

W+Jets background: Central + inverted VBF selections (2016 results)

Process	Data	DY+Jets	EWK W+2jets	EWK Z+2jets	QCD	SingleTop	$V_\tau + jets$	VBF Higgs	VV	VVV	W+Jets	$t\bar{t}$	tt+X
NRcoVertex	130579652.0	223925129.3 \pm 3814.8	1654800.3 \pm 20.1	286415.5 \pm 8.2	9933557955547.9 \pm 106994701.7	10375369.4 \pm 165.6	3429644.6 \pm 537.0	2921778.5 \pm 717.7	4943949.4 \pm 86.0	13937.4 \pm 6.5	2205649819.1 \pm 44062.8	26092333.4 \pm 373.8	65611.7 \pm 21.1
NRcoTriggers1	28576265.0	1345813.6 \pm 1077.8	115728.7 \pm 135.9	24478.9 \pm 42.0	28443857.8 \pm 2615494.1	285993.0 \pm 200.3	40434.2 \pm 94.2	1394.9 \pm 78.2	155205.0 \pm 148.5	2061.2 \pm 6.5	12888809.2 \pm 12766.1	1782015.0 \pm 391.9	8788.6 \pm 9.0
NRcoMuon1	22136.0	579.6 \pm 20.4	71.0 \pm 3.5	6.8 \pm 0.9	915.4 \pm 374.2	1187.8 \pm 14.5	35.5 \pm 2.8	0.0 \pm 0.0	1300.0 \pm 13.0	26.2 \pm 0.8	11434.5 \pm 402.9	13833.9 \pm 27.4	120.6 \pm 0.9
NRcoMuon2	21501.0	475.1 \pm 19.9	70.3 \pm 3.5	4.3 \pm 0.7	915.0 \pm 374.2	1140.7 \pm 14.1	30.7 \pm 2.6	0.0 \pm 0.0	1205.4 \pm 12.7	22.8 \pm 0.7	11430.2 \pm 402.9	13351.4 \pm 27.0	112.0 \pm 0.9
NRcoElectron1	20439.0	472.7 \pm 19.9	69.7 \pm 3.5	4.2 \pm 0.7	915.0 \pm 374.2	1075.4 \pm 13.7	30.2 \pm 2.6	0.0 \pm 0.0	1140.7 \pm 12.3	21.5 \pm 0.7	11375.3 \pm 402.0	12399.8 \pm 26.1	103.1 \pm 0.9
NRcoTau1	19944.0	470.8 \pm 19.9	68.9 \pm 3.4	4.1 \pm 0.7	915.0 \pm 374.2	1033.4 \pm 13.4	29.5 \pm 2.6	0.0 \pm 0.0	1089.4 \pm 12.0	20.6 \pm 0.7	11367.8 \pm 402.0	12144.2 \pm 25.9	100.1 \pm 0.9
METCut	2819.0	26.4 \pm 2.6	11.3 \pm 1.4	1.4 \pm 0.3	17.5 \pm 5.4	191.0 \pm 6.0	5.9 \pm 1.1	0.0 \pm 0.0	326.4 \pm 6.6	8.3 \pm 0.4	754.8 \pm 18.2	1528.0 \pm 9.1	29.3 \pm 0.4
NRcoJet1	2819.0	26.4 \pm 2.6	11.3 \pm 1.4	1.4 \pm 0.3	17.5 \pm 5.4	191.0 \pm 6.0	5.9 \pm 1.1	0.0 \pm 0.0	326.4 \pm 6.6	8.3 \pm 0.4	754.8 \pm 18.2	1528.0 \pm 9.1	29.3 \pm 0.4
NRcoJet2	2819.0	26.4 \pm 2.6	11.3 \pm 1.4	1.4 \pm 0.3	17.5 \pm 5.4	191.0 \pm 6.0	5.9 \pm 1.1	0.0 \pm 0.0	326.4 \pm 6.6	8.3 \pm 0.4	754.8 \pm 18.2	1528.0 \pm 9.1	29.3 \pm 0.4
NRcoBjet	1828.0	25.2 \pm 2.6	10.6 \pm 1.3	1.1 \pm 0.3	11.5 \pm 4.1	86.9 \pm 4.0	5.9 \pm 1.1	0.0 \pm 0.0	312.9 \pm 6.5	7.8 \pm 0.4	729.4 \pm 18.0	602.5 \pm 5.8	11.2 \pm 0.3
NDJetCombinations	1767.0	24.3 \pm 2.5	9.5 \pm 1.3	0.9 \pm 0.2	9.0 \pm 3.3	81.5 \pm 3.9	5.4 \pm 1.1	0.0 \pm 0.0	300.6 \pm 6.3	7.6 \pm 0.4	716.1 \pm 17.9	560.3 \pm 5.6	10.6 \pm 0.2

$$SF = \frac{N_{Data} - N_{non\ W+Jets}}{N_{W+Jets}}$$

$$SF^{CR1} = 1.06 \pm 0.07$$