



Sanity check for Summer19UL16 V7 AK4PFchs JEC

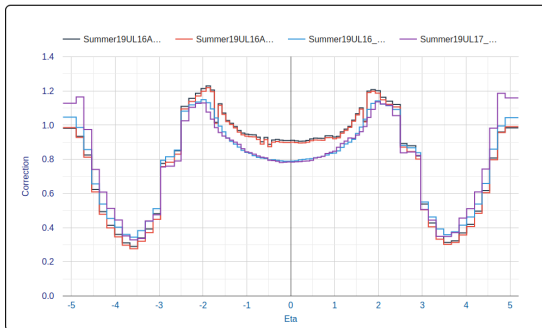
Juska Pekkanen for the JERC group

juska@cern.ch

SUNY Buffalo

May 7, 2021

UL16 V7 vs UL17 V5 data JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask "H" if you want new curves or other versions.

Number of curves: 4 ☒ Force linear scale

<input checked="" type="checkbox"/> Version	Summer19UL16APV_RunBCD_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	Eta_Rho40.00_PT30.00
<input checked="" type="checkbox"/> Hide band							
<input checked="" type="checkbox"/> Version	Summer19UL16APV_RunEF_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	Eta_Rho40.00_PT30.00
<input checked="" type="checkbox"/> Hide band							
<input checked="" type="checkbox"/> Version	Summer19UL16_RunFGH_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	Eta_Rho40.00_PT30.00
<input checked="" type="checkbox"/> Hide band							
<input checked="" type="checkbox"/> Version	Summer19UL17_RunB_V5_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	Eta_Rho40.00_PT30.00
<input checked="" type="checkbox"/> Hide band							



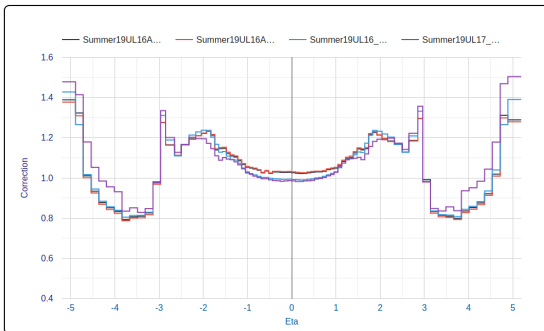
The State University
of New York



Sanity check for Summer19UL16 V7 AK4PFchs JEC
Juska Pekkanen, juska@cern.ch

May 7, 2021
2/??

UL16 V7 vs UL17 V5 data JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask "Y" if you want new curves or other versions.

Number of curves: 4

☒ Force linear scale

<input checked="" type="checkbox"/>	Version	Summer19UL16APV_RunBCD_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	Eta_Rho40.00_PT100.00
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	Summer19UL16APV_RunEF_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	Eta_Rho40.00_PT100.00
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	Summer19UL16_RunFGH_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	Eta_Rho40.00_PT100.00
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	Summer19UL17_RunB_V5_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	Eta_Rho40.00_PT100.00
<input checked="" type="checkbox"/>	Hide band							



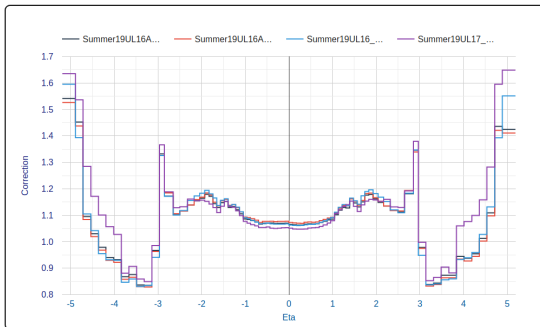
The State University
of New York



Sanity check for Summer19UL16 V7 AK4PFchs JEC
Juska Pekkanen, juska@cern.ch

May 7, 2021
3/??

UL16 V7 vs UL17 V5 data JEC



Instructions: Drag-select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask Yi if you want new curves or other versions.

Number of curves: 4

☒ Force linear scale

<input checked="" type="checkbox"/> Version: Summer19UL16APV_RunBCD_V7_DATA	Algorithm: AK4PFchs	Level: L1L2L3L2L3Res	Curve: Eta_Rho40.00_PT300.00
<input checked="" type="checkbox"/> Hide band			
<input checked="" type="checkbox"/> Version: Summer19UL16APV_RunEF_V7_DATA	Algorithm: AK4PFchs	Level: L1L2L3L2L3Res	Curve: Eta_Rho40.00_PT300.00
<input checked="" type="checkbox"/> Hide band			
<input checked="" type="checkbox"/> Version: Summer19UL16_RunFGH_V7_DATA	Algorithm: AK4PFchs	Level: L1L2L3L2L3Res	Curve: Eta_Rho40.00_PT300.00
<input checked="" type="checkbox"/> Hide band			
<input checked="" type="checkbox"/> Version: Summer19UL17_RunB_V5_DATA	Algorithm: AK4PFchs	Level: L1L2L3L2L3Res	Curve: Eta_Rho40.00_PT300.00



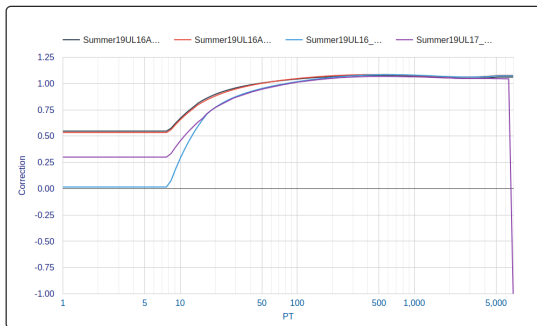
The State University
of New York



Sanity check for Summer19UL16 V7 AK4PFchs JEC
Juska Pekkanen, juska@cern.ch

May 7, 2021
4/??

UL16 V7 vs UL17 V5 data JEC



Instructions: Drag-select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the undervlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "Force linear scale" if you want to look closer. Ask Yi if you want new curves or other versions.

Number of curves: 4

☒ Force linear scale

<input checked="" type="checkbox"/> Version	Summer19UL16APV_RunBCD_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	PT_Rho30.00_Eta0.00
<input checked="" type="checkbox"/>	Hide band						
<input checked="" type="checkbox"/> Version	Summer19UL16APV_RunEF_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	PT_Rho30.00_Eta0.00
<input checked="" type="checkbox"/>	Hide band						
<input checked="" type="checkbox"/> Version	Summer19UL16_RunFGH_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	PT_Rho30.00_Eta0.00
<input checked="" type="checkbox"/>	Hide band						
<input checked="" type="checkbox"/> Version	Summer19UL17_RunB_V5_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	PT_Rho30.00_Eta0.00
<input checked="" type="checkbox"/>	Hide band						



The State University
of New York

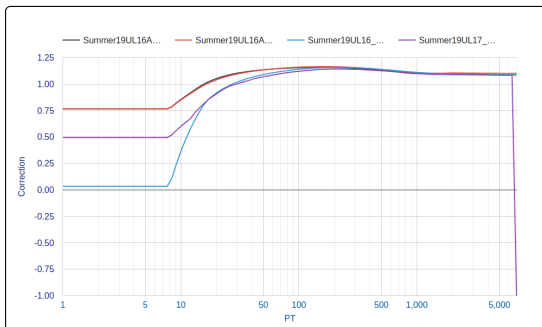


Sanity check for Summer19UL16 V7 AK4PFchs JEC
Juska Pekkanen, juska@cern.ch

May 7, 2021

5/??

UL16 V7 vs UL17 V5 data JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask "Y" if you want new curves or other versions.

Number of curves: 4

☒ Force linear scale

<input checked="" type="checkbox"/>	Version	Summer19UL16APV_RunBCD_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	PT_Rho30.00_Eta1.50
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	Summer19UL16APV_RunEF_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	PT_Rho30.00_Eta1.50
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	Summer19UL16_RunFGH_V7_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	PT_Rho30.00_Eta1.50
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	Summer19UL17_RunB_V5_DATA	Algorithm	AK4PFchs	Level	L1L2L3L2L3Res	Curve	PT_Rho30.00_Eta1.50
<input checked="" type="checkbox"/>	Hide band							



The State University
of New York

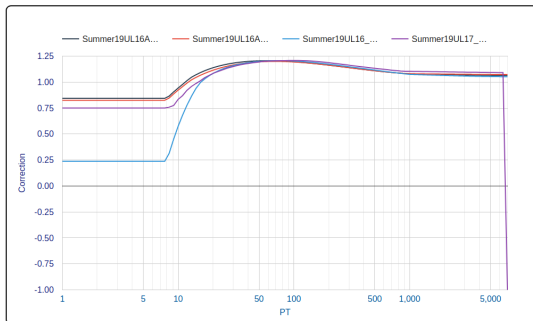


Sanity check for Summer19UL16 V7 AK4PFchs JEC
Juska Pekkanen, juska@cern.ch

May 7, 2021

6/??

UL16 V7 vs UL17 V5 data JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "Force linear scale" if you want to look closer. Add Y if you want new curves or other versions.

Number of curves: 4 ☒ Force linear scale

<input checked="" type="checkbox"/> Version	<u>Summer19UL16APV_RunBCD_V7_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta2.30</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL16APV_RunEF_V7_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta2.30</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL16_RunFGH_V7_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta2.30</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL17_RunB_V5_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta2.30</u>



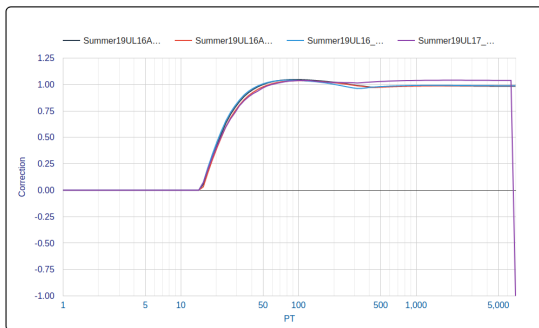
The State University
of New York



Sanity check for Summer19UL16 V7 AK4PFchs JEC
Juska Pekkanen, juska@cern.ch

May 7, 2021
7/??

UL16 V7 vs UL17 V5 data JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask Yi if you want new curves or other versions.

Number of curves: 4 ☒ Force linear scale

<input checked="" type="checkbox"/> Version	<u>Summer19UL16APV_RunBCD_V7_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta3.00</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL16APV_RunEF_V7_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta3.00</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL16_RunFGH_V7_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta3.00</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL17_RunB_V5_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta3.00</u>



The State University
of New York



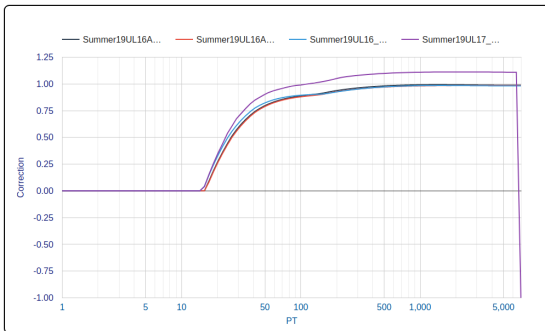
Sanity check for Summer19UL16 V7 AK4PFchs JEC

Juska Pekkanen, juska@cern.ch

May 7, 2021

8/??

UL16 V7 vs UL17 V5 data JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask "Y" if you want new curves or other versions.

Number of curves: 4

☒ Force linear scale

<input checked="" type="checkbox"/>	Version	<u>Summer19UL16APV_RunBCD_V7_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta4.00</u>
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	<u>Summer19UL16APV_RunEF_V7_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta4.00</u>
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	<u>Summer19UL16_RunFGH_V7_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta4.00</u>
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	<u>Summer19UL17_RunB_V5_DATA</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3L2L3Res</u>	Curve	<u>PT_Rho30.00_Eta4.00</u>
<input checked="" type="checkbox"/>	Hide band							



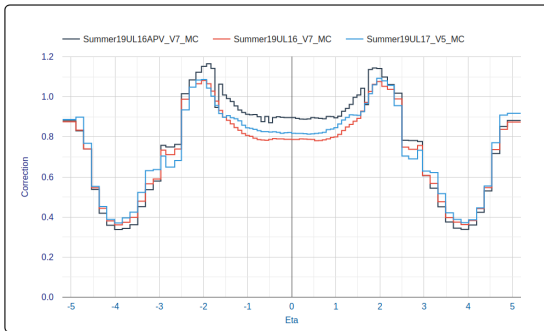
The State University
of New York



Sanity check for Summer19UL16 V7 AK4PFchs JEC
Juska Pekkanen, juska@cern.ch

May 7, 2021
9/??

UL16 V7 vs UL17 V5 MC JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty bands, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "Force linear scale" if you want to look closer. Ask "Y" if you want new curves or other versions.

Number of curves: 3 ☒ Force linear scale

<input checked="" type="checkbox"/> Version	<u>Summer19UL16APV_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>Eta_Rho40.00_PT30.00</u>
<input checked="" type="checkbox"/> Hide band							
<input checked="" type="checkbox"/> Version	<u>Summer19UL16_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>Eta_Rho40.00_PT30.00</u>
<input checked="" type="checkbox"/> Hide band							
<input checked="" type="checkbox"/> Version	<u>Summer19UL17_V5_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>Eta_Rho40.00_PT30.00</u>



The State University
of New York



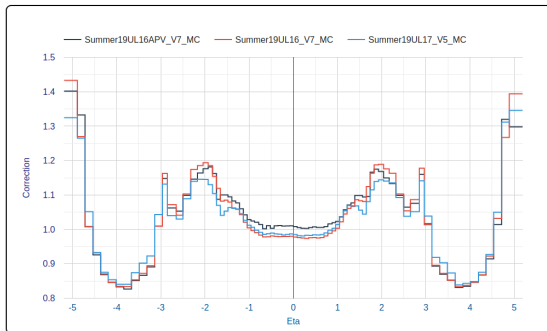
Sanity check for Summer19UL16 V7 AK4PFchs JEC

Juska Pekkanen, juska@cern.ch

May 7, 2021

10/??

UL16 V7 vs UL17 V5 MC JEC



Instructions: Drag-select to zoom, right-click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty bands, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask "Y" if you want new curves or other versions.

Number of curves: 3

☒ Force linear scale

<input checked="" type="checkbox"/>	Version	<u>Summer19UL16APV_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>Eta_Rho40.00_PT100.00</u>
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	<u>Summer19UL16_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>Eta_Rho40.00_PT100.00</u>
<input checked="" type="checkbox"/>	Hide band							
<input checked="" type="checkbox"/>	Version	<u>Summer19UL17_V5_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>Eta_Rho40.00_PT100.00</u>



The State University
of New York



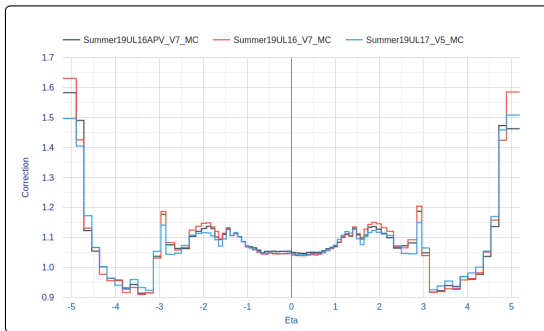
Sanity check for Summer19UL16 V7 AK4PFchs JEC

Juska Pekkanen, juska@cern.ch

May 7, 2021

11/??

UL16 V7 vs UL17 V5 MC JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty bands, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask "Y" if you want new curves or other versions.

Number of curves: 3

☒ Force linear scale

<input checked="" type="checkbox"/> Version	<u>Summer19UL16APV_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>Eta_Rho40.00_PT300.00</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL16_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>Eta_Rho40.00_PT300.00</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL17_V5_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>Eta_Rho40.00_PT300.00</u>



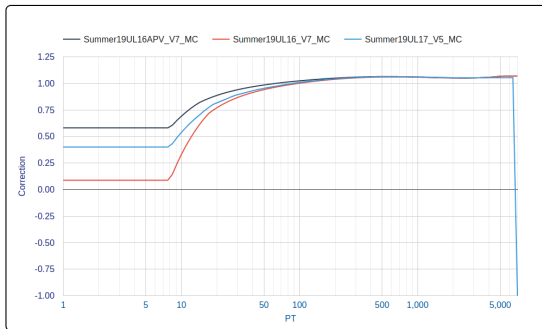
The State University
of New York



Sanity check for Summer19UL16 V7 AK4PFchs JEC
Juska Pekkanen, juska@cern.ch

May 7, 2021
12/??

UL16 V7 vs UL17 V5 MC JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the undetermined fields can be clicked. Some curves have uncertainty bands, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask Yi if you want new curves or other versions.

Number of curves: 3

☒ Force linear scale

<input checked="" type="checkbox"/> Version Summer19UL16APV_V7_MC	Algorithm AK4PFchs	Level L1L2L3	Curve PT_Rho30.00_Eta0.00
<input checked="" type="checkbox"/> Hide band			
<input checked="" type="checkbox"/> Version Summer19UL16_V7_MC	Algorithm AK4PFchs	Level L1L2L3	Curve PT_Rho30.00_Eta0.00
<input checked="" type="checkbox"/> Hide band			
<input checked="" type="checkbox"/> Version Summer19UL17_V5_MC	Algorithm AK4PFchs	Level L1L2L3	Curve PT_Rho30.00_Eta0.00



The State University
of New York



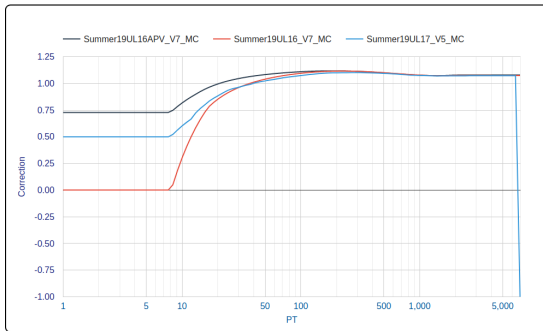
Sanity check for Summer19UL16 V7 AK4PFchs JEC

Juska Pekkanen, juska@cern.ch

May 7, 2021

13/??

UL16 V7 vs UL17 V5 MC JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "Force linear scale" if you want to look closer. Ask "!" if you want new curves or other versions.

Number of curves: 3

☒ Force linear scale

<input checked="" type="checkbox"/> Version	<u>Summer19UL16APV_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>PT_Rho30.00_Eta1.50</u>
<input checked="" type="checkbox"/> Hide band							
<input checked="" type="checkbox"/> Version	<u>Summer19UL16_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>PT_Rho30.00_Eta1.50</u>
<input checked="" type="checkbox"/> Hide band							
<input checked="" type="checkbox"/> Version	<u>Summer19UL17_V5_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>PT_Rho30.00_Eta1.50</u>



The State University
of New York



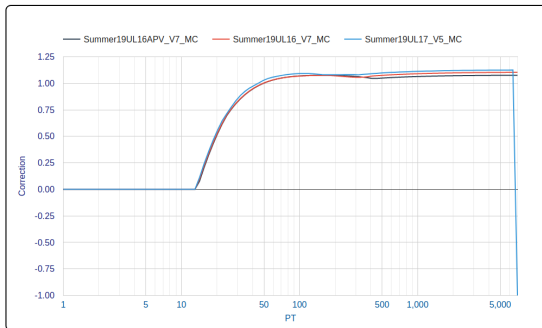
Sanity check for Summer19UL16 V7 AK4PFchs JEC

Juska Pekkanen, juska@cern.ch

May 7, 2021

14/??

UL16 V7 vs UL17 V5 MC JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask YI if you want new curves or other versions.

Number of curves: 3

☒ Force linear scale

<input checked="" type="checkbox"/> Version	<u>Summer19UL16APV_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>PT_Rho30.00_Eta3.00</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL16_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>PT_Rho30.00_Eta3.00</u>
	<input checked="" type="checkbox"/> Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL17_V5_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>PT_Rho30.00_Eta3.00</u>



The State University
of New York



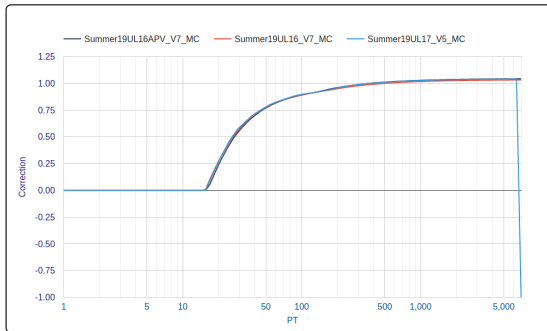
Sanity check for Summer19UL16 V7 AK4PFchs JEC

Juska Pekkanen, juska@cern.ch

May 7, 2021

15/??

UL16 V7 vs UL17 V5 MC JEC



Instructions: Drag select to zoom, right click to reset. Select curves to display from the drop-down boxes below. All the underlined fields can be clicked. Some curves have uncertainty band, which can be toggled with the check box on the right. Copy address to share with others. Log scales can't be zoomed - use the "force linear scale" if you want to look closer. Ask "Y" if you want new curves or other versions.

Number of curves: 3

☒ Force linear scale

<input checked="" type="checkbox"/> Version	<u>Summer19UL16APV_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>PT_Rho30.00_Eta4.00</u>
<input checked="" type="checkbox"/>	Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL16_V7_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>PT_Rho30.00_Eta4.00</u>
<input checked="" type="checkbox"/>	Hide band						
<input checked="" type="checkbox"/> Version	<u>Summer19UL17_V5_MC</u>	Algorithm	<u>AK4PFchs</u>	Level	<u>L1L2L3</u>	Curve	<u>PT_Rho30.00_Eta4.00</u>



The State University
of New York



Sanity check for Summer19UL16 V7 AK4PFchs JEC
Juska Pekkanen, juska@cern.ch

May 7, 2021
16/??