

Z+Jets background: Central + VBF selections (2017 results)

Process	Data	DY+Jets	EWK W+2jets	EWK Z+2jets	QCD	SingleTop	$V_\alpha + jets$	VBF Higgs	VV	VVV	W+Jets	$t\bar{t}$	$t\bar{t}+X$
NRecoVertex	739384588.0	243294209.7 ± 4899.8	1903278.1 ± 51.9	329697.4 ± 15.5	1249396902697.3 ± 6335531.6	11626732.8 ± 237.1	3681750.7 ± 476.6	649957.8 ± 171.7	5387659.3 ± 141.2	16557.0 ± 6.8	2547180197.8 ± 55452.1	34794967.3 ± 622.0	82170.5 ± 29.0
NRecoTriggers1	480099871.0	49836120.7 ± 9494.2	422383.4 ± 268.3	53329.6 ± 79.3	54291206.3 ± 735896.5	947739.7 ± 310.2	899907.1 ± 370.0	901.8 ± 8.2	622692.3 ± 290.8	2718.2 ± 8.4	343755075.5 ± 98720.3	4494576.7 ± 663.7	12083.8 ± 13.2
NRecoMuon1	20054689.0	19568351.8 ± 6417.1	128.0 ± 5.3	22198.7 ± 57.8	25243.5 ± 3237.8	15568.8 ± 54.8	127929.7 ± 149.2	77.6 ± 0.3	39794.9 ± 67.7	268.2 ± 2.6	2680.4 ± 178.4	160821.6 ± 100.2	755.4 ± 2.7
NRecoMuon2	20054689.0	19568351.8 ± 6417.1	128.0 ± 5.3	22198.7 ± 57.8	25243.5 ± 3237.8	15568.8 ± 54.8	127929.7 ± 149.2	77.6 ± 0.3	39794.9 ± 67.7	268.2 ± 2.6	2680.4 ± 178.4	160821.6 ± 100.2	755.4 ± 2.7
NDiMuonCombinations	19391648.0	19207806.0 ± 6368.3	23.8 ± 2.3	20900.6 ± 56.4	330.4 ± 277.9	5784.1 ± 33.1	115956.3 ± 142.2	68.4 ± 0.2	28067.8 ± 49.2	161.8 ± 1.8	837.1 ± 105.7	61432.9 ± 62.1	333.9 ± 1.5
NRecoElectron1	19357721.0	19175556.1 ± 6363.7	23.4 ± 2.3	20805.9 ± 56.2	330.4 ± 277.9	5739.1 ± 33.0	112473.3 ± 140.1	59.4 ± 0.2	27496.5 ± 48.5	156.0 ± 1.8	833.5 ± 105.7	60782.9 ± 61.7	318.6 ± 1.5
NRecoTau1	19341803.0	19175552.9 ± 6363.7	23.4 ± 2.3	20805.9 ± 56.2	330.4 ± 277.9	5737.1 ± 33.0	112473.0 ± 140.1	59.3 ± 0.2	27447.6 ± 48.5	155.1 ± 1.8	833.5 ± 105.7	60766.0 ± 61.7	317.6 ± 1.5
METCut	19341803.0	19175552.9 ± 6363.7	23.4 ± 2.3	20805.9 ± 56.2	330.4 ± 277.9	5737.1 ± 33.0	112473.0 ± 140.1	59.3 ± 0.2	27447.6 ± 48.5	155.1 ± 1.8	833.5 ± 105.7	60766.0 ± 61.7	317.6 ± 1.5
NRecoJet1	12889968.0	1178398.6 ± 1173.3	12.3 ± 1.6	12552.2 ± 44.9	330.4 ± 277.9	2232.9 ± 20.4	24997.0 ± 66.3	13.7 ± 0.2	10937.3 ± 28.5	120.1 ± 1.6	232.6 ± 30.0	33598.4 ± 46.6	268.0 ± 1.3
NRecoJet2	249208.0	227487.9 ± 310.0	2.0 ± 0.6	5747.5 ± 31.1	8.8 ± 6.8	504.6 ± 9.8	5056.2 ± 29.4	3.6 ± 0.0	3596.0 ± 15.5	71.2 ± 1.2	36.7 ± 5.2	11777.9 ± 28.0	173.6 ± 0.9
NRecoBJet	239283.0	223841.1 ± 308.8	2.0 ± 0.6	5683.4 ± 30.9	8.8 ± 6.8	366.9 ± 8.4	5022.4 ± 29.3	3.5 ± 0.0	3513.4 ± 15.3	68.0 ± 1.2	34.7 ± 5.1	6462.4 ± 21.1	79.3 ± 0.7
NDiJetCombinations	7018.0	5820.3 ± 57.0	0.0 ± 0.0	928.2 ± 12.7	3.9 ± 3.9	13.7 ± 1.4	169.5 ± 4.5	0.8 ± 0.0	101.2 ± 3.0	2.3 ± 0.2	1.4 ± 0.9	245.2 ± 4.0	3.3 ± 0.1

$$SF = \frac{N_{Data} - N_{non\ DY+Jets}}{N_{DY+Jets} \cdot SF^{CR3}}$$

$$SF^{CR2} = 1.03 \pm 0.02$$