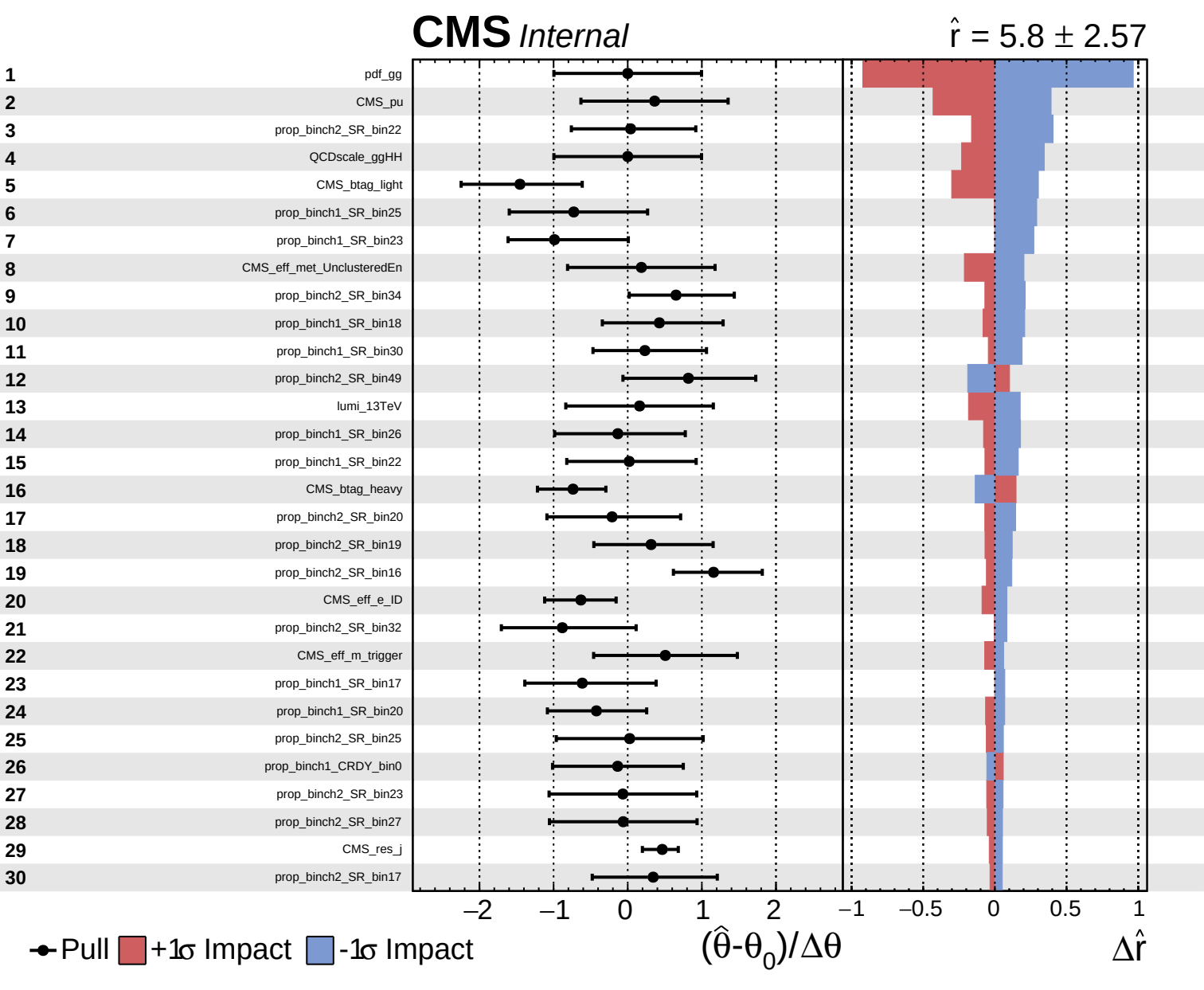
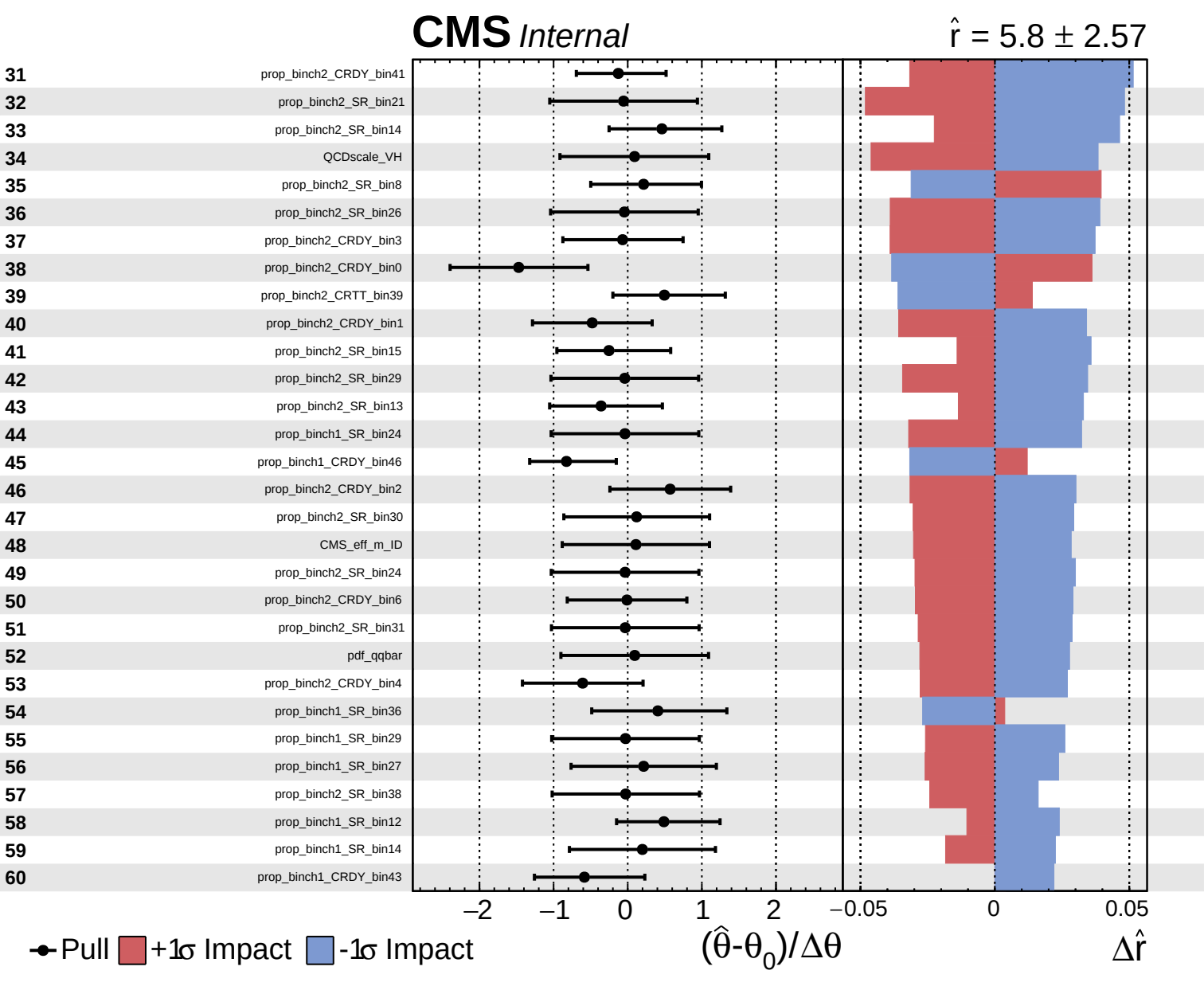
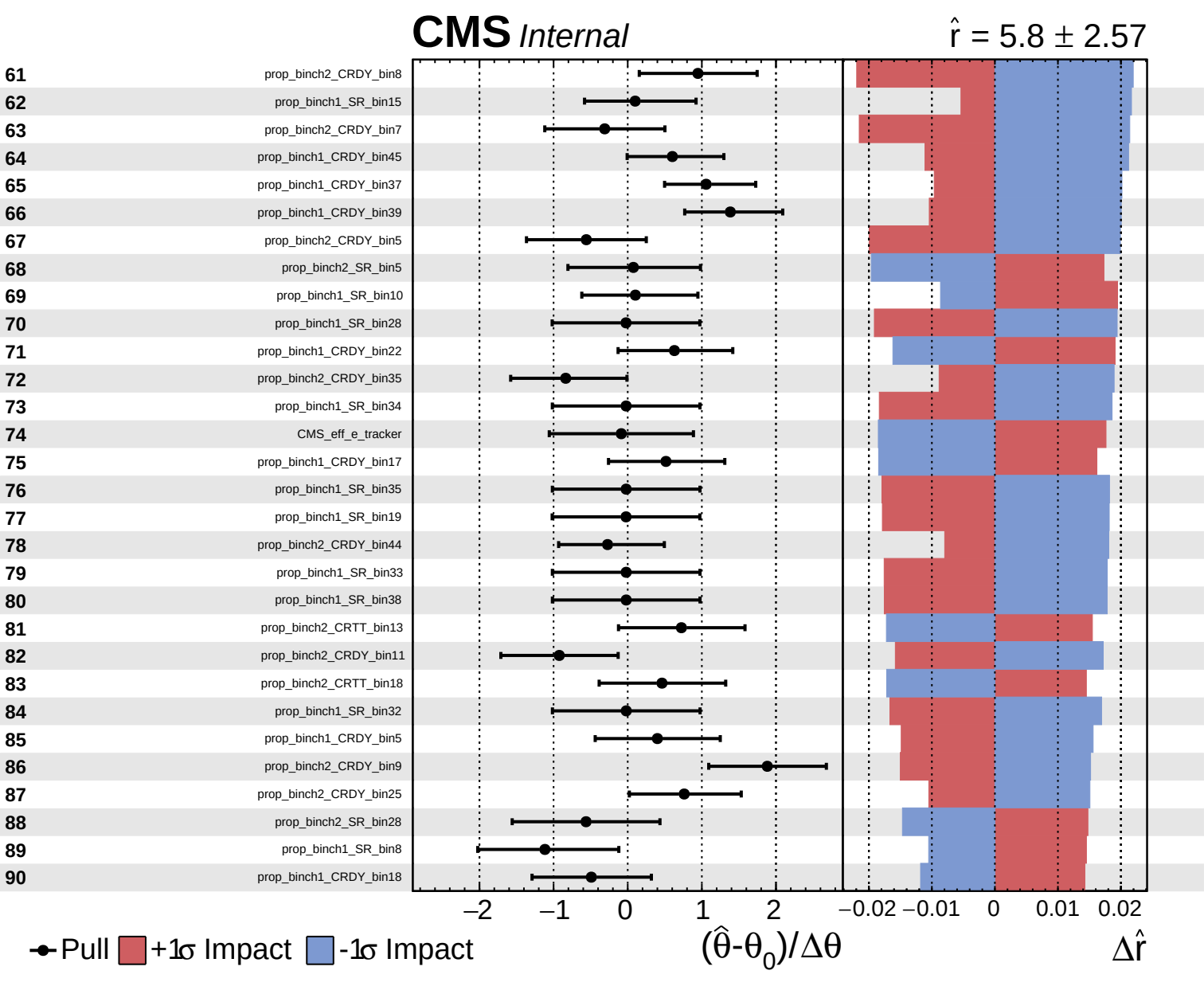
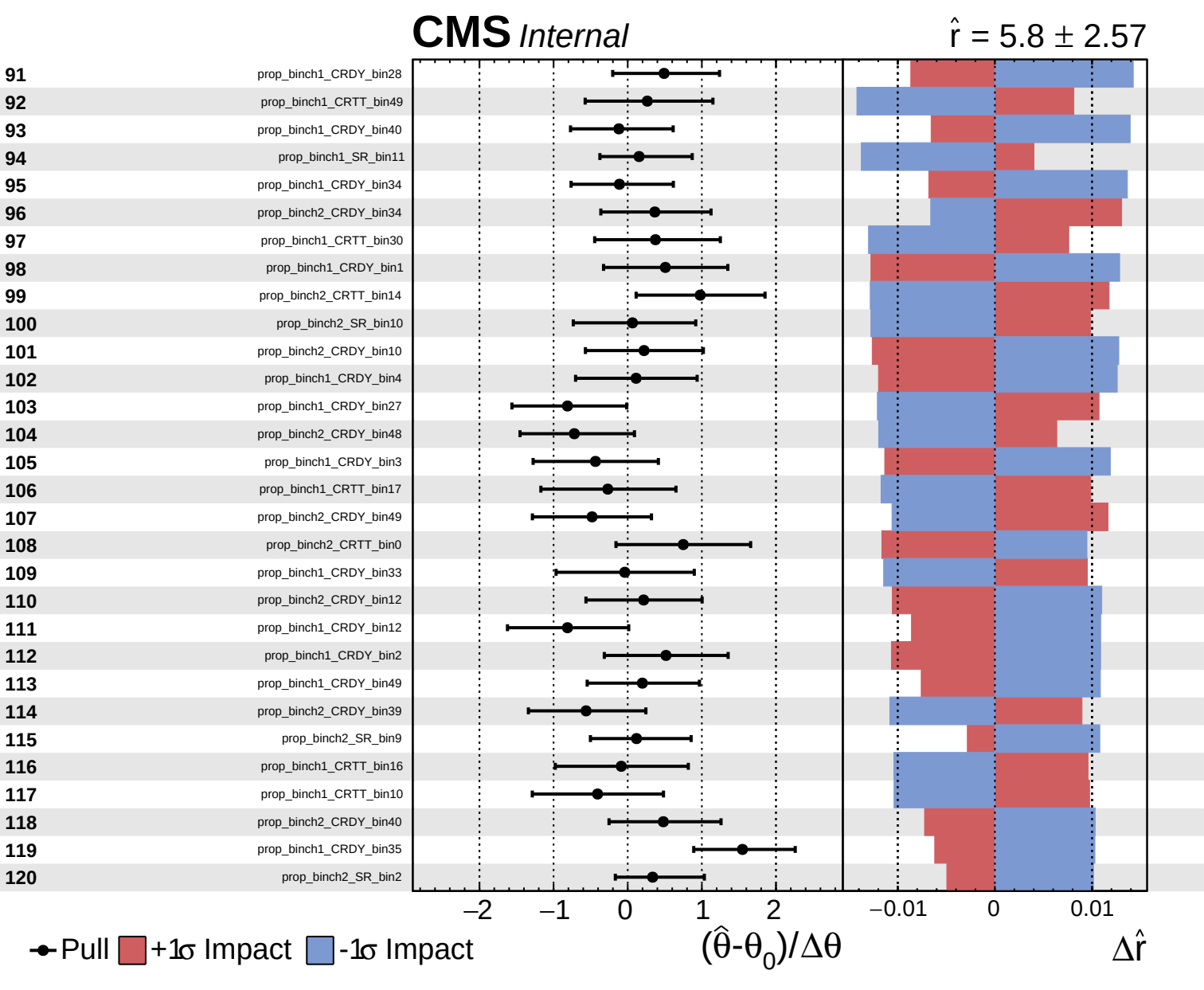
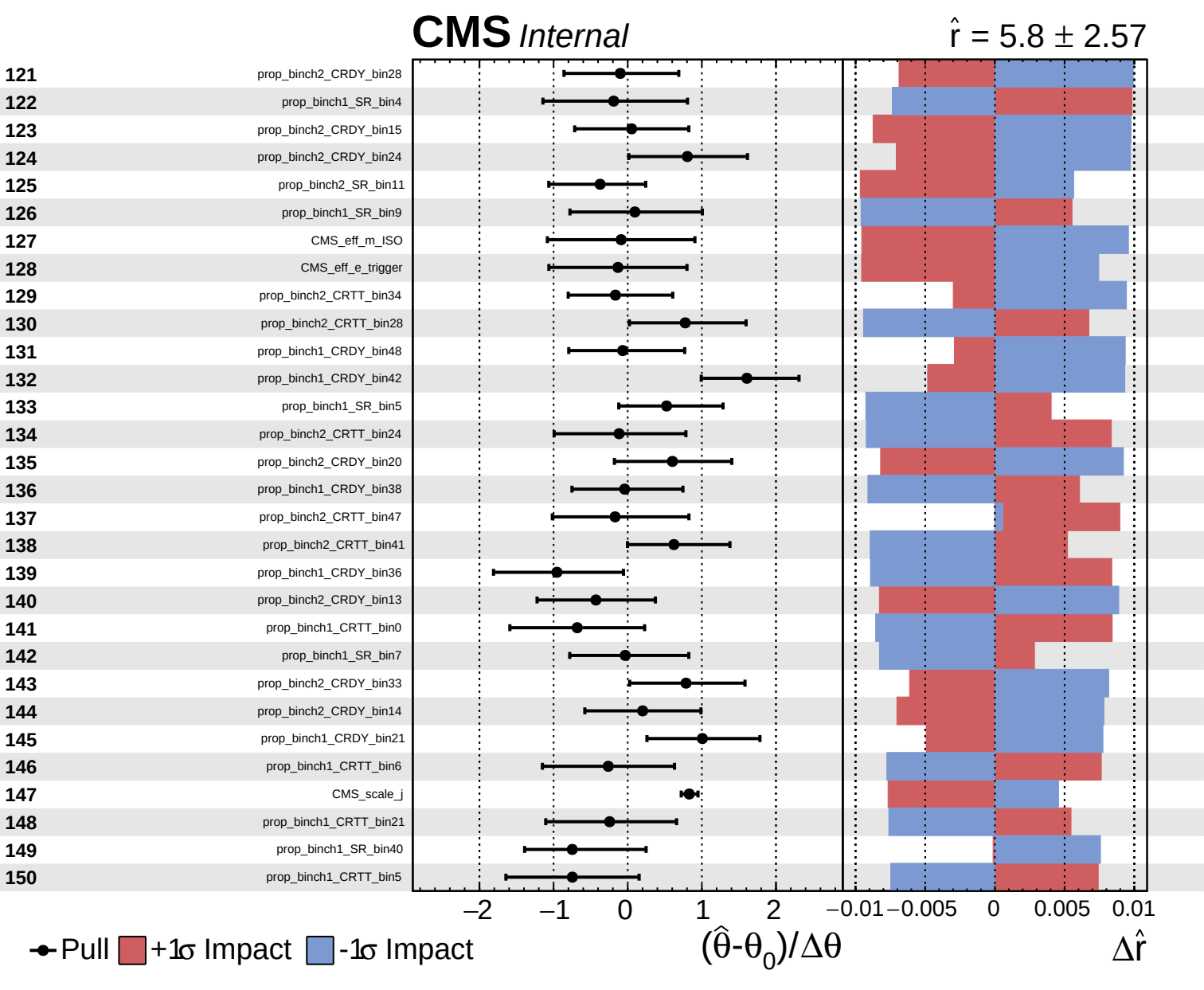
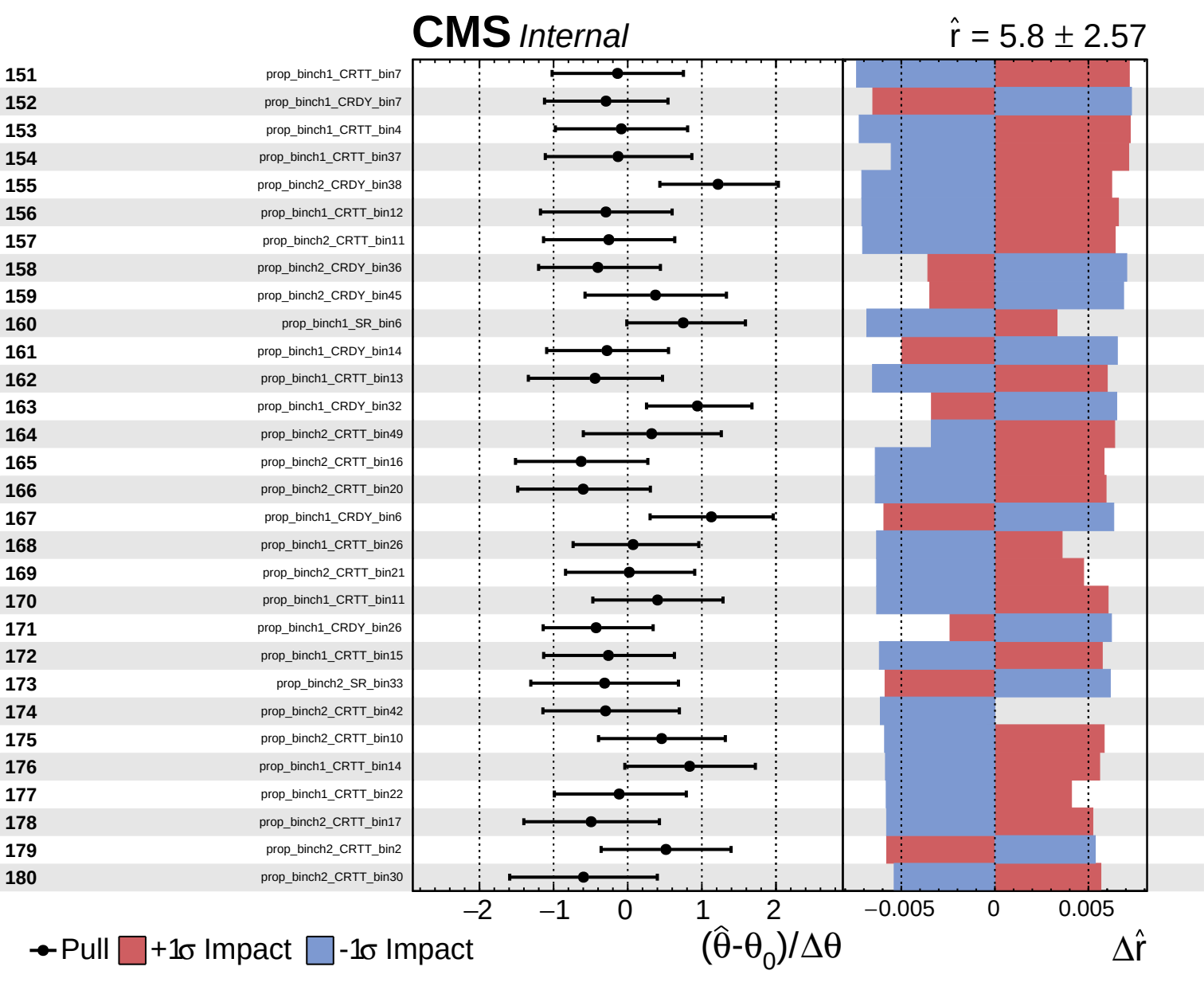

CMS Internal
r̂ = 5.8 ± 2.57
1 pdf_gg
2 CMS_pu
3 prop_binch2_SR_bin22
4 QCDscale_ggHH
5 CMS_btag_light
6 prop_binch1_SR_bin25
7 prop_binch1_SR_bin23
8 CMS_eff_met_UnclusteredEn
9 prop_binch2_SR_bin34
10 prop_binch1_SR_bin18
11 prop_binch1_SR_bin30
12 prop_binch2_SR_bin49
13 lumi_13TeV
14 prop_binch1_SR_bin26
15 prop_binch1_SR_bin22
16 CMS_btag_heavy
17 prop_binch2_SR_bin20
18 prop_binch2_SR_bin19
19 prop_binch2_SR_bin16
20 CMS_eff_e_ID
21 prop_binch2_SR_bin32
22 CMS_eff_m_trigger
23 prop_binch1_SR_bin17
24 prop_binch1_SR_bin20
25 prop_binch2_SR_bin25
26 prop_binch1_CRDY_bin0
27 prop_binch2_SR_bin23
28 prop_binch2_SR_bin27
29 CMS_res_j
30 prop_binch2_SR_bin17
−2 −1 0 1 2
−1 −0.5 0 0.5 1
Pull +1σ Impact -1σ Impact
(θ̂-θ0)/Δθ
Δr̂

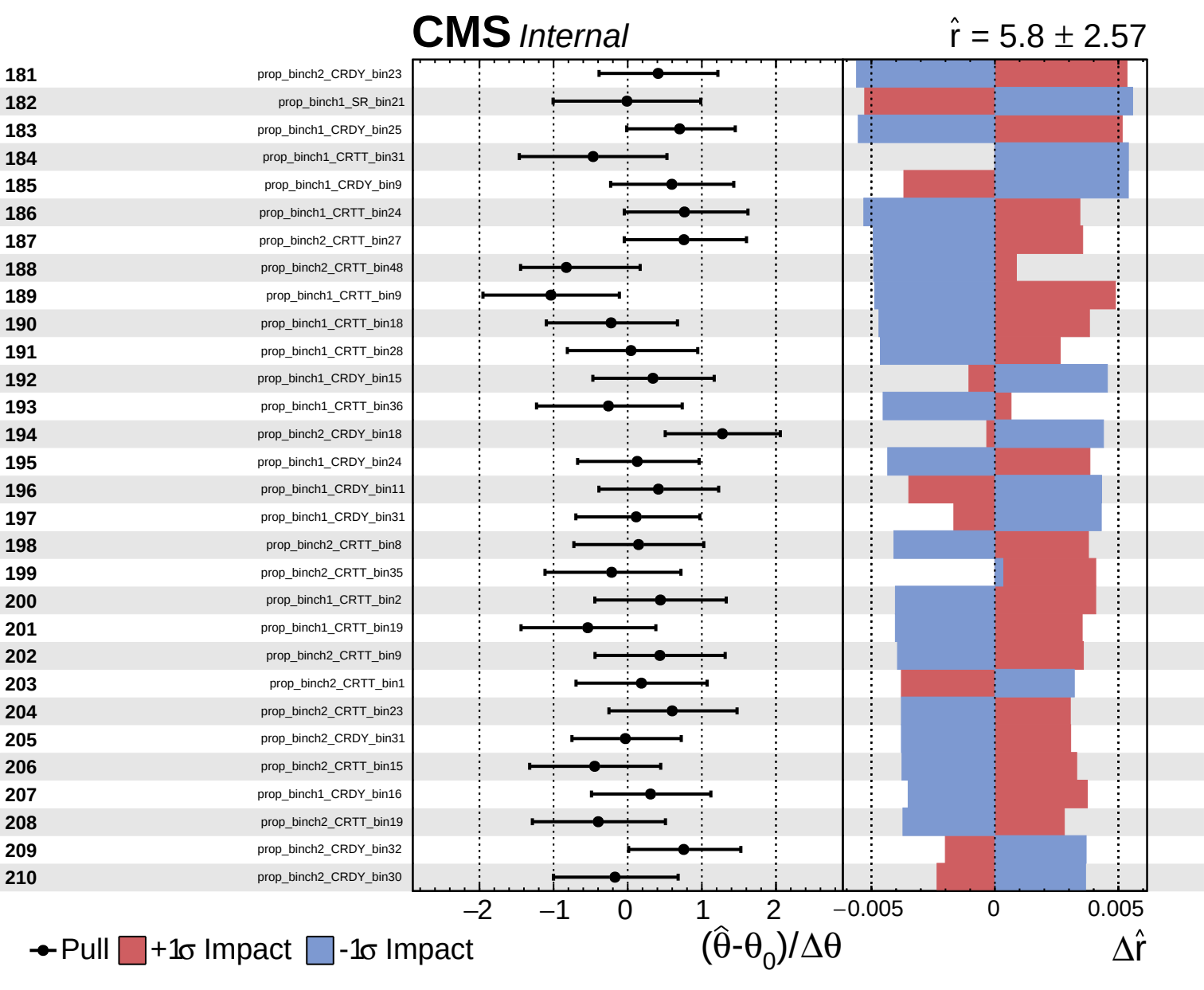

CMS Internal
r̂ = 5.8 ± 2.57
31 prop_binch2_CRDY_bin41
32 prop_binch2_SR_bin21
33 prop_binch2_SR_bin14
34 QCDscale_VH
35 prop_binch2_SR_bin8
36 prop_binch2_SR_bin26
37 prop_binch2_CRDY_bin3
38 prop_binch2_CRDY_bin0
39 prop_binch2_CRTT_bin39
40 prop_binch2_CRDY_bin1
41 prop_binch2_SR_bin15
42 prop_binch2_SR_bin29
43 prop_binch2_SR_bin13
44 prop_binch1_SR_bin24
45 prop_binch1_CRDY_bin46
46 prop_binch2_CRDY_bin2
47 prop_binch2_SR_bin30
48 CMS_eff_m_ID
49 prop_binch2_SR_bin24
50 prop_binch2_CRDY_bin6
51 prop_binch2_SR_bin31
52 pdf_qqbar
53 prop_binch2_CRDY_bin4
54 prop_binch1_SR_bin36
55 prop_binch1_SR_bin29
56 prop_binch1_SR_bin27
57 prop_binch2_SR_bin38
58 prop_binch1_SR_bin12
59 prop_binch1_SR_bin14
60 prop_binch1_CRDY_bin43
−2 −1 0 1 2
−0.05 0 0.05
Pull +1σ Impact -1σ Impact
(θ̂-θ0)/Δθ
Δr̂

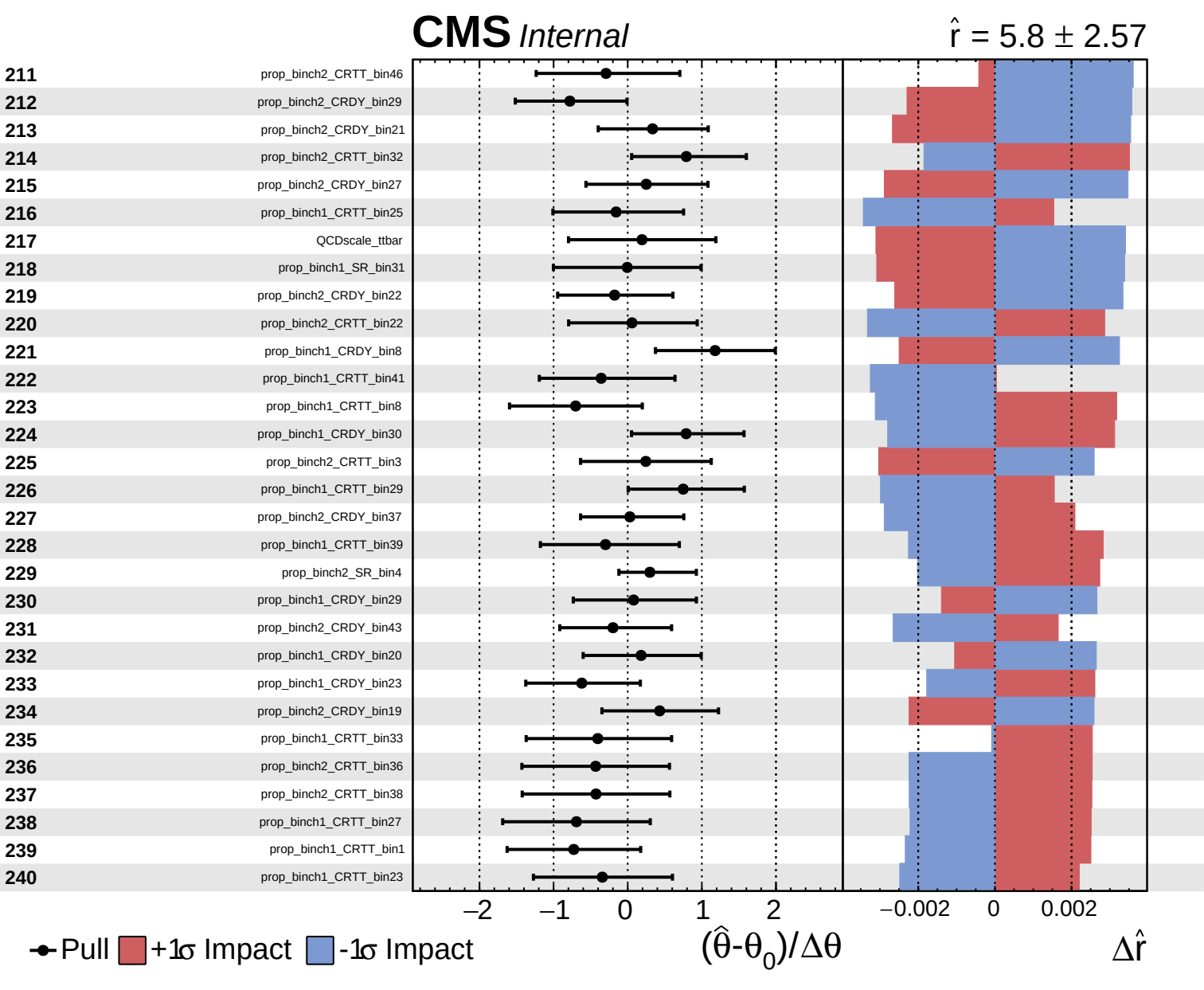

CMS Internal
r̂ = 5.8 ± 2.57
61 prop_binch2_CRDY_bin8
62 prop_binch1_SR_bin15
63 prop_binch2_CRDY_bin7
64 prop_binch1_CRDY_bin45
65 prop_binch1_CRDY_bin37
66 prop_binch1_CRDY_bin39
67 prop_binch2_CRDY_bin5
68 prop_binch2_SR_bin5
69 prop_binch1_SR_bin10
70 prop_binch1_SR_bin28
71 prop_binch1_CRDY_bin22
72 prop_binch2_CRDY_bin35
73 prop_binch1_SR_bin34
74 CMS_eff_e_tracker
75 prop_binch1_CRDY_bin17
76 prop_binch1_SR_bin35
77 prop_binch1_SR_bin19
78 prop_binch2_CRDY_bin44
79 prop_binch1_SR_bin33
80 prop_binch1_SR_bin38
81 prop_binch2_CRTT_bin13
82 prop_binch2_CRDY_bin11
83 prop_binch2_CRTT_bin18
84 prop_binch1_SR_bin32
85 prop_binch1_CRDY_bin5
86 prop_binch2_CRDY_bin9
87 prop_binch2_CRDY_bin25
88 prop_binch2_SR_bin28
89 prop_binch1_SR_bin8
90 prop_binch1_CRDY_bin18
−2 −1 0 1 2
−0.02 −0.01 0 0.01 0.02
Pull +1σ Impact -1σ Impact
(θ̂-θ0)/Δθ
Δr̂

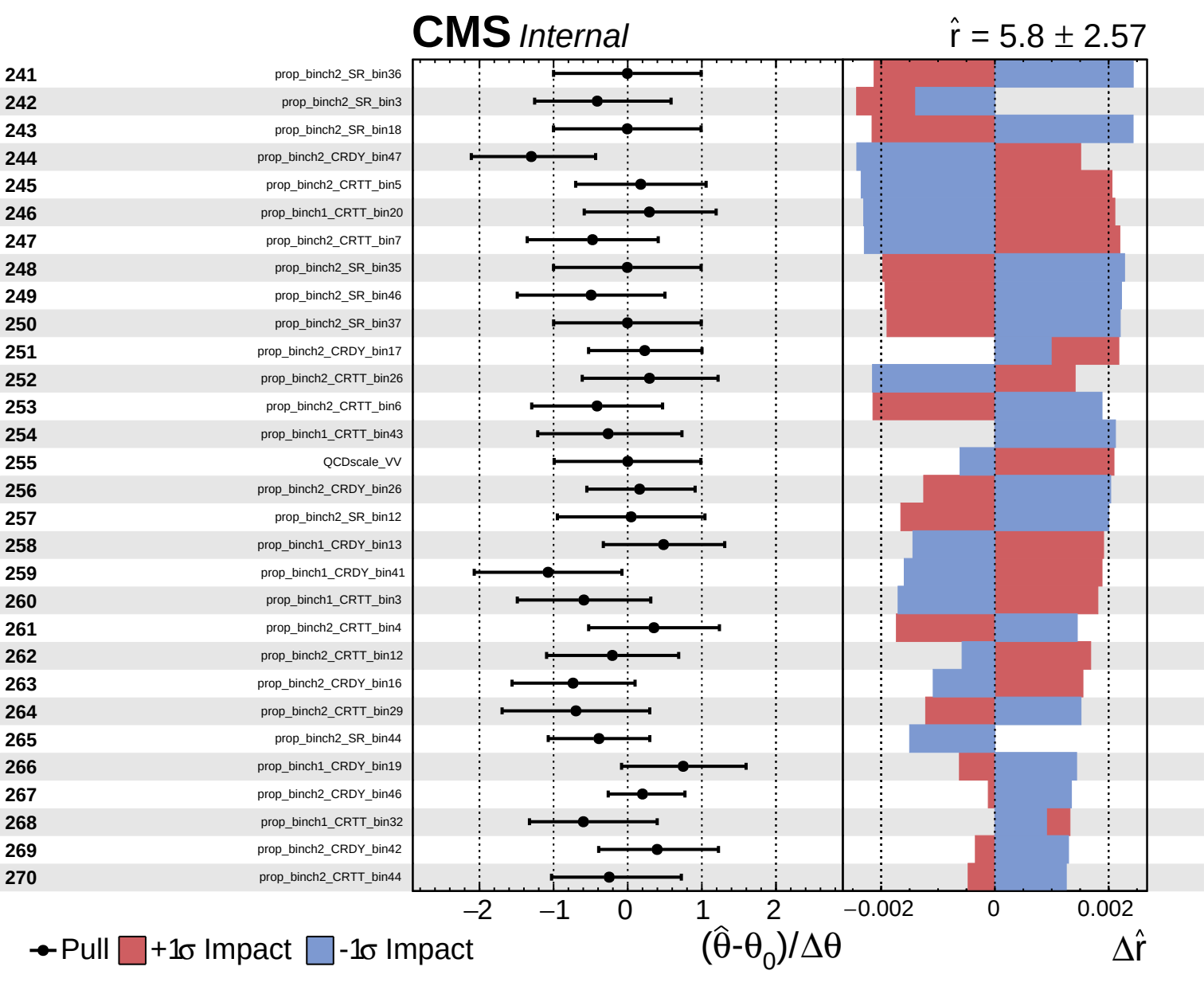

CMS Internal
r̂ = 5.8 ± 2.57
91 prop_binch1_CRDY_bin28
92 prop_binch1_CRTT_bin49
93 prop_binch1_CRDY_bin40
94 prop_binch1_SR_bin11
95 prop_binch1_CRDY_bin34
96 prop_binch2_CRDY_bin34
97 prop_binch1_CRTT_bin30
98 prop_binch1_CRDY_bin1
99 prop_binch2_CRTT_bin14
100 prop_binch2_SR_bin10
101 prop_binch2_CRDY_bin10
102 prop_binch1_CRDY_bin4
103 prop_binch1_CRDY_bin27
104 prop_binch2_CRDY_bin48
105 prop_binch1_CRDY_bin3
106 prop_binch1_CRTT_bin17
107 prop_binch2_CRDY_bin49
108 prop_binch2_CRTT_bin0
109 prop_binch1_CRDY_bin33
110 prop_binch2_CRDY_bin12
111 prop_binch1_CRDY_bin12
112 prop_binch1_CRDY_bin2
113 prop_binch1_CRDY_bin49
114 prop_binch2_CRDY_bin39
115 prop_binch2_SR_bin9
116 prop_binch1_CRTT_bin16
117 prop_binch1_CRTT_bin10
118 prop_binch2_CRDY_bin40
119 prop_binch1_CRDY_bin35
120 prop_binch2_SR_bin2
−2 −1 0 1 2
−0.01 0 0.01
Pull +1σ Impact -1σ Impact
(θ̂-θ0)/Δθ
Δr̂

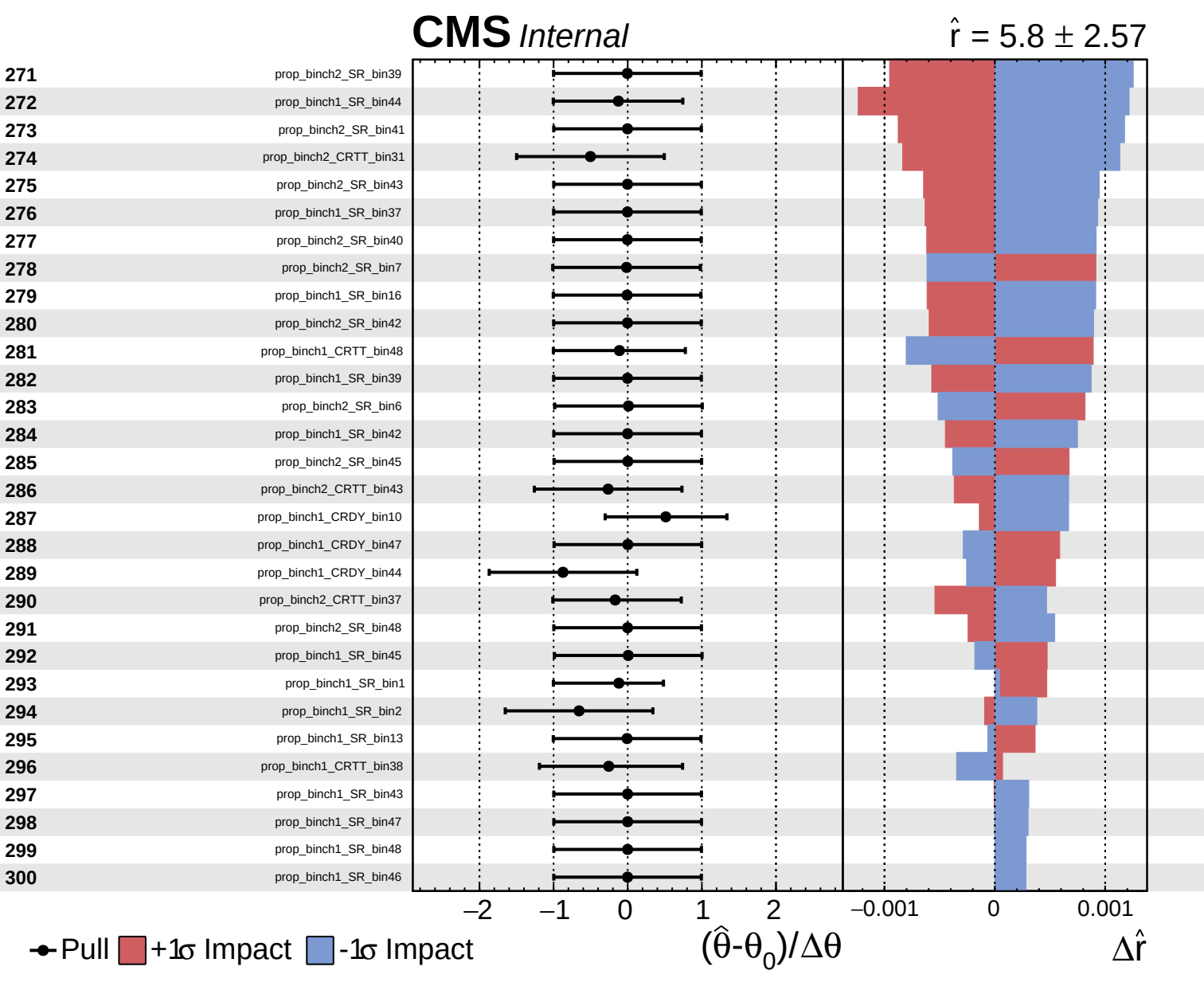

CMS Internal
r̂ = 5.8 ± 2.57
121 prop_binch2_CRDY_bin28
122 prop_binch1_SR_bin4
123 prop_binch2_CRDY_bin15
124 prop_binch2_CRDY_bin24
125 prop_binch2_SR_bin11
126 prop_binch1_SR_bin9
127 CMS_eff_m_ISO
128 CMS_eff_e_trigger
129 prop_binch2_CRTT_bin34
130 prop_binch2_CRTT_bin28
131 prop_binch1_CRDY_bin48
132 prop_binch1_CRDY_bin42
133 prop_binch1_SR_bin5
134 prop_binch2_CRTT_bin24
135 prop_binch2_CRDY_bin20
136 prop_binch1_CRDY_bin38
137 prop_binch2_CRTT_bin47
138 prop_binch2_CRTT_bin41
139 prop_binch1_CRDY_bin36
140 prop_binch2_CRDY_bin13
141 prop_binch1_CRTT_bin0
142 prop_binch1_SR_bin7
143 prop_binch2_CRDY_bin33
144 prop_binch2_CRDY_bin14
145 prop_binch1_CRDY_bin21
146 prop_binch1_CRTT_bin6
147 CMS_scale_j
148 prop_binch1_CRTT_bin21
149 prop_binch1_SR_bin40
150 prop_binch1_CRTT_bin5
−2 −1 0 1 2
−0.01 −0.005 0 0.005 0.01
Pull +1σ Impact -1σ Impact
(θ̂-θ0)/Δθ
Δr̂

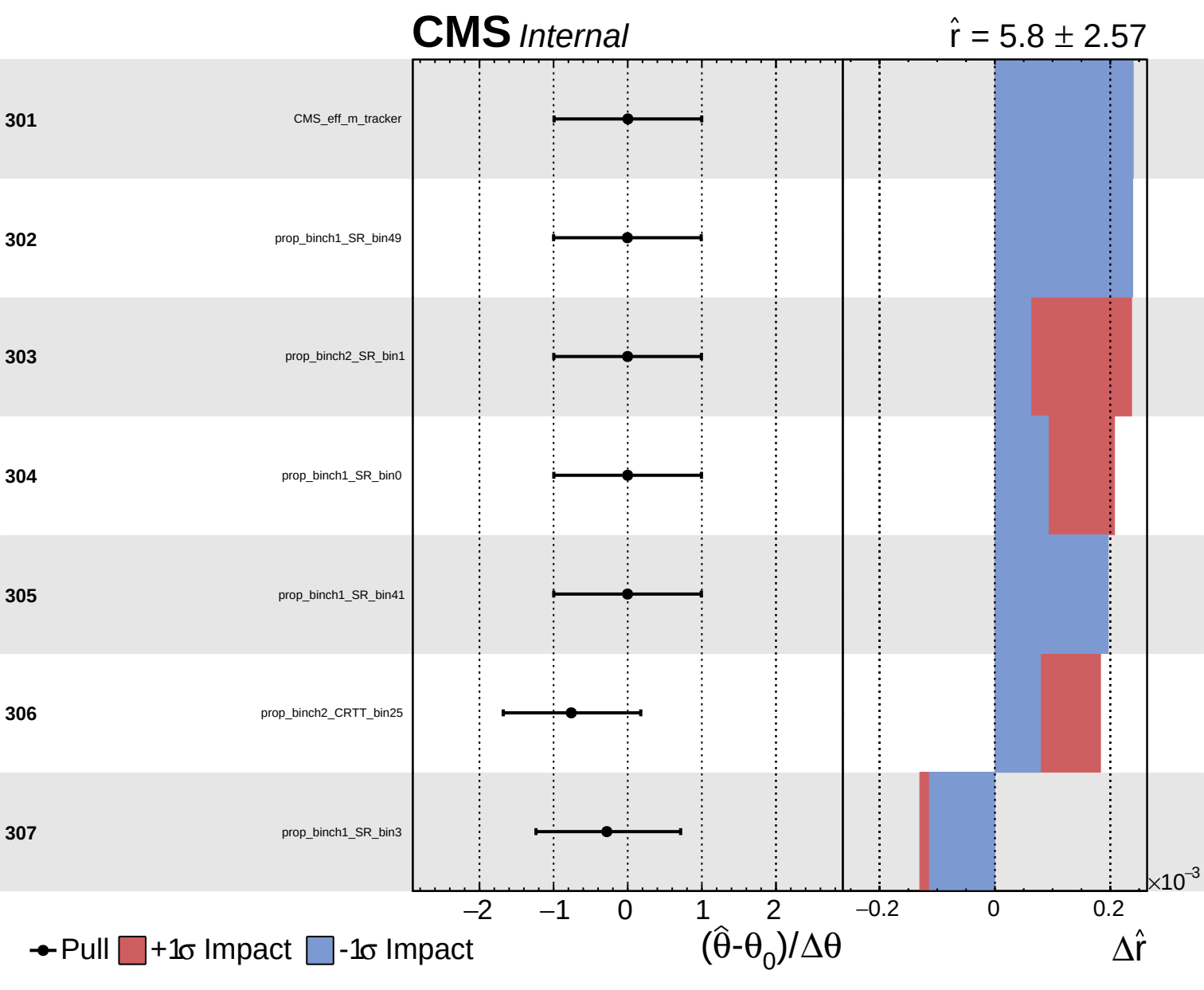

CMS Internal
r̂ = 5.8 ± 2.57
151 prop_binch1_CRTT_bin7
152 prop_binch1_CRDY_bin7
153 prop_binch1_CRTT_bin4
154 prop_binch1_CRTT_bin37
155 prop_binch2_CRDY_bin38
156 prop_binch1_CRTT_bin12
157 prop_binch2_CRTT_bin11
158 prop_binch2_CRDY_bin36
159 prop_binch2_CRDY_bin45
160 prop_binch1_SR_bin6
161 prop_binch1_CRDY_bin14
162 prop_binch1_CRTT_bin13
163 prop_binch1_CRDY_bin32
164 prop_binch2_CRTT_bin49
165 prop_binch2_CRTT_bin16
166 prop_binch2_CRTT_bin20
167 prop_binch1_CRDY_bin6
168 prop_binch1_CRTT_bin26
169 prop_binch2_CRTT_bin21
170 prop_binch1_CRTT_bin11
171 prop_binch1_CRDY_bin26
172 prop_binch1_CRTT_bin15
173 prop_binch2_SR_bin33
174 prop_binch2_CRTT_bin42
175 prop_binch2_CRTT_bin10
176 prop_binch1_CRTT_bin14
177 prop_binch1_CRTT_bin22
178 prop_binch2_CRTT_bin17
179 prop_binch2_CRTT_bin2
180 prop_binch2_CRTT_bin30
−2
−1
0
1
2
−0.005
0
0.005
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
Δr̂


CMS Internal
r̂ = 5.8 ± 2.57
181 prop_binch2_CRDY_bin23
182 prop_binch1_SR_bin21
183 prop_binch1_CRDY_bin25
184 prop_binch1_CRTT_bin31
185 prop_binch1_CRDY_bin9
186 prop_binch1_CRTT_bin24
187 prop_binch2_CRTT_bin27
188 prop_binch2_CRTT_bin48
189 prop_binch1_CRTT_bin9
190 prop_binch1_CRTT_bin18
191 prop_binch1_CRTT_bin28
192 prop_binch1_CRDY_bin15
193 prop_binch1_CRTT_bin36
194 prop_binch2_CRDY_bin18
195 prop_binch1_CRDY_bin24
196 prop_binch1_CRDY_bin11
197 prop_binch1_CRDY_bin31
198 prop_binch2_CRTT_bin8
199 prop_binch2_CRTT_bin35
200 prop_binch1_CRTT_bin2
201 prop_binch1_CRTT_bin19
202 prop_binch2_CRTT_bin9
203 prop_binch2_CRTT_bin1
204 prop_binch2_CRTT_bin23
205 prop_binch2_CRDY_bin31
206 prop_binch2_CRTT_bin15
207 prop_binch1_CRDY_bin16
208 prop_binch2_CRTT_bin19
209 prop_binch2_CRDY_bin32
210 prop_binch2_CRDY_bin30
−2
−1
0
1
2
−0.005
0
0.005
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
Δr̂


CMS Internal
r̂ = 5.8 ± 2.57
211 prop_binch2_CRTT_bin46
212 prop_binch2_CRDY_bin29
213 prop_binch2_CRDY_bin21
214 prop_binch2_CRTT_bin32
215 prop_binch2_CRDY_bin27
216 prop_binch1_CRTT_bin25
217 QCDscale_ttbar
218 prop_binch1_SR_bin31
219 prop_binch2_CRDY_bin22
220 prop_binch2_CRTT_bin22
221 prop_binch1_CRDY_bin8
222 prop_binch1_CRTT_bin41
223 prop_binch1_CRTT_bin8
224 prop_binch1_CRDY_bin30
225 prop_binch2_CRTT_bin3
226 prop_binch1_CRTT_bin29
227 prop_binch2_CRDY_bin37
228 prop_binch1_CRTT_bin39
229 prop_binch2_SR_bin4
230 prop_binch1_CRDY_bin29
231 prop_binch2_CRDY_bin43
232 prop_binch1_CRDY_bin20
233 prop_binch1_CRDY_bin23
234 prop_binch2_CRDY_bin19
235 prop_binch1_CRTT_bin33
236 prop_binch2_CRTT_bin36
237 prop_binch2_CRTT_bin38
238 prop_binch1_CRTT_bin27
239 prop_binch1_CRTT_bin1
240 prop_binch1_CRTT_bin23
−2 −1 0 1 2
−0.002 0 0.002
Pull +1σ Impact -1σ Impact
(θ̂-θ0)/Δθ
Δr̂


CMS Internal
r̂ = 5.8 ± 2.57
241 prop_binch2_SR_bin36
242 prop_binch2_SR_bin3
243 prop_binch2_SR_bin18
244 prop_binch2_CRDY_bin47
245 prop_binch2_CRTT_bin5
246 prop_binch1_CRTT_bin20
247 prop_binch2_CRTT_bin7
248 prop_binch2_SR_bin35
249 prop_binch2_SR_bin46
250 prop_binch2_SR_bin37
251 prop_binch2_CRDY_bin17
252 prop_binch2_CRTT_bin26
253 prop_binch2_CRTT_bin6
254 prop_binch1_CRTT_bin43
255 QCDscale_VV
256 prop_binch2_CRDY_bin26
257 prop_binch2_SR_bin12
258 prop_binch1_CRDY_bin13
259 prop_binch1_CRDY_bin41
260 prop_binch1_CRTT_bin3
261 prop_binch2_CRTT_bin4
262 prop_binch2_CRTT_bin12
263 prop_binch2_CRDY_bin16
264 prop_binch2_CRTT_bin29
265 prop_binch2_SR_bin44
266 prop_binch1_CRDY_bin19
267 prop_binch2_CRDY_bin46
268 prop_binch1_CRTT_bin32
269 prop_binch2_CRDY_bin42
270 prop_binch2_CRTT_bin44
−2 −1 0 1 2
−0.002 0 0.002
Pull +1σ Impact -1σ Impact
(θ̂-θ0)/Δθ
Δr̂


CMS Internal
r̂ = 5.8 ± 2.57
271 prop_binch2_SR_bin39
272 prop_binch1_SR_bin44
273 prop_binch2_SR_bin41
274 prop_binch2_CRTT_bin31
275 prop_binch2_SR_bin43
276 prop_binch1_SR_bin37
277 prop_binch2_SR_bin40
278 prop_binch2_SR_bin7
279 prop_binch1_SR_bin16
280 prop_binch2_SR_bin42
281 prop_binch1_CRTT_bin48
282 prop_binch1_SR_bin39
283 prop_binch2_SR_bin6
284 prop_binch1_SR_bin42
285 prop_binch2_SR_bin45
286 prop_binch2_CRTT_bin43
287 prop_binch1_CRDY_bin10
288 prop_binch1_CRDY_bin47
289 prop_binch1_CRDY_bin44
290 prop_binch2_CRTT_bin37
291 prop_binch2_SR_bin48
292 prop_binch1_SR_bin45
293 prop_binch1_SR_bin1
294 prop_binch1_SR_bin2
295 prop_binch1_SR_bin13
296 prop_binch1_CRTT_bin38
297 prop_binch1_SR_bin43
298 prop_binch1_SR_bin47
299 prop_binch1_SR_bin48
300 prop_binch1_SR_bin46
−2
−1
0
1
2
−0.001
0
0.001
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
Δr̂


CMS Internal
r̂ = 5.8 ± 2.57
301
CMS_eff_m_tracker
302
prop_binch1_SR_bin49
303
prop_binch2_SR_bin1
304
prop_binch1_SR_bin0
305
prop_binch1_SR_bin41
306
prop_binch2_CRTT_bin25
307
prop_binch1_SR_bin3
−2
−1
0
1
2
−0.2
0
0.2
×10−3
Pull
+1σ Impact
-1σ Impact
(θ̂-θ0)/Δθ
Δr̂