Bulkgrav 74x selections	1000	1200	1400	1600	1800	2000	2500	3000	3500	4000	4500
entries	50000	50000	50000	50000	48400	50000	50000	50000	50000	50000	50000
nVtx>=1	50000	50000	50000	50000	48400	50000	50000	50000	50000	50000	50000
triggers	45552	48807	49516	49782	48297	49934	49954	49979	49986	49996	49996
Pt>200GeV and tightId	45271	48700	49448	49736	48256	49895	49915	49942	49949	49956	49959
$|\eta|$ <2.4	45190	48659	49405	49710	48244	49881	49906	49939	49945	49953	49959
$|\Delta\eta|$ <1.3	40891	42500	42869	42840	41794	43008	43045	43227	43178	43105	42942
Mjj>1000	17546	39660	42354	42712	41761	42986	43038	43226	43175	43105	42942
105<fatjetPRmassL2L3Corr<135	4623	11837	12139	12127	11643	11717	11370	10830	10310	9926	9353
$\tau21_1$ two LP at least one HP	4586	11743	12044	12046	11543	11627	11263	10731	10199	9786	9227
0-btagged	5	12	15	13	27	28	62	115	203	345	459
1-btagged	76	217	251	287	370	423	717	1114	1565	1921	2298
2-btagged	538	1494	1657	1877	2048	2384	3062	3738	3932	4010	3741
3-btagged	1736	4649	4886	5079	4867	4990	4782	4150	3477	2837	2269
4-btagged	2231	5371	5235	4790	4231	3802	2640	1614	1022	673	460
HPHP3-btagged	1529	4213	4380	4557	4374	4490	4197	3617	2990	2370	1839

Table 1: cutflow.

Bulkgrav 76x selections	1000	1200	1400	1600	1800	2000	2500	3000	3500	4000	4500
entries	50000	50000	50000	50000	50000	50000	49200	49800	0	49200	48200
nVtx>=1	50000	50000	50000	50000	50000	50000	49200	49800	0	49200	48200
triggers	48358	49547	49841	49932	49973	49987	49197	49798	0	49200	48200
P_t>200GeV and tightId	44331	48115	49222	49639	49809	49891	49144	49754	0	49147	48162
$|\eta|$<2.4	44259	48073	49192	49619	49793	49881	49136	49749	0	49144	48162
$|\Delta\eta|$<1.3	40066	42216	42765	42876	43182	43085	42393	43106	0	42390	41375
Mjj>1000	14328	39295	42301	42777	43144	43068	42387	43105	0	42390	41375
105<fatjetPRmassL2L3Corr<135	3831	11269	11431	11362	11651	11414	11001	10867	0	9656	9093
$\tau21_1$ two LP at least one HP	3812	11185	11349	11281	11574	11326	10889	10762	0	9535	8971
0-btagged	8	8	16	12	14	15	27	39	0	84	106
1-btagged	70	170	175	217	231	296	339	528	0	810	996
2-btagged	442	1284	1423	1472	1573	1690	1992	2428	0	2844	2979
3-btagged	1437	4390	4560	4549	4863	4696	4705	4688	0	3950	3417
4-btagged	1855	5333	5175	5031	4893	4629	3826	3079	0	1847	1473
HPHP3-btagged	1284	3983	4141	4085	4346	4170	4181	4118	0	3398	2973

Table 2: cutflow.

Radion 74x selections	1000	1200	1400	1600	1800	2000	2500	3000	3500	4000	4500
entries	49000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000
nVtx>=1	49000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000
triggers	34242	40723	43432	45162	46213	47059	48162	48662	49093	49267	49420
P_t>200GeV and tightId	33879	40435	43200	44951	46013	46875	47963	48417	48812	48915	49008
$|\eta|$<2.4	33782	40317	43093	44845	45879	46744	47811	48264	48643	48713	48788
$|\Delta\eta|$<1.3	27908	29747	29828	29752	29790	29916	29605	29479	29180	29069	28946
Mjj>1000	11726	27193	29003	29251	29439	29668	29448	29403	29122	29042	28927
105<fatjetPRmassL2L3Corr<135	2926	7777	8131	7952	8043	7872	7532	7237	6928	6419	6327
$\tau21_1$ two LP at least one HP	2902	7729	8068	7885	7978	7796	7454	7167	6845	6336	6223
0-btagged	0	8	8	9	17	16	42	69	124	194	307
1-btagged	62	143	175	221	252	295	454	686	973	1238	1530
2-btagged	336	980	1164	1208	1432	1576	2018	2380	2645	2598	2588
3-btagged	1139	2928	3236	3317	3319	3277	3173	2937	2392	1892	1486
4-btagged	1365	3670	3485	3130	2958	2632	1767	1095	711	414	312
HPHP3-btagged	1007	2625	2907	2976	2960	2935	2834	2589	2059	1585	1204

Table 3: cutflow.

Radion 76x selections	1000	1200	1400	1600	1800	2000	2500	3000	3500	4000	4500
entries	50000	50000	50000	49200	50000	49200	49200	49200	48400	0	50000
nVtx>=1	50000	50000	50000	49200	50000	49200	49200	49200	48400	0	50000
triggers	40158	44004	45842	46160	47722	47380	48179	48399	47872	0	49622
$P_t>200\text{GeV}$ and tightId	33355	39709	42746	43797	45759	45951	47091	47615	47231	0	48992
$|\eta|<2.4$	33287	39615	42640	43713	45663	45847	46995	47488	47092	0	48809
$|\Delta\eta|<1.3$	27629	29257	29534	29186	29757	29449	29310	29033	28204	0	28935
Mjj>1000	9645	26767	28853	28805	29451	29251	29186	28957	28163	0	28920
105<fatjetPRmassL2L3Corr<135	2493	7423	7757	7613	7709	7466	7445	6972	6684	0	6355
$\tau 21_1$ two LP at least one HP	2479	7376	7705	7553	7654	7406	7372	6898	6601	0	6277
0-btagged	3	5	6	8	12	11	14	14	30	0	73
1-btagged	37	114	120	136	160	181	245	319	430	0	615
2-btagged	305	860	931	1040	1101	1145	1332	1561	1760	0	1981
3-btagged	937	2896	3078	3002	3129	3049	3214	3032	2761	0	2549
4-btagged	1197	3501	3570	3367	3252	3020	2567	1972	1620	0	1059
HPHP3-btagged	837	2632	2787	2689	2773	2735	2838	2714	2429	0	2184

Table 4: cutflow.

QCDHT 74x	700-1000	1000-1500	1500-2000	2000-inf
entries	1.53415e+07	2.71077e+06	269280	56685.8
nVtx>=1	1.53415e+07	2.71076e+06	269280	56685.7
triggers	4.8954e+06	2.3286e+06	259532	55706
Pt>200GeV and tightId	4.61917e+06	2.27583e+06	258255	55614.8
$|\eta|$ <2.4	4.49869e+06	2.24592e+06	257377	55584.3
$|\Delta\eta|$ <1.3	2.67491e+06	1.38989e+06	164988	37949.2
Mjj>1000	395214	963598	161393	37892.9
105<fatjetPRmassL2L3Corr<135	4733.11	6917.99	761.648	124.722
$\tau 21_1$ two LP at least one HP	4217.01	6101.3	656.55	104.982
0-btagged	1621.46	2351.53	248.616	38.9459
1-btagged	1717.67	2480.63	260.518	41.9987
2-btagged	714.526	1044.93	120.132	19.4433
3-btagged	145.31	209.217	24.8477	4.2384
4-btagged	18.0385	14.9852	2.43605	0.35567
HPHP3-btagged	78.1669	126.222	13.2939	2.46005

Table 5: cutflow.

QCDHT 76x	700-1000	1000-1500	1500-2000	2000-inf	QCDTotal	Data
entries	1.84007e+07	3.2513e+06	322975	67989	2.20429e+07	7.07809e+07
nVtx>=1	1.84006e+07	3.25129e+06	322974	67988.7	2.20429e+07	7.05357e+07
triggers	1.521e+07	3.24988e+06	322973	67988.7	1.88508e+07	1.17584e+07
Pt>200GeV and tightId	7.58564e+06	2.84296e+06	320481	67860.4	1.08169e+07	7.65249e+06
$|\eta|<2.4$	7.42166e+06	2.80662e+06	319339	67823	1.06154e+07	7.55016e+06
$|\Delta\eta|<1.3$	4.49407e+06	1.66853e+06	198272	45621	6.4065e+06	4.49162e+06
Mjj>1000	359348	1.10029e+06	193071	45538.7	1.69825e+06	1.40171e+06
105<fatjetPRmassL2L3Corr<135	4301.98	7832.86	930.476	152.727	13218	7832
$\tau21_1$ two LP at least one HP	3898.63	7017.65	812.029	129.036	11857.3	7306
0-btagged	1883.18	3288.89	365.142	54.0178	5591.23	3052
1-btagged	1411.73	2613.62	310.61	49.2681	4385.23	2870
2-btagged	508.118	935.36	113.755	21.3679	1578.6	1140
3-btagged	94.2899	165.09	20.8533	4.00217	284.235	0
4-btagged	1.30958	14.6845	1.66827	0.379516	18.0419	0
HPHP3-btagged	56.312	100.122	10.6352	2.10459	169.174	0

Table 6: cutflow.

BulkgravBtagSF 76x selections	1000	1200	1400	1600	1800	2000	2500	3000	3500	4000	4500
0-btagged	8.80755	9.64414	17.3344	12.7953	14.3254	14.1878	24.9027	33.5309	0	72.4345	91.975
1-btagged	74.9509	185.348	185.401	220.852	229.631	285.721	318.222	483.307	0	747.207	915.184
2-btagged	466.095	1353.15	1460.42	1479.53	1544.59	1640.76	1899.28	2307.94	0	2735.43	2891.02
3-btagged	1455.85	4443.18	4576.51	4536.76	4828.63	4650.86	4657.76	4689.52	0	4028.17	3508.75
4-btagged	1788.23	5196.11	5116.76	5045.74	4972.45	4752.11	4010.4	3272.4	0	1993.7	1601.5
HPHP3-btagged	1302.75	4029.37	4153.72	4069.93	4308.25	4124.06	4136.39	4113.64	0	3464.68	3051.06

Table 7: cutflow.

RadionBtagSF 76x selections	1000	1200	1400	1600	1800	2000	2500	3000	3500	4000	4500
0-btagged	3.28585	5.48963	6.74352	8.17361	12.2831	10.194	12.9167	12.5052	26.7573	0	63.869
1-btagged	38.9216	122.713	126.535	139.27	157.505	175.4	228.658	295.265	396.978	0	566.552
2-btagged	314.293	906.285	956.152	1046.65	1086.8	1106.29	1272.17	1491.39	1685.42	0	1924.17
3-btagged	943.146	2924.79	3087.05	2995.43	3109.83	3030.57	3187.82	3032.22	2790.94	0	2616.25
4-btagged	1151.93	3404.67	3525.5	3373.8	3300.48	3098.1	2688.1	2093.71	1734.1	0	1150.74
HPHP3-btagged	843.144	2659.41	2795.36	2680.14	2752.98	2712.91	2810.81	2712.68	2455.76	0	2241.39

Table 8: cutflow.

QCDHTBtagSF 76x	700-1000	1000-1500	1500-2000	2000-inf	QCDTotal
0-btagged	1742.51	3024.07	330.302	48.0292	5144.91
1-btagged	1460	2718.45	323.555	51.2166	4553.23
2-btagged	569.127	1050.81	131.6	25.0516	1776.59
3-btagged	114.646	199.972	26.2802	5.22702	346.125
4-btagged	1.25358	19.7871	2.14232	0.495375	23.6784
HPHP3-btagged	68.6011	120.763	13.7102	2.74862	205.823

Table 9: cutflow.