VBF with Pileup jets

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Results (25 GeV)

- The jets are selected with default Hgg selection (25GeV cut)
  - 7pileup jets

Results	Official Loose	Official Tight	Pileup Loose	Pileup Tight
VBF signal	4.8	4.3	4.2	3.2
ggF	2.9	0.8	11.7	2.3
BK model	40.4	6.7	293.4	50.7
VBF Purity	61.1%	83.3%	25.6%	57.4
VBF Significance	0.71	1.4	0.2	0.4
Comb. significance	1.61		0.5	
Data	412	70	2859	514

Results (30GeV)

- The jets are selected with 30GeV cut
  - 2.3 pileup jets

Results	Official Loose	Official Tight	Pileup Loose	Pileup Tight
VBF signal	4.8	4.3	4.5	3.9
ggF	2.9	0.8	5.6	1.3
BK model	40.4	6.7	110.6	15.9
VBF Purity	61.1%	83.3%	43.6%	73.9
VBF Significance	0.71	1.4	0.4	0.9
Comb. significance	1.61		1.00	
Data	412	70	1104	167

Results (JVF)

- The jets are selected with 30GeV and JVF>0.5 (default 0.25)
  - JVF allows for the identification and selection of jets originating in the hard-scatter interaction through the use of tracking and vertexing

Results	Official Loose	Official Tight	Pileup Loose	Pileup Tight
VBF signal	4.8	4.3	1.5	0.7
ggF	2.9	0.8	1.1	0.3
BK model	40.4	6.7	20.1	1.5
VBF Purity	61.1%	83.3%	55.5	73.4
VBF Significance	0.71	1.4	0.3	0.95
Comb. significance	1.61		0.5	
Data	412	70	196	16

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