

$\sqrt{s}=8$ TeV $|\eta^{\text{Truth}}| < 1.2$, $350 < p_{\text{T}}^{\text{Truth}} < 500$ GeV, M Cut

★ = Optimal substructure variable for jet algorithm

Split-Filtered

Pruned

Trimmed

C/A R=0.6 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=9\%$)
 C/A R=0.6 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=4\%$)
 C/A R=0.6 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=0\%$)
 C/A R=0.8 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=9\%$)
 C/A R=0.8 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=4\%$)
 C/A R=0.8 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=0\%$)
 C/A R=1.2 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=15\%$)
 C/A R=1.2 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=12\%$)
 C/A R=1.2 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=9\%$)
 C/A R=1.2 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=4\%$)
 C/A R=1.2 ($\mu=1, R_{\text{sub}}=0.3, y_{\text{filt}}=0\%$)

 C/A R=0.6 ($R_{\text{cut}}=0.5, Z_{\text{cut}}=0.15$)
 C/A R=0.6 ($R_{\text{cut}}=0.5, Z_{\text{cut}}=0.1$)
 C/A R=0.8 ($R_{\text{cut}}=0.5, Z_{\text{cut}}=0.15$)
 C/A R=0.8 ($R_{\text{cut}}=0.5, Z_{\text{cut}}=0.1$)
 C/A R=1.0 ($R_{\text{cut}}=0.5, Z_{\text{cut}}=0.15$)
 C/A R=1.0 ($R_{\text{cut}}=0.5, Z_{\text{cut}}=0.1$)
 C/A R=1.2 ($R_{\text{cut}}=0.5, Z_{\text{cut}}=0.15$)
 C/A R=1.2 ($R_{\text{cut}}=0.5, Z_{\text{cut}}=0.1$)

 C/A R=0.6 ($f_{\text{cut}}=5\%, R_{\text{sub}}=0.2$)
 anti- k_t R=0.8 ($f_{\text{cut}}=5\%, R_{\text{sub}}=0.2$)
 C/A R=0.8 ($f_{\text{cut}}=5\%, R_{\text{sub}}=0.2$)
 anti- k_t R=1.0 ($f_{\text{cut}}=5\%, R_{\text{sub}}=0.3$)
 anti- k_t R=1.0 ($f_{\text{cut}}=5\%, R_{\text{sub}}=0.2$)
 C/A R=1.0 ($f_{\text{cut}}=5\%, R_{\text{sub}}=0.2$)
 anti- k_t R=1.2 ($f_{\text{cut}}=5\%, R_{\text{sub}}=0.2$)
 C/A R=1.2 ($f_{\text{cut}}=5\%, R_{\text{sub}}=0.2$)

21.8	29.8	26.6	44.8	39.1	28.9	30.9	26.8	27.8	21.6	28.1	26.7	21.6	17.7	17.6	17.8	29.5	27.8	31.4	29.4	34.2	28.2	30	20.5	23.3	20.2	10.4	20.1
+0.4	+0.7	+0.6	+1.1	+0.8	+0.7	+0.8	+0.6	+0.6	+0.6	+0.6	+0.7	+0.4	+0.4	+0.4	+0.4	+0.6	+0.8	+0.7	+0.6	+0.8	+0.7	+0.7	+0.4	+0.5	+0.4	+0.1	+0.3
22.9	30.1	24.8	50.9	44.3	30.9	33.1	27.9	28.8	23.3	29.7	29.9	21.9	18.5	18.4	18.8	31.2	28.4	34.3	29.7	37.4	29.5	31	21.6	23.1	19.5	9.7	19.8
+0.4	+0.6	+0.5	+1.2	+1	+0.7	+0.8	+0.6	+0.6	+0.5	+0.5	+0.7	+0.7	+0.4	+0.4	+0.4	+0.7	+0.6	+0.8	+0.6	+0.9	+0.6	+0.7	+0.4	+0.4	+0.5	+0.3	+0.1
21.4	31	23.2	55.3	41.5	31	26.5	27.8	26.5	24.3	32.3	31.7	21.6	18.6	18	18.8	33	29.7	36.4	31.5	38.6	29.7	32.3	21.3	23.8	18.7	9.1	18.2
+0.3	+0.6	+0.4	+1.3	+0.9	+0.7	+0.6	+0.6	+0.5	+0.5	+0.5	+0.7	+0.7	+0.4	+0.4	+0.3	+0.3	+0.7	+0.6	+0.8	+0.6	+0.9	+0.6	+0.7	+0.4	+0.5	+0.3	+0.1
23.4	23.8	20.1	45.7	40.1	26	26.5	21.4	22.3	19.2	24.3	27.8	19.7	15.9	16.6	16.4	24.6	28.3	27.3	28.6	31.2	22.7	24.1	19.7	20	18.9	9.1	17.1
+0.5	+0.6	+0.5	+1.4	+1	+0.7	+0.7	+0.5	+0.6	+0.5	+0.5	+0.7	+0.8	+0.5	+0.4	+0.4	+0.7	+0.7	+0.8	+0.7	+0.9	+0.6	+0.6	+0.5	+0.5	+0.5	+0.5	+0.1
23	20.6	15.4	49.2	41.8	30.2	31.7	19.9	21.5	18.9	23.6	25.1	22.8	18.6	18.5	19.5	21.8	22.1	29.4	22	35.5	21.5	21.3	22.2	17.1	16.3	7.9	12.8
+0.4	+0.4	+0.3	+1.1	+0.9	+0.8	+0.8	+0.4	+0.4	+0.4	+0.6	+0.6	+0.5	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4	+0.6	+0.4	+0.6	+0.4	+0.4	+0.4	+0.3	+0.3	+0.1
16.9	17	11.3	40	19.4	21.9	14.4	15.5	14.4	17.5	21.3	20.6	17.5	14.9	14.7	15.5	18	19.2	24.5	18.3	29.5	16.3	17.1	17.6	14.3	12.8	6.6	12
+0.3	+0.3	+0.2	+1	+0.4	+0.5	+0.3	+0.3	+0.3	+0.4	+0.6	+0.5	+0.4	+0.3	+0.3	+0.3	+0.4	+0.4	+0.6	+0.3	+0.3	+0.3	+0.3	+0.4	+0.3	+0.2	+0.1	+0.1
24.2	28.6	26	47.8	39.7	28.2	26.7	25	25.4	16.5	19.5	30.6	19.6	15.3	16.3	16	28.9	36	28.8	36.2	32.1	26.5	28.5	19.7	22.4	19.6	10.9	18.7
+0.5	+0.7	+0.6	+1.1	+0.9	+0.7	+0.6	+0.6	+0.6	+0.4	+0.4	+0.6	+0.4	+0.3	+0.3	+0.3	+0.7	+0.8	+0.7	+0.9	+0.6	+0.7	+0.4	+0.7	+0.4	+0.5	+0.4	+0.1
23.7	26.3	23.8	44.7	39.4	27.6	27.5	23.8	24.5	16.8	19.4	28.9	21.1	16.8	17.8	17.4	26.6	30.8	27.7	31.7	31.2	24.7	26.4	21	21.6	20.7	11.1	20.5
+0.4	+0.6	+0.5	+1	+0.8	+0.6	+0.6	+0.5	+0.5	+0.4	+0.4	+0.6	+0.4	+0.3	+0.3	+0.3	+0.4	+0.6	+0.7	+0.6	+0.7	+0.7	+0.5	+0.6	+0.4	+0.4	+0.1	+0.3
24.5	24.8	20.9	46.8	40.6	30.4	30.2	22.6	23.6	16.5	19.2	29.8	23.1	18.8	19.5	19.4	25.6	28.5	29.1	29.2	34	24	25	23.2	21.2	21.1	10.1	18.3
+0.4	+0.5	+0.4	+1	+0.9	+0.6	+0.7	+0.5	+0.5	+0.3	+0.4	+0.6	+0.5	+0.4	+0.4	+0.4	+0.5	+0.6	+0.7	+0.6	+0.8	+0.5	+0.5	+0.4	+0.4	+0.1	+0.1	+0.3
22.6	13.5	10.3	47.4	35.1	30.4	28.5	13.4	14.8	10.9	12.6	15.3	23.2	17.4	18.1	18.8	14.4	14.6	24.3	13.9	32.7	14.2	13.9	23.1	12.2	12	6.1	9.5
+0.4	+0.2	+0.1	+0.9	+0.7	+0.6	+0.6	+0.2	+0.2	+0.2	+0.2	+0.2	+0.3	+0.4	+0.3	+0.3	+0.2	+0.2	+0.4	+0.2	+0.7	+0.2	+0.2	+0.4	+0.2	+0.2	+0.1	+0.1
9.8	6.9	4.8	21.1	7.8	14	6.8	5.9	6	6.8	7.6	14.3	10	10.7	11	6.5	7.2	14	6.6	19.7	6.1	6.2	13.9	6.7	6.5	3.5	5.1	
+0.1	+0.1	+0.1	+0.3	+0.1	+0.2	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.2	+0.2	+0.1	+0.1	+0.1	+0.1	+0.2	+0.1	+0.3	+0.1	+0.1	+0.2	+0.1	+0.1	+0.1	+0.1
24.9	36.8	34.1	47.3	47.1	39.3	41.4	31.7	35.6	26.1	31.7	32.6	25.1	19.8	19.7	19.9	33.9	33.2	35.1	34.6	38.9	33.3	35.6	23.8	28.3	23.7	12.6	25.6
+0.4	+0.9	+0.8	+1.1	+1.1	+1	+1.1	+0.7	+0.8	+0.6	+0.8	+0.8	+0.5	+0.5	+0.5	+0.4	+0.8	+0.7	+0.8	+0.8	+0.9	+0.8	+0.8	+0.5	+0.6	+0.5	+0.2	+0.5
27.5	34.4	32.6	51.3	52	41.5	45.1	30.3	37.3	25.7	32	33.9	26.4	22.2	21.5	22.2	32.6	30.9	36.5	32.7	41.3	31.6	34	26.2	26.9	24.1	12.3	20.3
+0.6	+0.6	+0.7	+1.2	+1.2	+1	+1.1	+0.7	+0.8	+0.6	+0.8	+0.6	+0.5	+0.5	+0.5	+0.5	+0.7	+0.7	+0.8	+0.7	+1	+0.7	+0.6	+0.6	+0.6	+0.6	+0.5	+0.2
26.7	36.1	33.3	50.1	50.4	41.8	42.6	31.6	39	25.9	32.1	35.4	25.7	19.8	20.2	20.2	34	36.9	35.7	38.2	39.7	33.3	35.6	24.7	28.8	24.6	12.7	21.7
+0.5	+1.1	+1	+1.4	+1.5	+1.3	+1.3	+0.9	+1	+0.7	+1	+1	+0.7	+0.5	+0.5	+0.5	+1	+1	+1.1	+1.2	+0.9	+1	+1	+0.6	+0.7	+0.6	+0.2	+0.4
28.2	29.9	27.1	54.7	52.1	41.8	44.5	26.3	33.7	23.4	28.9	32.5	25.9	21.3	20.8	21.4	28.7	31.4	34.1	32.9	40.5	27.9	29.7	25.8	24.6	23.1	10.4	19.7
+0.7	+0.8	+0.8	+1.7	+1.6	+1.3	+1.4	+0.7	+0.9	+0.7	+0.9	+0.9	+0.6	+0.5	+0.5	+0.5	+0.7	+0.8	+1	+0.9	+1.2	+0.8	+0.7	+0.6	+0.6	+0.1	+0.1	+0.4
27	37.4	34.8	53.8	51.4	44.6	45.1	33.2	37.8	24	28.6	36.1	26.9	21.3	21.8	21.9	36.2	40.5	38.5	41.6	42.6	35.4	37.9	26.9	30.4	26.3	12.9	23.6
+0.6	+0.8	+0.8	+1.3	+1.2	+1.1	+1.2	+0.8	+0.9	+0.6	+0.7	+0.9	+0.6	+0.5	+0.5	+0.5	+0.9	+0.9	+0.9	+0.9	+1	+0.8	+0.9	+0.6	+0.7	+0.6	+0.2	+0.4
30.3	32.2	29.1	56.7	53.7	45.3	48.1	28.9	36.8	23.7	27.3	34.6	30.2	25.7	25.2	26.5	31.4	34.1	37.5	35.7	45.1	30.6	32.9	30.5	26.8	26.6	12.4	19.2
+0.6	+0.8	+0.7	+1.3	+1.2	+1	+1.3	+0.7	+0.8	+0.5	+0.7	+0.6	+0.6	+0.5	+0.5	+0.6	+0.7	+0.7	+0.9	+0.7	+1.1	+0.7	+0.7	+0.7	+0.6	+0.6	+0.2	+0.3
24	36.7	32.9	50.9	45.1	43.9	41	33.6	37.3	20.5	22.9	31.5	26.7	21.9	21.9	22.5	35.9	37.9	39	39.2	43.1	36.1	37.5	26.6	28.6	24.1	11.6	24.8
+0.4	+0.8	+0.8	+1.1	+1	+1.1	+0.9	+0.7	+0.8	+0.5	+0.5	+0.5	+0.5	+0.4	+0.4	+0.4	+0.8	+0.8	+0.8	+0.9	+0.8	+1	+0.8	+0.8	+0.6	+0.5	+0.1	+0.4
28.4	33	28.6	55.6	49.9	45.9	47.3	29.9	36.6	21	23.8	31.9	31.3	28	26.8	28.4	32.1	33.5	38.6	35.2	46.5	32.3	32.8	31.3	27.4	26.6	12.4	20.7
+0.5	+0.7	+0.6	+1.4	+1.3	+1.1	+1.2	+0.8	+0.9	+0.5	+0.5	+0.7	+0.6	+0.6	+0.6	+0.6	+0.9	+0.9	+0.9	+0.9	+1	+0.8	+0.9	+0.6	+0.6	+0.5	+0.1	+0.3
25.6	36.2	32.9	54.5	51.3	39.8	39.6	34	34.4	27	35.8	36.8	29.6	20.6	20.6	20.6	38.7	37.4	37.5	40.7	35.5	33.9	32.8	27.5	26.9	23.2	12	21.8
+0.4	+0.8	+0.7	+1.4	+1.3	+1	+1	+0.8	+0.8	+0.6	+0.6	+0.5	+0.5	+0.4	+0.4	+0.4	+0.9	+0.8	+0.9	+0.9	+1	+0.8	+0.8	+0.5	+0.5	+0.5	+0.1	+0.3
38.4	27.2	21.5	48	43.3	36.9	34.6	26.5	25.9	32	31.1	26.1	22.1	21.6	22.5	28.5	29.4	30.4	30	35.1	28	27.9	25.9	24.7	22.3	11.8	16.8	
+0.6	+0.7	+0.5	+1.3	+1.2	+1	+1	+0.9	+0.7	+0.6	+0.7	+0.9	+0.6	+0.5	+0.5	+0.5	+0.7	+0.7	+0.8	+0.7	+1	+0.7	+0.7	+0.6	+0.6	+0.5	+0.2	+0.3
25.5	28.1	21.9	48	42.6	35.6	33.7	26.4	25.8	24	30.6	33.2	24	20.6	19.9	20.7	28.8	29.4	30.4	30.2	34.2	27.8	28	23.8	24.5	20.7	10.5	17.8
+0.5	+0.7	+0.6	+1.4	+1.3	+1.1	+1	+0.7	+0.7	+0.6	+0.9	+0.9	+0.6	+0.5	+0.5	+0.5	+0.8	+0.7	+0.9	+0.7	+1	+0.7	+0.7	+0.6	+0.6	+0.5	+0.1	+0.3
24.5	23.7	17	51.6																								