The state of the s	ATLAS Internal																																	
Controller (1968) 1. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	BTag_B_0	100.0	-0.0	0.0	-0.0	0.0	0.1	0.1	-0.1	-0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.0	0.0	0.0	0.7	-2.5	0.0	0.4	0.0	-0.1	-0.0	-0.2	-0.1	-0.1	9.8	10.6	12.1	11.1	7.5	2.2
Economic Series and the series and t	BTag_Light_0	-0.0	100.0	-0.0	0.1	0.0	0.3	0.1	0.3	-0.5	0.4	0.5	0.1	-0.4	0.2	0.2	-0.9	0.0	-5.3	1.4	0.5	0.1	0.0	-0.3	0.6	2.6	0.8	1.8	5.1	9.0	9.3	10.8	11.0	9.3
**************************************	EG_SCALE_ALL	0.0	-0.0	100.0	0.0	-0.0	-0.1	-0.0	0.2	0.1	-0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	1.3	5.5	-0.1	-1.1	-0.2	-0.2	0.1	0.2	-0.2	0.3	-6.6	-7.4	-8.9	-11.3	-10.0	-7.3
Fig. 1. The mode is a control of the	Electron_Iso_SF_0	-0.0	0.1	0.0	100.0	-0.0	-0.1	0.0	-0.0	0.1	-0.1	-0.1	-0.0	0.1	-0.1	-0.0	0.2	-0.0	0.9	-0.8	-0.1	0.1	0.0	0.0	-0.2	-0.7	-0.1	-0.4	-10.3	-12.1	-12.7	-11.8	-9.6	-4.6
Temporal properties (a) 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	JET_BJES_Response	0.0	0.0	-0.0	-0.0	100.0	-0.1	-0.1	0.0	0.1	-0.1	-0.1	-0.0	-0.2	0.1	0.0	0.0	-0.2	0.6	5.3	-0.1	-0.2	-0.1	0.2	-0.0	-0.1	-0.1	-0.0	-10.3	-13.2	-13.0	-11.2	-6.1	-1.7
HFT From Charmon, Cha	JET_EffectiveNP_Modelling1	0.1	0.3	-0.1	-0.1	-0.1	100.0	-0.1	0.1	0.4	-0.3	-0.3	-0.1	0.3	0.1	-0.0	0.7	-0.3	5.5	8.4	-0.6	-1.5	-0.1	0.0	-0.3	-1.4	-0.8	-0.8	-10.4	-13.8	-15.4	-14.0	-11.9	-5.9
### Fine Alternate Heller Register Alternate	T_EtaIntercalibration_Modelling	0.1	0.1	-0.0	0.0	-0.1	-0.1	100.0	0.1	0.1	-0.1	-0.1	-0.0	0.2	0.1	0.0	0.1	0.0	-0.3	3.8	-0.1	-0.5	-0.1	0.1	-0.0	-0.1	0.2	-0.0	-11.5	-12.7	-13.0	-10.5	-8.8	-4.2
EEI-Processimple with the series of the seri	JET_Flavor_Composition	-0.1	0.3	0.2	-0.0	0.0	0.1	0.1	100.0	0.0	-0.1	-0.2	-0.0	0.5	-0.3	-0.2	0.3	0.6	-2.9	-10.3	0.5	1.7	0.0	0.4	-0.4	-1.3	0.3	-1.1	-18.0	-17.1	-13.3	-11.1	-7.3	-2.7
LITIPIGE, Pichic proper 10 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	JET_Flavor_Response	-0.0	-0.5	0.1	0.1	0.1	0.4	0.1	0.0	100.0	0.4	0.4	0.1	-0.4	0.1	0.1	-0.9	0.1	-5.5	-4.2	0.5	0.8	0.1	0.0	0.5	2.5	1.0	1.4	10.2	12.2	12.2	11.1	8.8	2.3
Freedomentage and the series of the series o	JET_Pileup_OffsetNPV	0.0	0.4	-0.1	-0.1	-0.1	-0.3	-0.1	-0.1	0.4	100.0	-0.4	-0.1	0.1	-0.0	-0.1	0.6	-0.2	3.8	5.0	-0.3	-0.3	-0.1	0.1	-0.4	-1.9	-0.7	-1.1	-8.7	-11.3	-11.1	-9.6	-8.6	-4.1
Primary 1. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	JET_Pileup_RhoTopology	0.0	0.5	0.0	-0.1	-0.1	-0.3	-0.1	-0.2	0.4	-0.4	100.0	-0.1	0.2	-0.1	-0.1	0.7	0.0	2.1	3.5	-0.2	0.2	-0.2	0.6	-0.5	-2.0	-0.3	-1.4	-25.7	-30.5	-29.1	-25.9	-17.5	-7.5
Friedamen of the control of the cont	Luminosity	-0.0	0.1	0.0	-0.0	-0.0	-0.1	-0.0	-0.0	0.1	-0.1	-0.1	100.0	0.1	-0.1	-0.1	0.2	0.1	0.9	-0.8	-0.1	0.1	0.0	0.1	-0.2	-0.7	-0.2	-0.4	-10.7	-12.7	-13.5	-12.8	-10.5	-5.3
Product Produc	PileupRW	-0.1	-0.4	0.1	0.1	-0.2	0.3	0.2	0.5	-0.4	0.1	0.2	0.1	100.0	0.4	0.3	-0.6	-0.7	-3.8	11.2	0.3	1.7	-0.3	0.3	0.1	0.9	1.8	1.8	2.4	6.7	4.3	2.1	6.1	2.1
My, Hennighen Register Registe	Photon_ID	-0.1	0.2	0.1	-0.1	0.1	0.1	0.1	-0.3	0.1	-0.0	-0.1	-0.1	0.4	100.0	-0.3	0.3	0.3	1.6	-14.7	-0.0	1.1	0.2	0.2	-0.2	-0.7	-0.5	-1.1	-9.0	-10.7	-11.4	-11.2	-9.5	-5.1
Makese Registration of the	Photon_effIso	-0.0	0.2	0.1	-0.0	0.0	-0.0	0.0	-0.2	0.1	-0.1	-0.1	-0.1	0.3	-0.3	100.0	0.4	0.2	2.0	-8.7	-0.1	0.7	0.1	0.2	-0.2	-1.0	-0.4	-1.0	-14.2	-16.8	-17.9	-17.2	-14.3	-7.4
tty,,dec, Howing Rights, from R	Wty_Herwig7	0.0	-0.9	0.1	0.2	0.0	0.7	0.1	0.3	-0.9	0.6	0.7	0.2	-0.6	0.3	0.4	100.0	0.2	-11.1	0.5	0.9	0.9	-0.1	0.2	1.3	5.8	2.3	3.3	-3.7	-3.0	-1.6	0.6	5.3	4.7
Hytichic Norm Registration 1. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	hfakeSF_	0.0	0.0	0.0	-0.0	-0.2	-0.3	0.0	0.6	0.1	-0.2	0.0	0.1	-0.7	0.3	0.2	0.2	100.0	3.2	15.1	-0.4	-0.1	-0.2	0.0	-0.2	-0.8	0.1	0.3	-23.4	-25.1	-28.6	-27.1	-19.7	-6.7
tty_prod_Herwif7 0, 0 0, 0 0, 0 0, 0 0, 0 0, 0 0, 0 0,	tty_dec_Herwig7	0.7	-5.3	1.3	0.9	0.6	5.5	-0.3	-2.9	-5.5	3.8	2.1	0.9	-3.8	1.6	2.0	-11.1	3.2	100.0	19.2	12.1	8.4	0.5	-2.7	4.5	26.8	11.3	12.5	-13.2	-22.5	-25.1	-23.4	-39.2	-36.2
tty_prod_Herwige 7 0.4 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.1 0.2 0.1 0.1 0.2 0.1 0.2 0.1 0.2 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	tty(dec) Norm	-2.5	1.4	5.5	-0.8	5.3	8.4	3.8	-10.3	-4.2	5.0	3.5	-0.8	11.2	-14.7	-8.7	0.5	15.1	19.2	100.0	3.7	51.1	10.4	6.6	1.5	5.5	-9.6	-22.8	-50.7	-56.2	-54.4	-48.3	-21.1	-15.6
Hyprod_midel Right	tty_dec_var3c	0.0	0.5	-0.1	-0.1	-0.1	-0.6	-0.1	0.5	0.5	-0.3	-0.2	-0.1	0.3	-0.0	-0.1	0.9	-0.4	12.1	3.7	100.0	-1.5	-0.0	0.3	-0.3	-2.0	-0.8	-0.8	-1.5	-1.0	1.0	2.0	3.5	3.7
thy prod, var3c    10. 10. 20. 20. 0. 20. 0. 20. 0. 20. 0. 20. 0. 20. 0. 20. 0. 20. 0. 20. 0. 20. 2	tty_prod_Herwig7	0.4	0.1	-1.1	0.1	-0.2	-1.5	-0.5	1.7	0.8	-0.3	0.2	0.1	1.7	1.1	0.7	0.9	-0.1	8.4	51.1	-1.5	100.0	-0.6	-1.6	0.4	0.5	-0.2	2.2	-46.1	-39.4	-31.9	-39.9	-15.1	-25.7
uncalib_liet 40 0 0 8 0 1 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	tty_prod_muR	0.0	0.0	-0.2	0.0	-0.1	-0.1	-0.1	0.0	0.1	-0.1	-0.2	0.0	-0.3	0.2	0.1	-0.1	-0.2	0.5	10.4	-0.0	-0.6	100.0	0.2	0.2	0.8	-0.0	0.3	-4.8	-7.0	-7.4	-10.8	-5.9	-5.3
uncalib_liet R. V.	tty_prod_var3c	-0.1	-0.3	-0.2	0.0	0.2	0.0	0.1	0.4	0.0	0.1	0.6	0.1	0.3	0.2	0.2	0.2	0.0	-2.7	6.6	0.3	-1.6	0.2	100.0	-0.3	-2.1	-0.3	0.8	-2.5	1.1	-2.6	-5.5	-11.8	-13.5
Wity Norm 90, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1	uncalib_cjet	-0.0	0.6	0.1	-0.2	-0.0	-0.3	-0.0	-0.4	0.5	-0.4	-0.5	-0.2	0.1	-0.2	-0.2	1.3	-0.2	4.5	1.5	-0.3	0.4	0.2	-0.3	100.0	-6.0	-1.0	-2.4	0.3	0.2	-0.1	-0.5	-2.1	-10.2
2γ Norm 9.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	uncalib_ljet	-0.2	2.6	0.2	-0.7	-0.1	-1.4	-0.1	-1.3	2.5	-1.9	-2.0	-0.7	0.9	-0.7	-1.0	5.8	-0.8	26.8	5.5	-2.0	0.5	0.8	-2.1	-6.0	100.0	-5.1	-10.1	-0.1	-1.7	-3.5	-6.4	-26.4	-57.2
Dull all syst Unfolded Truth Bin 1 98 5.1 6.6 10.3 10.4 10.5 10.0 10.4 10.5 10.0 10.4 10.5 10.0 10.4 10.5 10.0 10.4 10.5 10.0 10.4 10.5 10.0 10.5 10.5	Wty Norm	-0.1	0.8	-0.2	-0.1	-0.1	-0.8	0.2	0.3	1.0	-0.7	-0.3	-0.2	1.8	-0.5	-0.4	2.3	0.1	11.3	-9.6	-0.8	-0.2	-0.0	-0.3	-1.0	-5.1	100.0	-2.7	-15.4	-17.4	-21.8	-25.7	-35.6	-15.6
HILAIL SYST UNFOICING TRUTH BIN 2 10.6 9.0 7.4 12.1 13.2 13.8 12.7 13.0 15.4 13.2 13.8 12.7 13.0 15.4 13.0 13.3 12.2 13.8 12.7 13.0 15.4 13.0 13.3 12.2 13.1 12.2 13.1 13.2 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	Zγ Norm	-0.1	1.8	0.3	-0.4	-0.0	-0.8	-0.0	-1.1	1.4	-1.1	-1.4	-0.4	1.8	-1.1	-1.0	3.3	0.3	12.5	-22.8	-0.8	2.2	0.3	0.8	-2.4	-10.1	-2.7	100.0	-5.5	-5.8	-4.9	-9.7	-19.9	-20.1
## ## ## ## ## ## ## ## ## ## ## ## ##	otll_all_syst Unfolded Truth Bin 1	9.8	5.1	-6.6	-10.3	-10.3	-10.4	-11.5	-18.0	10.2	-8.7	-25.7	-10.7	2.4	-9.0	-14.2	-3.7	-23.4	-13.2	-50.7	-1.5	-46.1	-4.8	-2.5	0.3	-0.1	-15.4	-5.5	100.0	72.1	70.9	67.9	46.8	31.1
## ## ## ## ## ## ## ## ## ## ## ## ##	tll_all_syst Unfolded Truth Bin 2	10.6	9.0	-7.4	-12.1	-13.2	-13.8	-12.7	-17.1	12.2	-11.3	-30.5	-12.7	6.7	-10.7	-16.8	-3.0	-25.1	-22.5	-56.2	-1.0	-39.4	-7.0	1.1	0.2	-1.7	-17.4	-5.8	72.1	100.0	79.8	76.0	55.1	34.4
## all_syst Unfolded Truth Bin 6	tll_all_syst Unfolded Truth Bin 3	12.1	9.3	-8.9	-12.7	-13.0	-15.4	-13.0	-13.3	12.2	-11.1	-29.1	-13.5	4.3	-11.4	-17.9	-1.6	-28.6	-25.1	-54.4	1.0	-31.9	-7.4	-2.6	-0.1	-3.5	-21.8	-4.9	70.9	79.8	100.0	74.6	58.4	35.8
## ## ## ## ## ## ## ## ## ## ## ## ##	tll_all_syst Unfolded Truth Bin 4	11.1	10.8	-11.3	-11.8	-11.2	-14.0	-10.5	-11.1	11.1	-9.6	-25.9	-12.8	2.1	-11.2	-17.2	0.6	-27.1	-23.4	-48.3	2.0	-39.9	-10.8	-5.5	-0.5	-6.4	-25.7	-9.7	67.9	76.0	74.6	100.0	56.7	41.2
	tll_all_syst Unfolded Truth Bin 5		••••	• • • •						• • • • •					• • • • •	• • • • •			• • • • •			• • • • •			• • • • •				• • • • •					•••••
BTag_B_0  BTag_Light_0  EG_SCALE_ALL  Electron_Iso_SF_0  ET_BLES_Response ectiveNP_Nodeling  ealbration_Modeling  range_prepage  Luminosity  Pileup_RW  Phaton_ID  Phaton_BTs  try_dec_yari3c  try_dec_yari3c  try_dec_yari3c  try_prod_muk  try_prod_muk  try_prod_muk  try_prod_yari3c  uncalib_jer  Wry_Nom  Zy_Nom  Zy_Nom  Zy_Nom  Unicided Truth Bin 1  Unicided Truth Bin 3  Unicided Truth Bin 3  Unicided Truth Bin 3  Unicided Truth Bin 5  Unicided Truth Bin 5  Unicided Truth Bin 5	tll_all_syst Unfolded Truth Bin 6	2.2	9.3	-7.3	-4.6	-1.7	-5.9	-4.2	-2.7	2.3	-4.1	-7.5	-5.3	2.1	-5.1	-7.4	4.7	-6.7	-36.2	-15.6	3.7	-25.7	-5.3	-13.5	-10.2	-57.2	-15.6	-20.1	31.1	34.4	35.8	41.2	49.8	100.0
JET_TEL  JET		BTag_B_0	BTag_Light_0	EG_SCALE_ALL	Electron_Iso_SF_0	JET_BJES_Response	JET_EffectiveNP_Modelling1		JET_Flavor_Composition	JET_Flavor_Response	JET_Pileup_OffsetNPV	JET_Pileup_RhoTopology	Luminosity	PileupRW	Photon_ID	Photon_efflso	Wty_Herwig7	hfake SF_	tty_dec_Herwig7	tty(dec) Norm	tty_dec_var3c	tty_prod_Herwig7	tty_prod_muR	tty_prod_var3c	uncalib_get	uncalib_ljet	Wty Nom	Z <sub>Y</sub> Nom	uti_all_syst Unfolded Truth Bin 1	tl[_all_syst Unfolded Truth Bin 2	tll_all_syst Unfolded Truth Bin 3	tll_all_syst Unfolded Truth Bin 4	III_aII_syst Unfolded Truth Bin 5	il_al_syst Unfolded Truth Bin 6