

ATLAS Internal																																
BTag_B_0	100.0	0.2	-2.9	-0.6	-2.4	-1.9	-0.8	3.9	-0.7	1.6	1.4	-0.9	-0.1	-1.0	-3.1	1.9	-2.6	0.7	-0.4	0.5	1.3	2.7	-3.0	-4.6	-4.4	18.0	15.6	10.2	9.1	10.1	2.7	
EG_SCALE_ALL	0.2	100.0	0.4	0.5	0.8	0.6	0.0	-0.7	0.9	0.3	1.8	-0.0	-0.1	-0.6	0.2	-0.1	0.3	-1.0	0.3	-0.6	-1.0	-1.7	0.1	-1.7	0.3	2.1	-15.1	-14.9	-10.9	-7.6	-0.5	
JET_Flavor_Composition	-2.9	0.4	100.0	-1.3	-5.0	-2.3	-1.6	3.7	1.4	-1.6	-6.5	-4.2	-1.0	-4.6	-7.0	1.8	-2.4	-5.5	-1.5	-3.3	-3.2	-5.4	-5.5	-17.0	-9.6	-33.0	-25.2	-37.4	-30.2	-22.6	-2.8	
JET_Pileup_OffsetNPV	-0.6	0.5	-1.3	100.0	-1.5	-0.4	-0.3	0.2	-0.3	-2.9	-5.0	-1.6	-0.4	-0.2	-0.0	1.5	-1.1	-3.2	-0.4	-0.0	0.8	2.5	0.6	-2.3	-1.2	-6.8	-14.0	-16.8	-13.9	-10.4	-8.6	
JET_Pileup_RhoTopology	-2.4	0.8	-5.0	-1.5	100.0	-2.3	-1.3	3.3	-0.9	-3.4	-8.3	-3.6	-0.6	-2.9	-7.3	1.7	-2.2	-3.3	-1.4	0.2	-0.4	2.0	-3.4	-11.4	-7.2	-40.4	-29.2	-38.7	-31.4	-23.7	-14.0	
PileupRW	-1.9	0.6	-2.3	-0.4	-2.3	100.0	-1.0	3.2	-1.4	-1.5	-5.5	-0.8	-0.4	-1.7	-4.6	0.9	-1.8	-0.0	0.2	0.7	-0.4	1.1	-2.2	-5.3	-3.2	21.1	3.3	6.3	7.6	10.4	4.2	
Photon_ID	-0.8	0.0	-1.6	-0.3	-1.3	-1.0	100.0	1.1	-0.2	-2.0	-3.6	-1.2	-0.1	-0.4	-1.6	0.0	-0.4	-1.0	0.7	-0.2	-0.7	-1.7	-1.7	-4.6	-2.8	-23.4	-0.9	-2.9	-3.5	-5.8	-1.6	
Photon_effIso	3.9	-0.7	3.7	0.2	3.3	3.2	1.1	100.0	2.2	-3.6	-1.7	1.7	-0.2	3.2	1.2	-1.6	3.6	-3.8	1.4	-2.8	-0.5	-5.9	4.5	6.0	7.0	-28.2	-12.5	-16.2	-16.3	-19.9	-4.9	
Wty_Herwig7	-0.7	0.9	1.4	-0.3	-0.9	-1.4	-0.2	2.2	100.0	-2.0	-3.8	-0.4	0.4	0.6	-23.0	-0.4	-0.4	3.3	-0.1	4.3	4.2	8.7	0.6	4.2	0.4	-0.8	-2.9	1.6	2.2	2.4	-9.9	
efakeSF_	1.6	0.3	-1.6	-2.9	-3.4	-1.5	-2.0	-3.6	-2.0	100.0	-46.3	-1.4	-4.6	12.6	1.7	-0.0	-1.3	-20.6	8.0	2.0	2.3	2.1	0.3	-0.8	-2.3	11.6	-10.8	-3.3	-2.0	-3.0	-4.9	
hfakeSF_	1.4	1.8	-6.5	-5.0	-8.3	-5.5	-3.6	-1.7	-3.8	-46.3	100.0	-3.6	-6.8	15.9	-23.4	-1.3	-2.8	-28.7	10.6	4.6	0.7	3.9	-3.7	-3.1	-9.9	-14.4	-13.9	-18.6	-17.1	-10.6	-9.5	
lepfakeSF_	-0.9	-0.0	-4.2	-1.6	-3.6	-0.8	-1.2	1.7	-0.4	-1.4	-3.6	100.0	2.7	1.5	4.4	0.7	-1.5	-2.9	1.3	0.9	-0.4	-2.3	-2.9	-8.4	-4.3	23.4	-5.5	-2.2	-0.7	0.7	3.9	
lepfakeSF_var2	-0.1	-0.1	-1.0	-0.4	-0.6	-0.4	-0.1	-0.2	0.4	-4.6	-6.8	2.7	100.0	1.1	1.3	0.2	-0.3	-4.1	-0.6	-0.5	0.9	5.4	-0.2	1.1	-0.4	-2.2	15.1	16.3	22.3	13.6	-1.8	
ttbar_pt_hard	-1.0	-0.6	-4.6	-0.2	-2.9	-1.7	-0.4	3.2	0.6	12.6	15.9	1.5	1.1	100.0	-19.0	-1.5	0.6	9.0	-3.6	0.5	-2.1	8.4	-6.0	-6.7	-3.4	-19.0	13.6	9.8	8.5	9.3	-0.5	
tty_dec_Herwig7	-3.1	0.2	-7.0	-0.0	-7.3	-4.6	-1.6	1.2	-23.0	1.7	-23.4	4.4	1.3	-19.0	100.0	-27.8	22.1	8.3	-10.6	-9.5	16.9	18.4	5.2	-8.6	-2.7	31.4	-0.8	4.2	13.8	22.0	-13.2	
tty_dec_muF	1.9	-0.1	1.8	1.5	1.7	0.9	0.0	-1.6	-0.4	-0.0	-1.3	0.7	0.2	-1.5	-27.8	100.0	3.0	0.9	0.4	0.7	-2.5	-6.6	-0.9	1.2	1.5	-8.9	-6.9	-1.6	-0.9	-6.4	3.2	
tty_dec_var3c	-2.6	0.3	-2.4	-1.1	-2.2	-1.8	-0.4	3.6	-0.4	-1.3	-2.8	-1.5	-0.3	0.6	22.1	3.0	100.0	-1.2	-0.2	1.4	1.8	2.8	-1.4	-2.2	-3.6	-11.7	5.3	0.7	0.8	4.4	-1.3	
tty_prod_Herwig7	0.7	-1.0	-5.5	-3.2	-3.3	-0.0	-1.0	-3.8	3.3	-20.6	-28.7	-2.9	-4.1	9.0	8.3	0.9	-1.2	100.0	2.2	-1.6	-0.1	3.7	1.2	-2.0	0.9	0.4	51.2	47.9	43.6	34.1	11.8	
tty_prod_muR	-0.4	0.3	-1.5	-0.4	-1.4	0.2	0.7	1.4	-0.1	8.0	10.6	1.3	-0.6	-3.6	-10.6	0.4	-0.2	2.2	100.0	-0.0	0.8	5.7	-0.0	1.7	-0.1	-8.9	-0.1	-12.3	-12.3	-19.7	-18.4	
highpt_uncalib_bjet	0.5	-0.6	-3.3	-0.0	0.2	0.7	-0.2	-2.8	4.3	2.0	4.6	0.9	-0.5	0.5	-9.5	0.7	1.4	-1.6	-0.0	100.0	-4.7	-24.8	1.1	-9.5	-2.1	0.7	3.6	2.0	0.1	7.0	-21.8	
highpt_uncalib_cjet	1.3	-1.0	-3.2	0.8	-0.4	-0.4	-0.7	-0.5	4.2	2.3	0.7	-0.4	0.9	-2.1	16.9	-2.5	1.8	-0.1	0.8	-4.7	100.0	-38.0	-2.8	-12.6	-2.4	6.4	2.4	3.7	13.6	-25.1	-14.8	
highpt_uncalib_ljet	2.7	-1.7	-5.4	2.5	2.0	1.1	-1.7	-5.9	8.7	2.1	3.9	-2.3	5.4	8.4	18.4	-6.6	2.8	3.7	5.7	-24.8	-38.0	100.0	-5.3	-20.4	-1.2	6.6	6.6	6.4	7.6	38.2	-57.1	
Wty Norm	-3.0	0.1	-5.5	0.6	-3.4	-2.2	-1.7	4.5	0.6	0.3	-3.7	-2.9	-0.2	6.0	5.2	-0.9	-1.4	1.2	-0.0	1.1	-2.8	-5.3	100.0	-13.9	-10.8	-11.9	-6.5	-14.1	-17.0	-11.0	-0.1	
Wy Norm	-4.6	-1.7	-17.0	-2.3	-11.4	-5.3	-4.6	6.0	4.2	-0.8	-3.1	-8.4	1.1	-6.7	-8.6	1.2	-2.2	-2.0	1.7	-9.5	-12.6	-20.4	-13.9	100.0	-22.0	18.9	0.1	17.1	10.2	2.3	25.4	
Zy Norm	-4.4	0.3	-9.6	-1.2	-7.2	-3.2	-2.8	7.0	0.4	-2.3	-9.9	-4.3	-0.4	-3.4	-2.7	1.5	-3.6	0.9	-0.1	-2.1	-2.4	-1.2	-10.8	-22.0	100.0	9.1	3.2	15.3	15.4	5.9	11.1	
Norm factor for tty dec	18.0	2.1	-33.0	-6.8	-40.4	21.1	-23.4	-28.2	-0.8	11.6	-14.4	23.4	-2.2	-19.0	31.4	-8.9	-11.7	0.4	-8.9	0.7	6.4	6.6	-11.9	18.9	9.1	100.0	21.0	44.1	46.2	44.8	14.6	
tty_ptj1 Unfolded Truth Bin 1	15.6	-15.1	-25.2	-14.0	-29.2	3.3	-0.9	-12.5	-2.9	-10.8	-13.9	-5.5	15.1	13.6	-0.8	-6.9	5.3	51.2	-0.1	3.6	2.4	6.6	-6.5	0.1	3.2	21.0	100.0	65.6	58.9	43.9	13.1	
tty_ptj1 Unfolded Truth Bin 2	10.2	-14.9	-37.4	-16.8	-38.7	6.3	-2.9	-16.2	1.6	-3.3	-18.6	-2.2	16.3	9.8	4.2	-1.6	0.7	47.9	-12.3	2.0	3.7	6.4	-14.1	17.1	15.3	44.1	65.6	100.0	75.1	64.4	23.1	
tty_ptj1 Unfolded Truth Bin 3	9.1	-10.9	-30.2	-13.9	-31.4	7.6	-3.5	-16.3	2.2	-2.0	-17.1	-0.7	22.3	8.5	13.8	-0.9	0.8	43.6	-12.3	0.1	13.6	7.6	-17.0	10.2	15.4	46.2	58.9	75.1	100.0	55.8	19.0	
tty_ptj1 Unfolded Truth Bin 4	10.1	-7.6	-22.6	-10.4	-23.7	10.4	-5.8	-19.9	2.4	-3.0	-10.6	0.7	13.6	9.3	22.0	-6.4	4.4	34.1	-19.7	7.0	-25.1	38.2	-11.0	2.3	5.9	44.8	43.9	64.4	55.8	100.0	4.2	
tty_ptj1 Unfolded Truth Bin 5	2.7	-0.5	-2.8	-8.6	-14.0	4.2	-1.6	-4.9	-9.9	-4.9	-9.5	3.9	-1.8	-0.5	-13.2	3.2	-1.3	11.8	-18.4	-21.8	-14.8	-57.1	-0.1	25.4	11.1	14.6	13.1	23.1	19.0	4.2	100.0	
BTag_B_0	EG_SCALE_ALL	JET_Flavor_Composition	JET_Pileup_OffsetNPV	JET_Pileup_RhoTopology	PileupRW	Photon_ID	Photon_effIso	Wty_Herwig7	efakeSF_	hfakeSF_	lepfakeSF_	lepfakeSF_var2	ttbar_pt_hard	tty_dec_Herwig7	tty_dec_muF	tty_dec_var3c	tty_prod_Herwig7	tty_prod_muR	highpt_uncalib_bjet	highpt_uncalib_cjet	highpt_uncalib_ljet	Wty Norm	Wy Norm	Zy Norm	Norm factor for tty dec	tty_ptj1 Unfolded Truth Bin 1	tty_ptj1 Unfolded Truth Bin 2	tty_ptj1 Unfolded Truth Bin 3	tty_ptj1 Unfolded Truth Bin 4	tty_ptj1 Unfolded Truth Bin 5		