

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

Process	Data	DY+Jets	EWK W+2jets	EWK Z+2jets	QCD	SingleTop	$V_\gamma + jets$	VBF Higgs	VV	VVV	W+Jets	$t\bar{t}$	$t\bar{t}+X$
NRecoVertex	786628796.0	223926039.9 ± 3814.7	1654806.1 ± 20.1	286407.3 ± 8.8	9932194406044.1 ± 128877184.8	10375606.0 ± 165.5	3429613.3 ± 557.9	2915294.8 ± 717.5	4943962.6 ± 86.0	13937.5 ± 6.5	2205652570.8 ± 44062.1	26093442.4 ± 373.7	65613.8 ± 21.1
NRecoTriggers1	446859141.0	48597176.5 ± 6823.3	376917.4 ± 225.0	47208.3 ± 72.9	74959604.0 ± 9288504.9	893389.3 ± 316.4	798265.8 ± 448.8	2732.3 ± 122.3	588343.1 ± 250.5	2322.9 ± 7.1	312494150.4 ± 81104.9	3520060.1 ± 497.3	10025.0 ± 9.8
NRecoMuon1	16492113.0	16746070.2 ± 4350.6	27.8 ± 2.2	19166.4 ± 52.8	34960.0 ± 13156.1	13218.0 ± 50.3	109059.7 ± 180.0	69.4 ± 0.3	40306.0 ± 64.2	220.3 ± 2.2	1586.5 ± 122.6	117267.7 ± 72.6	614.6 ± 1.9
NRecoMuon2	16492113.0	16746070.2 ± 4350.6	27.8 ± 2.2	19166.4 ± 52.8	34960.0 ± 13156.1	13218.0 ± 50.3	109059.7 ± 180.0	69.4 ± 0.3	40306.0 ± 64.2	220.3 ± 2.2	1586.5 ± 122.6	117267.7 ± 72.6	614.6 ± 1.9
NDiMuonCombinations	15967270.0	16428718.4 ± 4315.1	7.4 ± 1.2	18070.8 ± 51.5	13870.9 ± 12785.8	4852.0 ± 30.4	102489.2 ± 174.6	57.6 ± 0.1	30073.4 ± 54.8	134.9 ± 1.6	609.4 ± 89.7	45048.2 ± 45.3	284.8 ± 1.1
NRecoElectron1	15941745.0	16401421.5 ± 4311.9	7.4 ± 1.2	17989.4 ± 51.4	13870.9 ± 12785.8	4819.5 ± 30.3	99092.3 ± 171.8	50.1 ± 0.1	29501.1 ± 54.6	129.9 ± 1.5	607.0 ± 89.7	44638.1 ± 45.1	270.6 ± 1.1
NRecoTau1	15930231.0	16401421.2 ± 4311.9	7.4 ± 1.2	17989.4 ± 51.4	13870.9 ± 12785.8	4817.8 ± 30.3	99092.3 ± 171.8	50.1 ± 0.1	29462.1 ± 54.6	129.1 ± 1.5	607.0 ± 89.7	44632.6 ± 45.1	269.7 ± 1.1
METCut	15930231.0	16401421.2 ± 4311.9	7.4 ± 1.2	17989.4 ± 51.4	13870.9 ± 12785.8	4817.8 ± 30.3	99092.3 ± 171.8	50.1 ± 0.1	29462.1 ± 54.6	129.1 ± 1.5	607.0 ± 89.7	44632.6 ± 45.1	269.7 ± 1.1
NRecoJet1	15930231.0	16401421.2 ± 4311.9	7.4 ± 1.2	17989.4 ± 51.4	13870.9 ± 12785.8	4817.8 ± 30.3	99092.3 ± 171.8	50.1 ± 0.1	29462.1 ± 54.6	129.1 ± 1.5	607.0 ± 89.7	44632.6 ± 45.1	269.7 ± 1.1
NRecoJet2	15930231.0	16401421.2 ± 4311.9	7.4 ± 1.2	17989.4 ± 51.4	13870.9 ± 12785.8	4817.8 ± 30.3	99092.3 ± 171.8	50.1 ± 0.1	29462.1 ± 54.6	129.1 ± 1.5	607.0 ± 89.7	44632.6 ± 45.1	269.7 ± 1.1
NRecoBJet	15812190.0	16390810.6 ± 4302.3	7.0 ± 1.1	17372.1 ± 50.6	13870.9 ± 12785.8	2766.0 ± 22.8	97428.0 ± 170.3	49.7 ± 0.1	28106.5 ± 52.5	121.2 ± 1.5	594.2 ± 89.7	16422.7 ± 27.8	107.9 ± 0.7
NDiJetCombinations	15807251.0	16296300.4 ± 4302.1	7.0 ± 1.1	16472.1 ± 49.5	13870.9 ± 12785.8	2754.1 ± 22.7	97287.1 ± 170.3	49.0 ± 0.1	28007.3 ± 52.4	118.9 ± 1.5	593.7 ± 89.7	16247.9 ± 27.7	104.7 ± 0.7

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

$$SF^{CR3} = 0.95 \pm 0.001$$