNuLL_bin20
207 prop_binNuNuLH_bin35
208 prop_binNuNuLL_bin2
209 prop_binNuNuLL_bin4
210 prop_binNuNuLL_bin0
Fit
Pull
+1σ Impact
-1σ Impact
−2 −1 0 1 2
(θ̂-θ_I)/σ_I
−0.002 −0.001 0 0.001 0.002
(θ̂-θ_I)/√(σ_I² - σ²)
Δr_VBF


Gaussian
AsymmetricGaussian
Poisson
Unconstrained
CMS Internal
r_VBF = 1.0 +2.1 −1.2
211
prop_binNuNuLH_bin3
212
prop_binNuNuLL_bin69
213
prop_binNuNuHH_bin0_p8_ee_ZQQ_ecm365
×10
−2
−1
0
1
2
−0.1
0
0.1
(θ̂-θ_I)/σ_I
(θ̂-θ_I)/√(σ_I² - σ²)
Δr_VBF
Fit
Pull
+1σ Impact
-1σ Impact