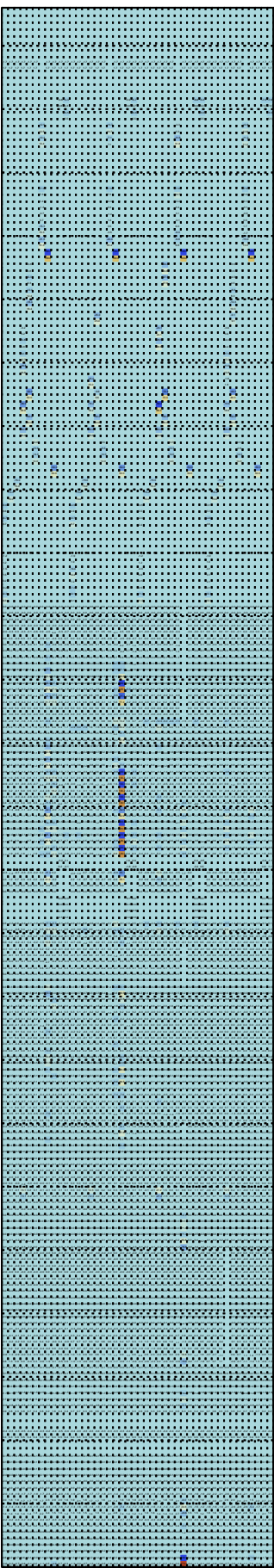


softmu_SF_ID_SYST_LOWPT_Dn
softmu_SF_ID_SYST_LOWPT_Up
softmu_SF_ID_STAT_LOWPT_Dn
softmu_SF_ID_STAT_LOWPT_Up
softmu_SF_ID_SYST_Dn
softmu_SF_ID_SYST_Up
softmu_SF_ID_STAT_Dn
softmu_SF_ID_STAT_Up
lumi_Dn
lumi_Up
signalMuF_Dn
signalMuF_Up
signalMuR_Dn
signalMuR_Up
signalMuRMuF_Dn
signalMuRMuF_Up
ttbarXsec_Dn
ttbarXsec_Up
ttbarBottomMeson_Dn
ttbarBottomMeson_Up
ttbarPhotConv_Dn
ttbarPhotConv_Up
ttbarMuF_Dn
ttbarMuF_Up
ttbarMuR_Dn
ttbarMuR_Up
ttbarMuRMuF_Dn
ttbarMuRMuF_Up
ttbarFSR_Dn
ttbarFSR_Up
ttbarA14_Dn
ttbarA14_Up
ttbarPDF_Dn
ttbarPDF_Up
ttbarhdamp_Dn
ttbarhdamp_Up
ttbarPS_Dn
ttbarPS_Up
OtherFakesNorm_Dn
OtherFakesNorm_Up
VVHF_5_Jet_Dn
VVHF_5_Jet_Up
VVHF_4_Jet_Dn
VVHF_4_Jet_Up
VVHF_3_Jet_Dn
VVHF_3_Jet_Up
VVHF_2_Jet_Dn
VVHF_2_Jet_Up
VVHF_1_Jet_Dn
VVHF_1_Jet_Up
VVLf_5_Jet_Dn
VVLf_5_Jet_Up
VVLf_4_Jet_Dn
VVLf_4_Jet_Up
VVLf_3_Jet_Dn
VVLf_3_Jet_Up
VVLf_2_Jet_Dn
VVLf_2_Jet_Up
VVLf_1_Jet_Dn
VVLf_1_Jet_Up
VVHFgen_Dn
VVHFgen_Up
VVLfgen_Dn
VVLfgen_Up
VVHFnorm_Dn
VVHFnorm_Up
VVLfnorm_Dn
VVLfnorm_Up
tZrad_Dn
tZrad_Up
tZnom_Dn
tZnom_Up
OtherNorm_Dn
OtherNorm_Up
ttHnorm_Dn
ttHnorm_Up
ttWnorm_Dn
ttWnorm_Up
ttWZmod_Dn
ttWZmod_Up
ttWZnorm_Dn
ttZmuF_Dn
ttZmuF_Up
ttZmuR_Dn
ttZmuR_Up
ttZmuRMuF_Dn
ttZmuRMuF_Up
ttZgen_Dn
ttZgen_Up
ttZrad_Dn
ttZrad_Up
ttZnorm_Dn
ttZnorm_Up
MUON_SAGITTA_RHO_Dn
MUON_SAGITTA_RHO_Up
MUON_SAGITTA_RESBIAS_Dn
MUON_SAGITTA_RESBIAS_Up
MUON_SCALE_Dn
MUON_SCALE_Up
MUON_MS_Dn
MUON_MS_Up
MUON_ID_Dn
MUON_ID_Up
MET_SoftTrk_Scale_Dn
MET_SoftTrk_Scale_Up
MET_SoftTrk_ResoPerp_Dn
MET_SoftTrk_ResoPerp_Up
MET_SoftTrk_ResoPara_Dn
MET_SoftTrk_ResoPara_Up
JER_Reduction_JET_SingleParticle_HighPt_Dn
JER_Reduction_JET_SingleParticle_HighPt_Up
JER_Reduction_JET_Pileup_RhoTopology_Dn
JER_Reduction_JET_Pileup_RhoTopology_Up
JER_Reduction_JET_Pileup_PtTerm_Dn
JER_Reduction_JET_Pileup_PtTerm_Up
JER_Reduction_JET_Pileup_OffsetNPV_Dn
JER_Reduction_JET_Pileup_OffsetNPV_Up
JER_Reduction_JET_Pileup_OffsetMu_Dn
JER_Reduction_JET_Pileup_OffsetMu_Up
JER_EFFECTIVENP_7restTerm_Dn
JER_EFFECTIVENP_7restTerm_Up
JER_EFFECTIVENP_6_Dn
JER_EFFECTIVENP_6_Up
JER_EFFECTIVENP_5_Dn
JER_EFFECTIVENP_5_Up
JER_EFFECTIVENP_4_Dn
JER_EFFECTIVENP_4_Up
JER_EFFECTIVENP_3_Dn
JER_EFFECTIVENP_3_Up
JER_EFFECTIVENP_2_Dn
JER_EFFECTIVENP_2_Up
JER_EFFECTIVENP_1_Dn
JER_EFFECTIVENP_1_Up
JER_DataVsMC_AFIL_Dn
JER_DataVsMC_AFIL_Up
JER_DataVsMC_MC16_Dn
JER_DataVsMC_MC16_Up
JER_PunchThrough_MC16_Dn
JER_PunchThrough_MC16_Up
JER_PunchThrough_AFIL_Dn
JER_PunchThrough_AFIL_Up
JER_RelativeNonClosure_AFIL_Dn
JER_RelativeNonClosure_AFIL_Up
JER_Flavor_Composition_Dn
JER_Flavor_Composition_Up
JER_EtaIntercalibration_TotalStat_Dn
JER_EtaIntercalibration_TotalStat_Up
JER_NonClosure_posEta_Dn
JER_NonClosure_posEta_Up
JER_NonClosure_negEta_Dn
JER_NonClosure_negEta_Up
JER_NonClosure_highE_Dn
JER_NonClosure_highE_Up
JER_NonClosure_2018data_Dn
JER_NonClosure_2018data_Up
JER_EtaIntercalibration_Modelling_Dn
JER_EtaIntercalibration_Modelling_Up
JER_EFFECTIVENP_8restTerm_Dn
JER_EFFECTIVENP_8restTerm_Up
JER_EFFECTIVENP_7_Dn
JER_EFFECTIVENP_7_Up
JER_EFFECTIVENP_6_Dn
JER_EFFECTIVENP_6_Up
JER_EFFECTIVENP_5_Dn
JER_EFFECTIVENP_5_Up
JER_EFFECTIVENP_4_Dn
JER_EFFECTIVENP_4_Up
JER_EFFECTIVENP_3_Dn
JER_EFFECTIVENP_3_Up
JER_EFFECTIVENP_2_Dn
JER_EFFECTIVENP_2_Up
JER_EFFECTIVENP_1_Dn
JER_EFFECTIVENP_1_Up
JER_BJES_Response_Dn
JER_BJES_Response_Up
EG_SCALE_ALL_Dn
EG_SCALE_ALL_Up
EG_RESOLUTION_ALL_Dn
EG_RESOLUTION_ALL_Up
bTagSF_eigenvars_Light_3_Dn
bTagSF_eigenvars_Light_3_Up
bTagSF_eigenvars_Light_2_Dn
bTagSF_eigenvars_Light_2_Up
bTagSF_eigenvars_Light_1_Dn
bTagSF_eigenvars_Light_1_Up
bTagSF_eigenvars_Light_0_Dn
bTagSF_eigenvars_Light_0_Up
bTagSF_eigenvars_C_3_Dn
bTagSF_eigenvars_C_3_Up
bTagSF_eigenvars_C_2_Dn
bTagSF_eigenvars_C_2_Up
bTagSF_eigenvars_C_1_Dn
bTagSF_eigenvars_C_1_Up
bTagSF_eigenvars_C_0_Dn
bTagSF_eigenvars_C_0_Up
bTagSF_eigenvars_B_8_Dn
bTagSF_eigenvars_B_8_Up
bTagSF_eigenvars_B_7_Dn
bTagSF_eigenvars_B_7_Up
bTagSF_eigenvars_B_6_Dn
bTagSF_eigenvars_B_6_Up
bTagSF_eigenvars_B_5_Dn
bTagSF_eigenvars_B_5_Up
bTagSF_eigenvars_B_4_Dn
bTagSF_eigenvars_B_4_Up
bTagSF_eigenvars_B_3_Dn
bTagSF_eigenvars_B_3_Up
bTagSF_eigenvars_B_2_Dn
bTagSF_eigenvars_B_2_Up
bTagSF_eigenvars_B_1_Dn
bTagSF_eigenvars_B_1_Up
bTagSF_eigenvars_B_0_Dn
bTagSF_eigenvars_B_0_Up
MU_SF_TTVA_SYST_Dn
MU_SF_TTVA_SYST_Up
MU_SF_Isol_SYST_Dn
MU_SF_Isol_SYST_Up
MU_SF_Isol_STAT_Dn
MU_SF_Isol_STAT_Up
MU_SF_ID_SYST_LOWPT_Dn
MU_SF_ID_SYST_LOWPT_Up
MU_SF_ID_SYST_Dn
MU_SF_ID_SYST_Up
MU_SF_ID_STAT_LOWPT_Dn
MU_SF_ID_STAT_LOWPT_Up
MU_SF_ID_STAT_Dn
MU_SF_ID_STAT_Up
MU_SF_Trigger_SYST_Dn
MU_SF_Trigger_SYST_Up
MU_SF_Trigger_STAT_Dn
MU_SF_Trigger_STAT_Up
EL_SF_Isol_Dn
EL_SF_Isol_Up
EL_SF_ID_Dn
EL_SF_ID_Up
EL_SF_Reco_Dn
EL_SF_Reco_Up
EL_SF_Trigger_Dn
EL_SF_Trigger_Up
jvt_Dn
jvt_Up
pileup_Dn
pileup_Up



SBCR1_kZ_plus_WZ
SBCR1_tbarW
SBCR1_tbarH
SBCR1_VLF
SBCR1_VHF
SBCR1_LZ
SBCR1_tbar_plus_Wt
SBCR1_OtherFakes
SBCR1_Other
SBCR1_cZprod
SBCR1_cZdisc
SBCR2_kZ_plus_WZ
SBCR2_tbarW
SBCR2_tbarH
SBCR2_VLF
SBCR2_VHF
SBCR2_LZ
SBCR2_tbar_plus_Wt
SBCR2_OtherFakes
SBCR2_Other
SBCR2_cZprod
SBCR2_cZdisc
TTZCR_kZ_plus_WZ
TTZCR_tbarW
TTZCR_tbarH
TTZCR_WLF
TTZCR_VHF
TTZCR_LZ
TTZCR_tbar_plus_Wt
TTZCR_OtherFakes
TTZCR_Other
TTZCR_cZprod
TTZCR_cZdisc
TTOR_kZ_plus_WZ
TTOR_tbarW
TTOR_tbarH
TTOR_WLF
TTOR_VHF
TTOR_LZ
TTOR_tbar_plus_Wt
TTOR_OtherFakes
TTOR_Other
TTOR_cZprod
TTOR_cZdisc