



UL-17 JEC-V4 Checks

**Validation performed comparing to legacy
EOY-17 (Fall17 V32) via JECViewer Tool
(shorturl.at/rOTVW)**

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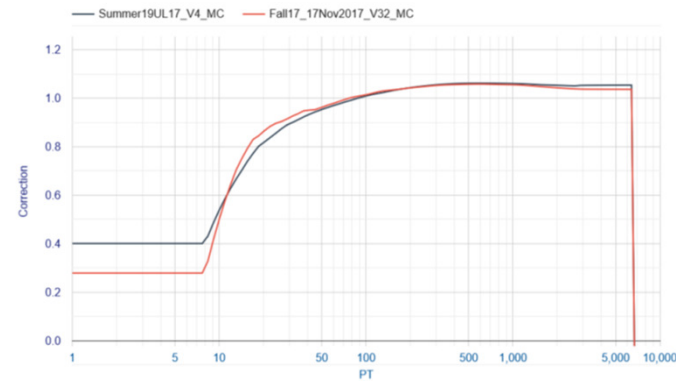
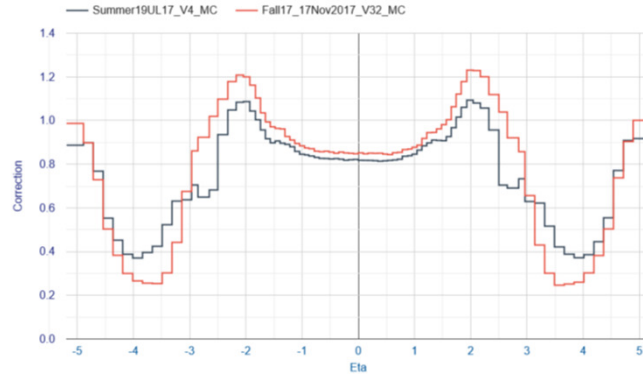
MC: L1L2L3 (MC-Truth)

AK4PF-CHS

vrs η ($\rho = 40$)

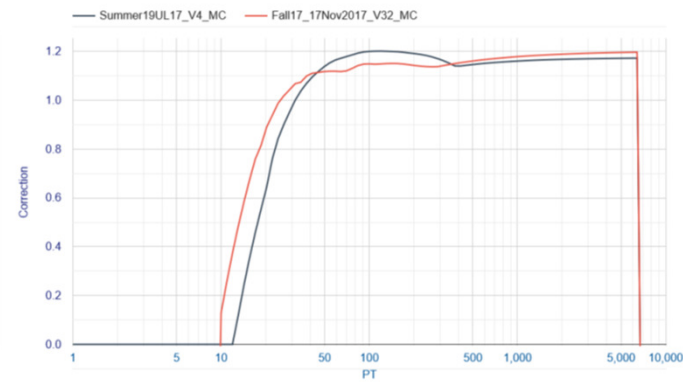
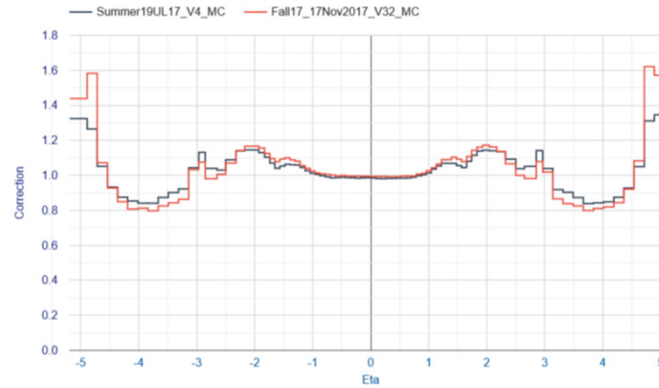
vrs Pt ($\rho = 30$)

$P_t = 30$ GeV



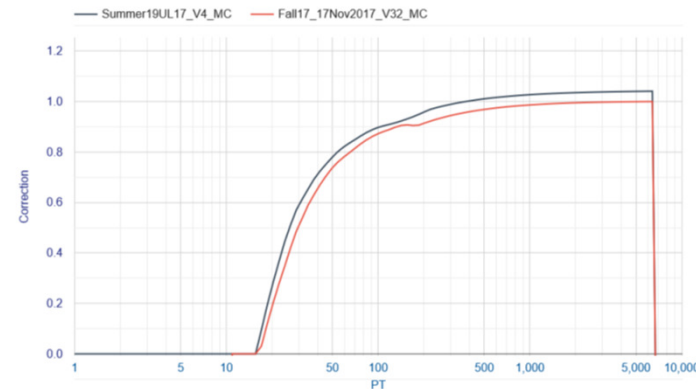
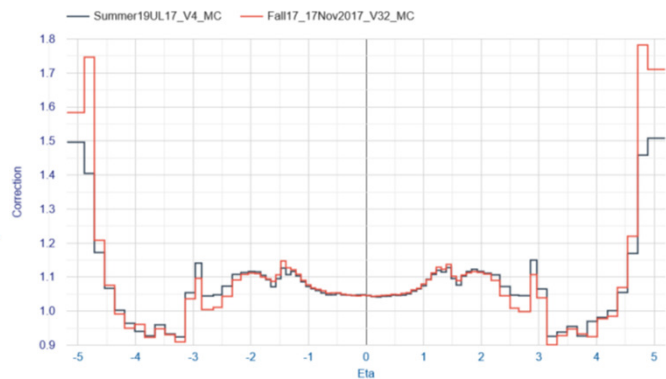
$\eta = 0.0$

$P_t = 100$ GeV



$\eta = 2.9$

$P_t = 300$ GeV



$\eta = 4.0$

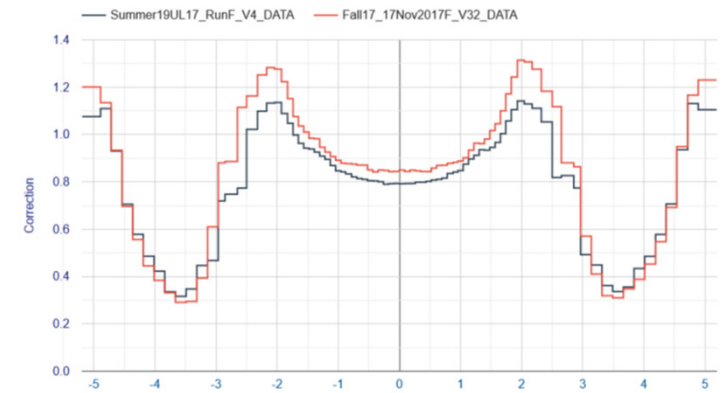
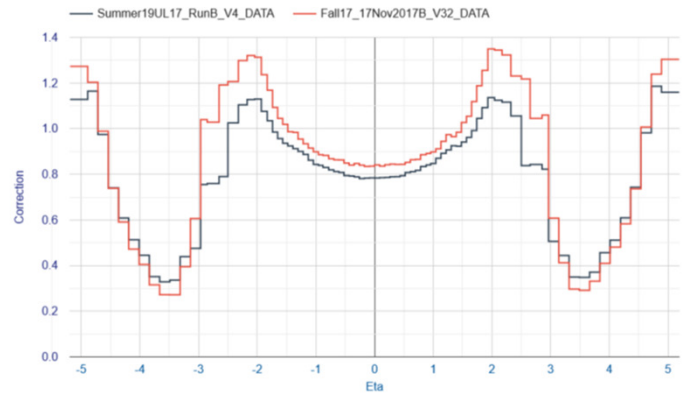
Data: L1L2L3L2L3Res vrs η ($\rho = 40$)

AK4PF-CHS

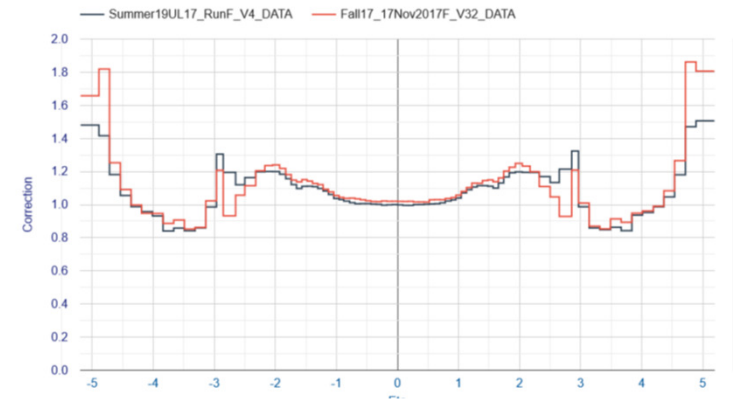
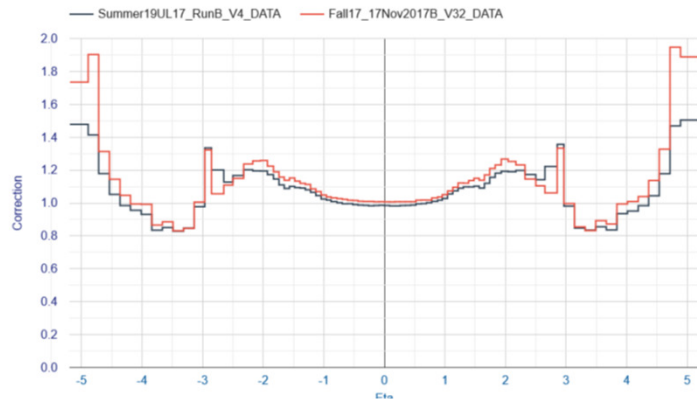
Era B

Era F

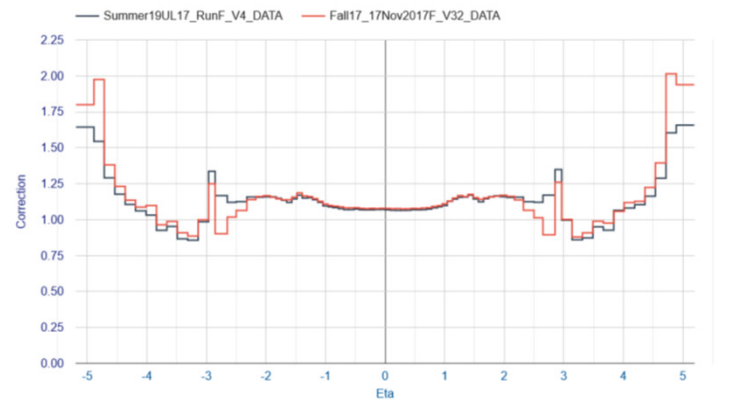
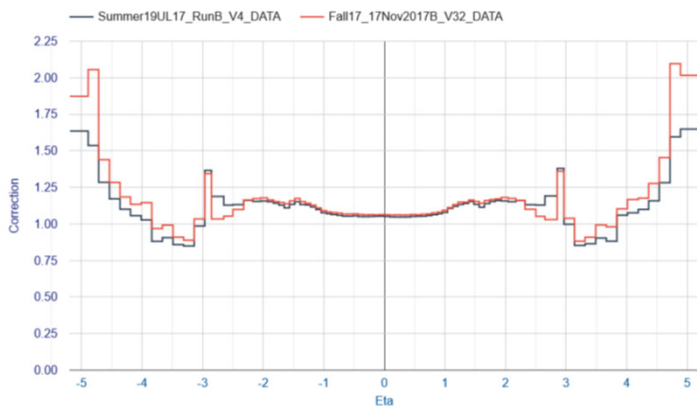
$P_t = 30$ GeV



$P_t = 100$ GeV



$P_t = 300$ GeV



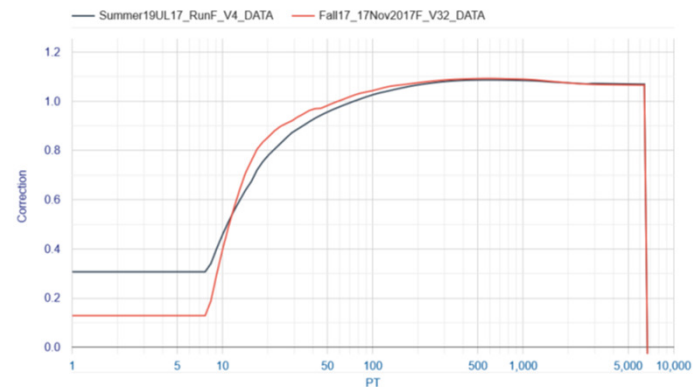
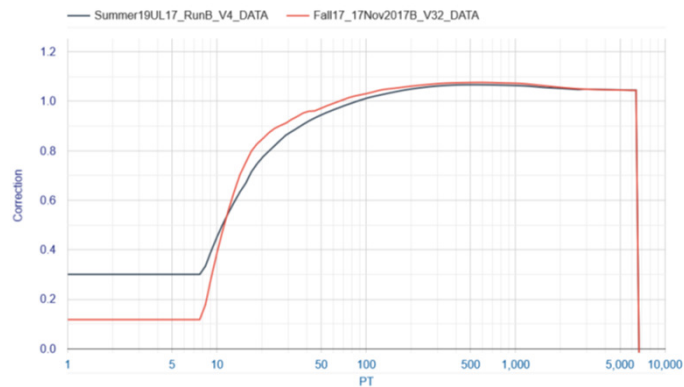
Data: L1L2L3L2L3Res vrs Pt ($\rho = 30$)

AK4PF-CHS

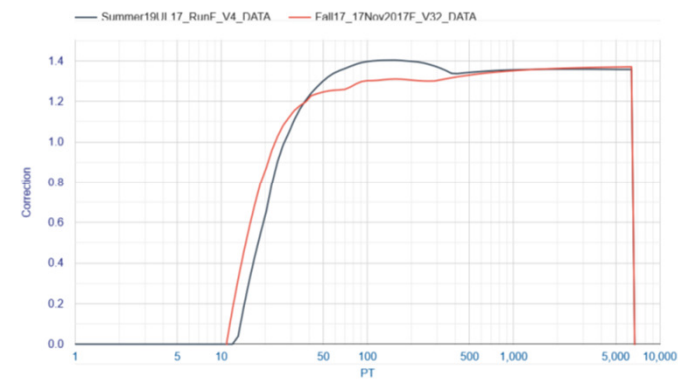
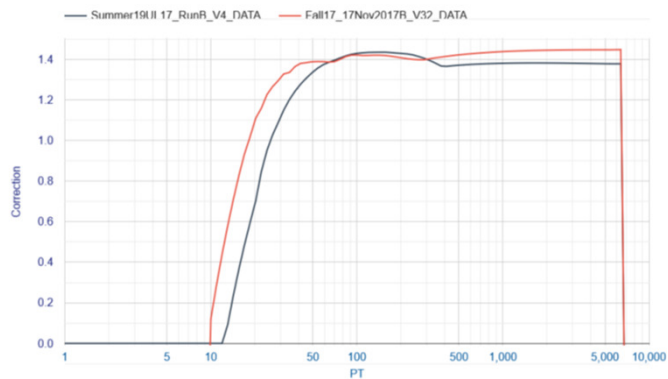
Era B

Era F

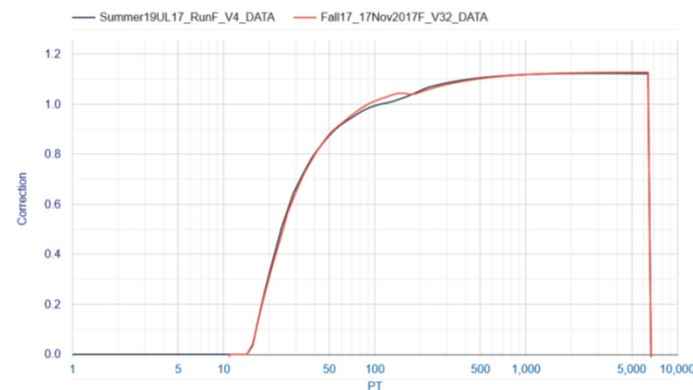
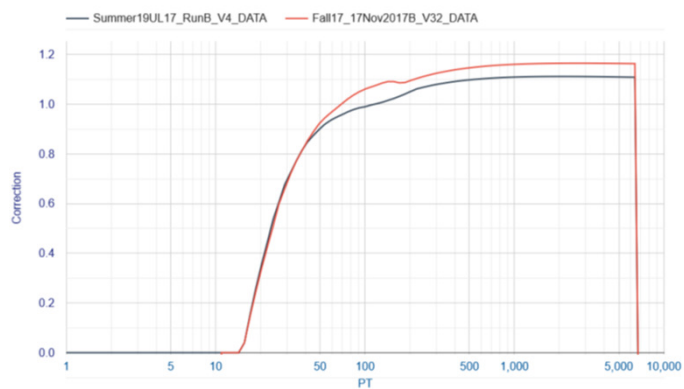
$\eta = 0.0$



$\eta = 2.9$



$\eta = 4.0$



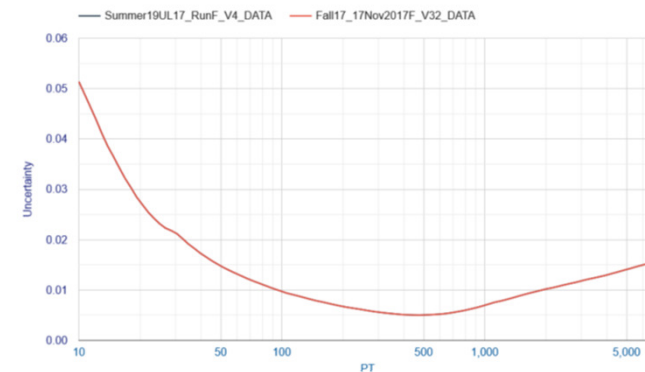
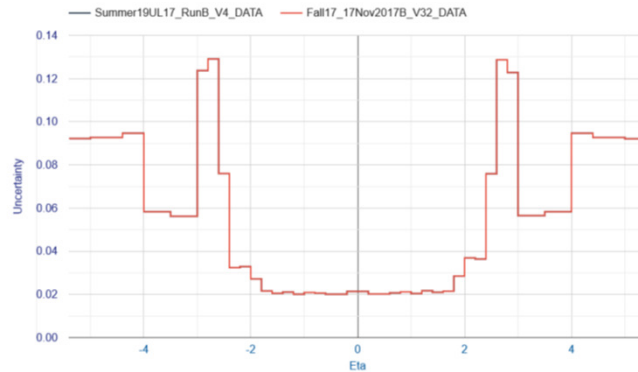
UL-17 v4 Uncertainties (currently same as Fall17 v32)

AK4PF-CHS

vrs η

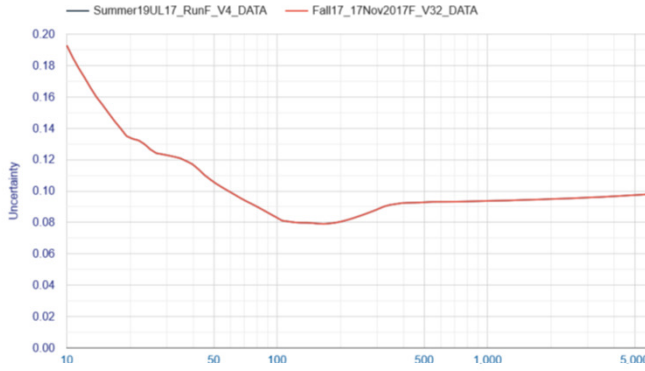
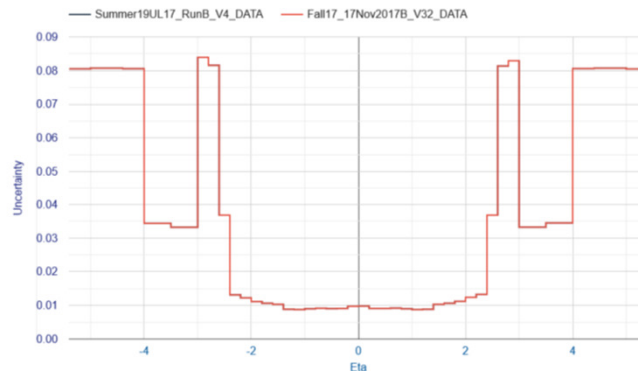
vrs Pt

$P_t = 30 \text{ GeV}$



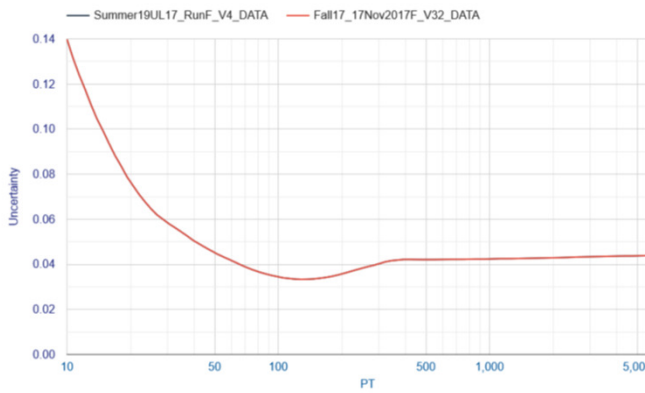
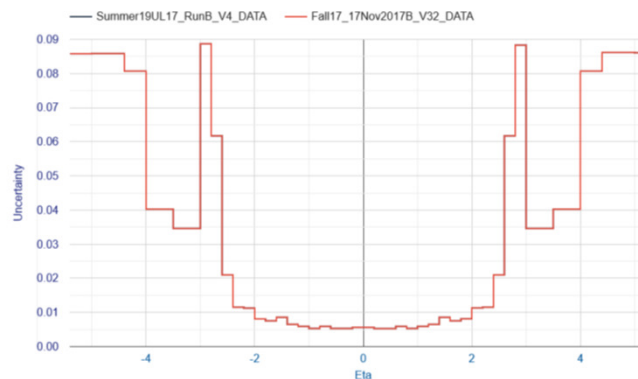
$\eta = 0.0$

$P_t = 100 \text{ GeV}$



$\eta = 2.9$

$P_t = 300 \text{ GeV}$



$\eta = 4.0$