

Introduction

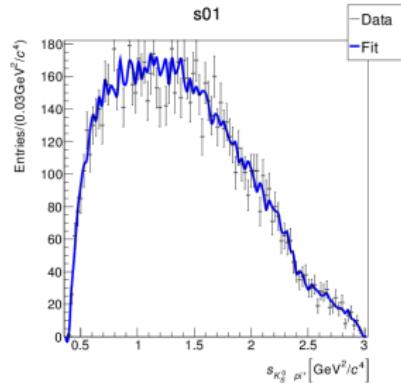
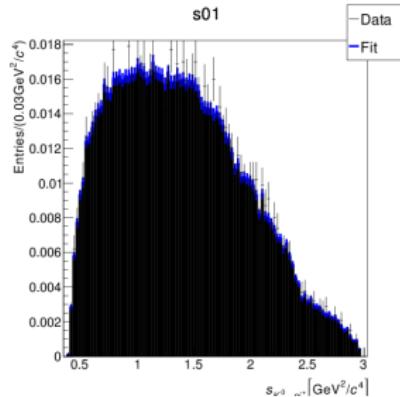
We perform a “Self Fit” for two particular models (“myBelle” and “timBelle”). The purpose of this is to establish a “baseline” fit for a given model.

Procedure

The “SelfFit” Procedure is

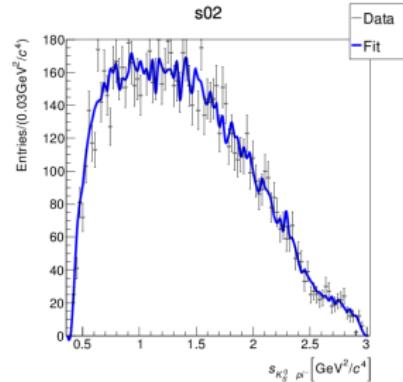
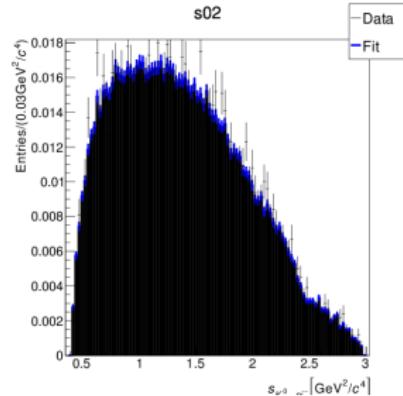
- ▶ Generate a toy MC sample, \mathcal{G} from a given model, \mathcal{M}
- ▶ Fit \mathcal{G} using the same model, \mathcal{M} and obtain a “fitted” model, \mathcal{M}'
- ▶ Regenerate another toy sample, \mathcal{G}' from this “new” model, \mathcal{M}'

m_+^2 for $\pi^+\pi^-$ S-wave



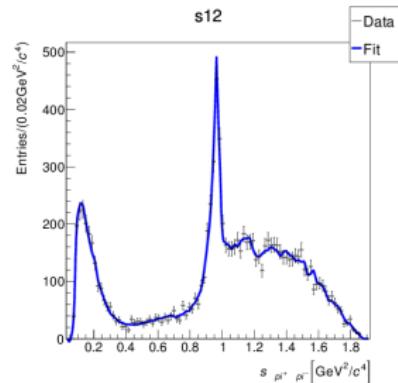
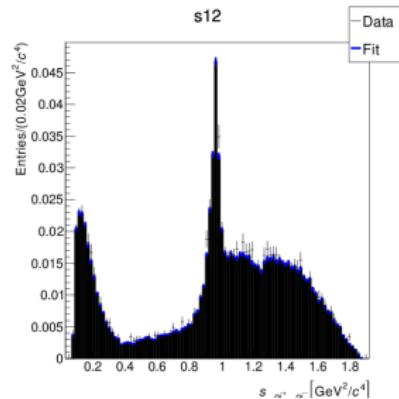
Left “Regenerated Model”, right “Original Model (with fit line)”

m_-^2 for $\pi^+\pi^-$ S-wave



Left “Regenerated Model”, right “Original Model (with fit line)”

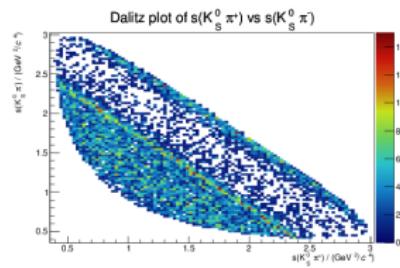
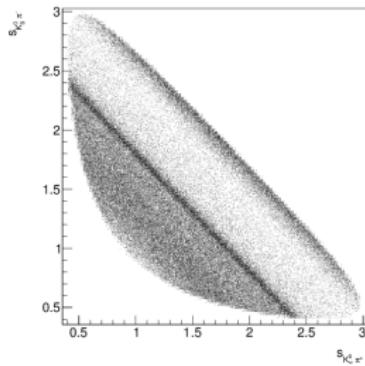
m_0^2 for $\pi^+\pi^-$ S-wave



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $\pi^+\pi^-$ S-wave

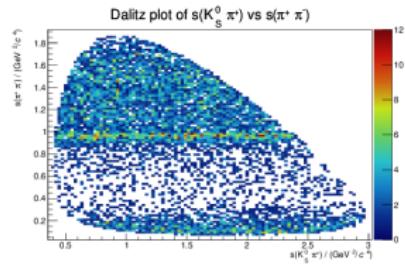
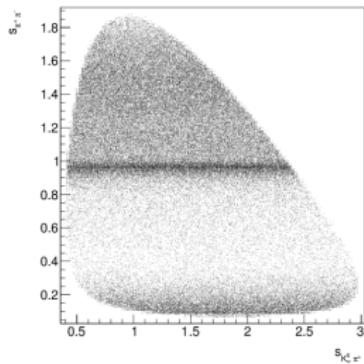
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $\pi^+\pi^-$ S-wave

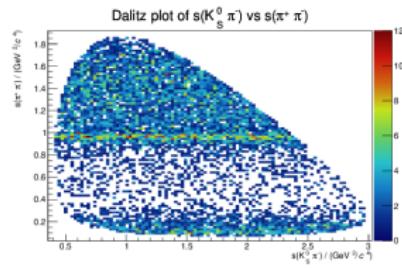
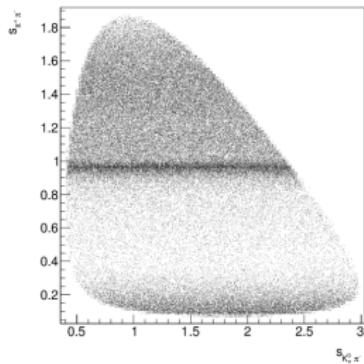
s01_vs_s12



Left “Regenerated”, right “Original”

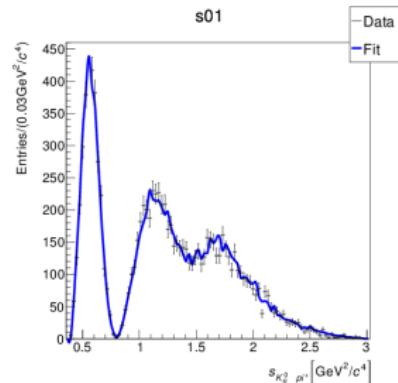
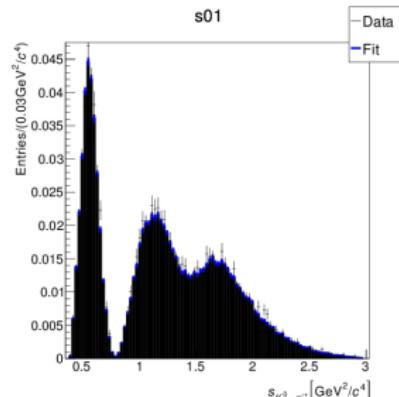
m_-^2 vs m_0^2 for $\pi^+\pi^-$ S-wave

s02_vs_s12



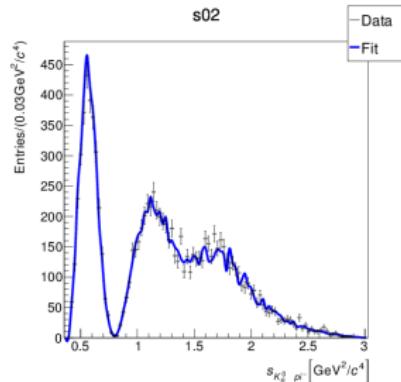
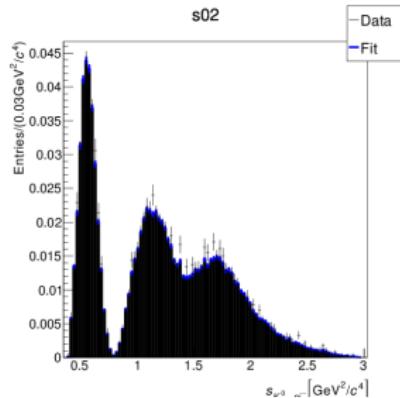
Left “Regenerated”, right “Original”

m_+^2 for $f_2(1270)^0$



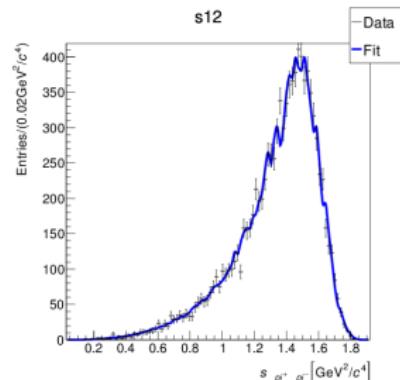
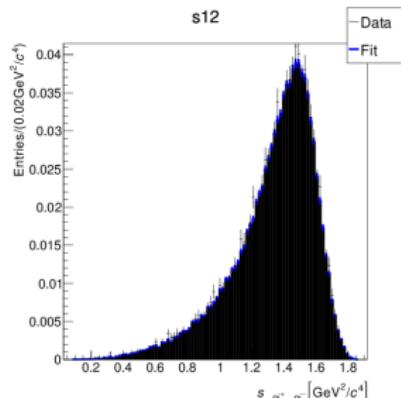
Left “Regenerated Model”, right “Original Model (with fit line)”

m^2 for $f_2(1270)^0$



Left “Regenerated Model”, right “Original Model (with fit line)”

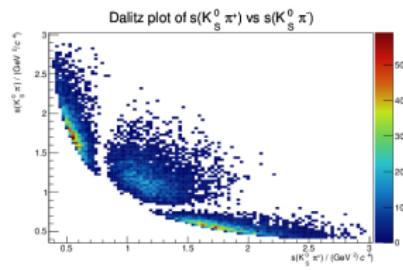
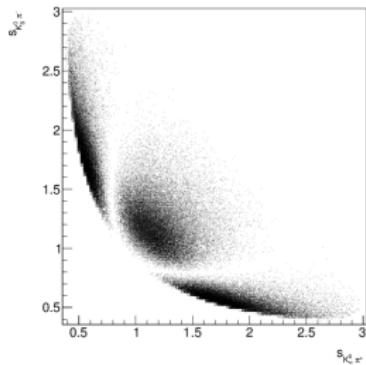
m_0^2 for $f_2(1270)^0$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $f_2(1270)^0$

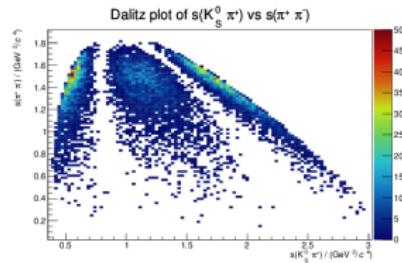
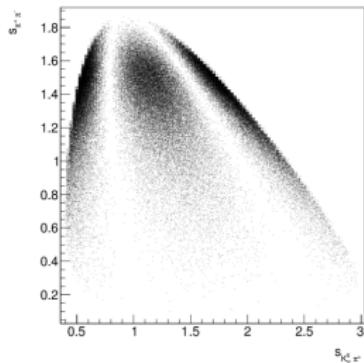
s01_vs_s02



Left “Regenerated”, right “Original”

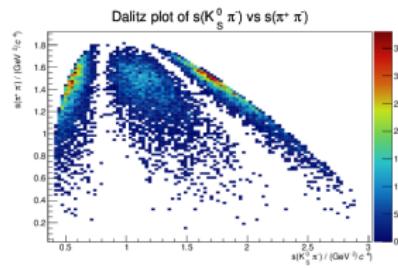
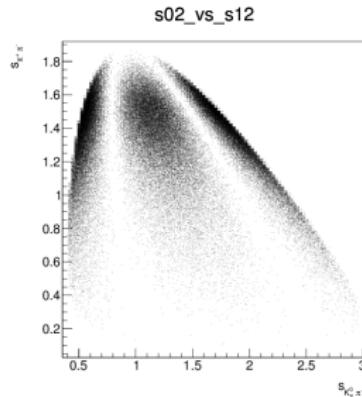
m_+^2 vs m_0^2 for $f_2(1270)^0$

s01_vs_s12



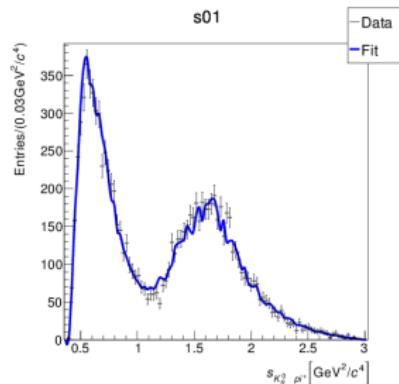
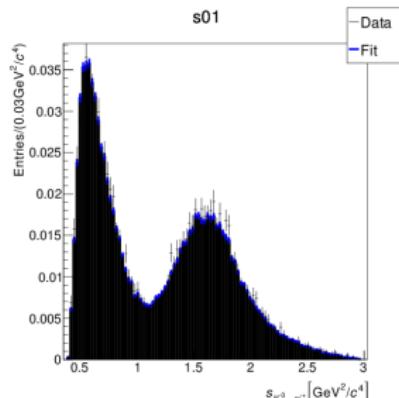
Left “Regenerated”, right “Original”

m_{π}^2 vs m_0^2 for $f_2(1270)^0$



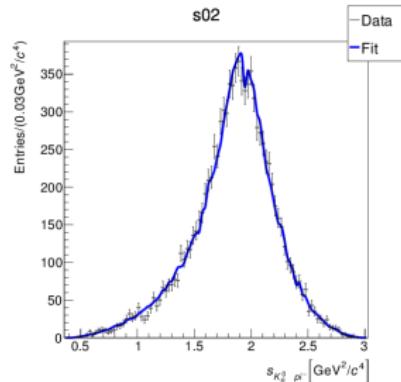
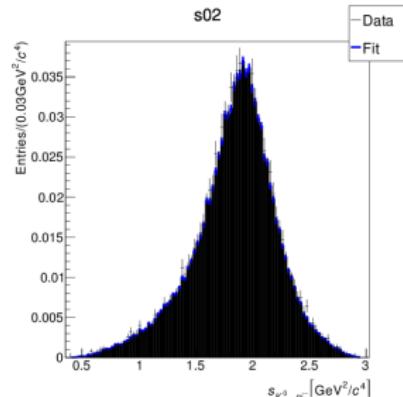
Left “Regenerated”, right “Original”

m_+^2 for $K_0^*(1410)^-$



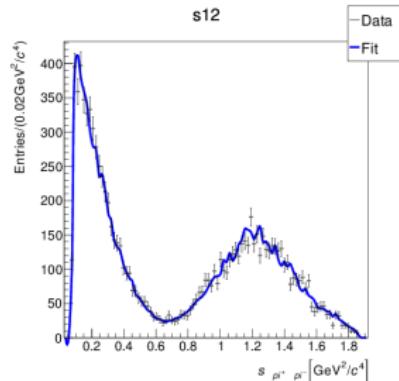
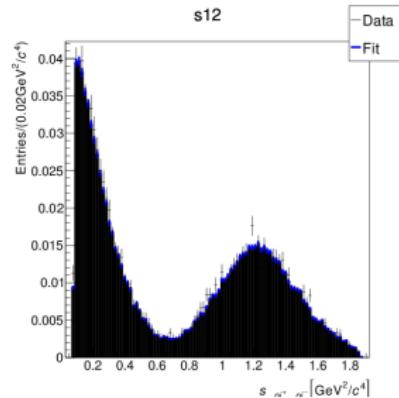
Left “Regenerated Model”, right “Original Model (with fit line)”

m^2 for $K_0^*(1410)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

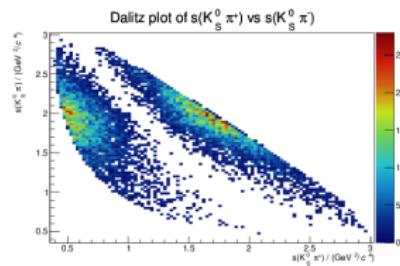
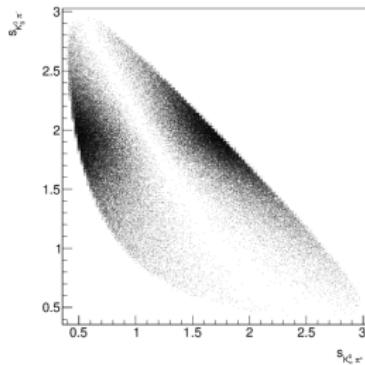
m_0^2 for $K_0^*(1410)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $K_0^*(1410)^-$

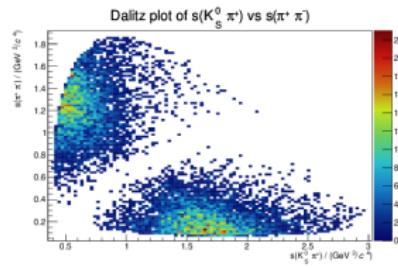
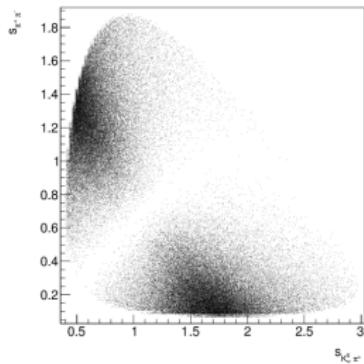
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $K_0^*(1410)^-$

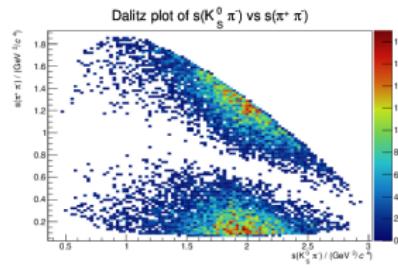
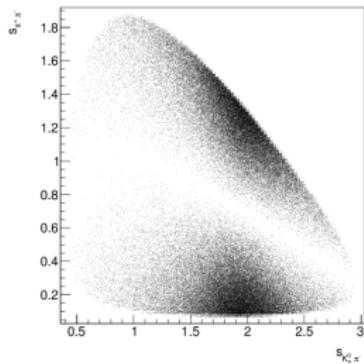
s01_vs_s12



Left “Regenerated”, right “Original”

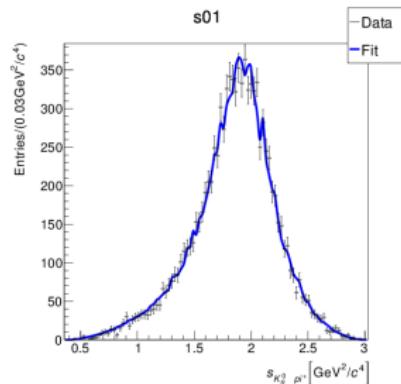
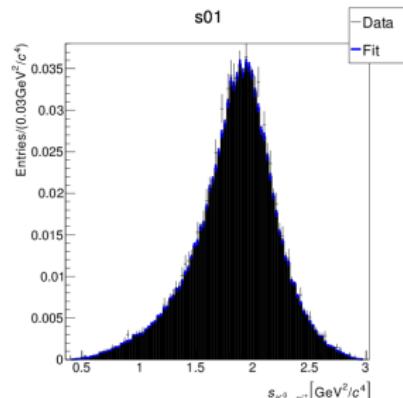
m_{π}^2 vs m_0^2 for $K_0^*(1410)^-$

s02_vs_s12



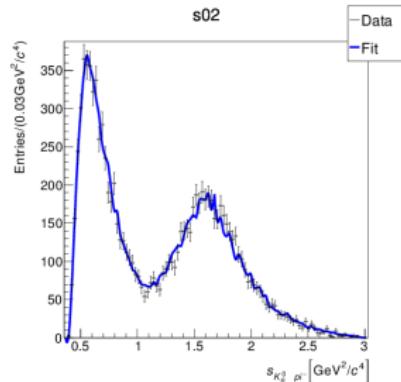
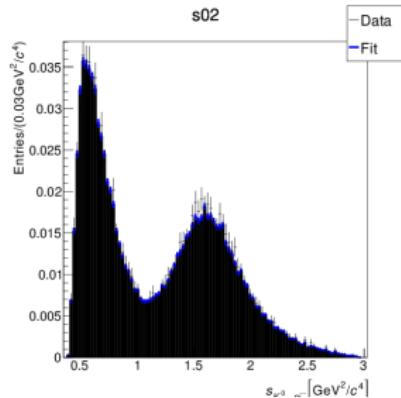
Left “Regenerated”, right “Original”

m_+^2 for $K_0^*(1410)^+$



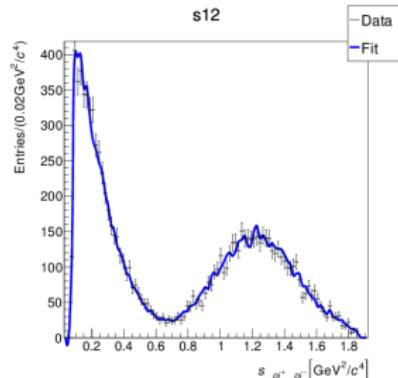
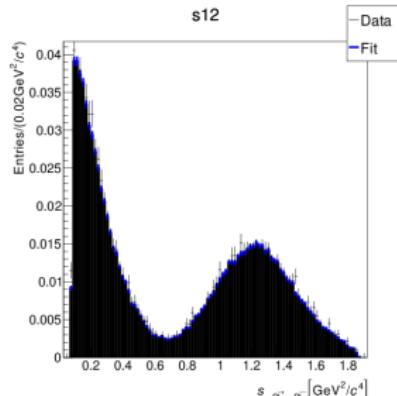
Left “Regenerated Model”, right “Original Model (with fit line)”

m_-^2 for $K_0^*(1410)^+$



Left “Regenerated Model”, right “Original Model (with fit line)”

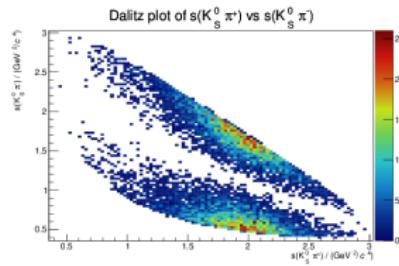
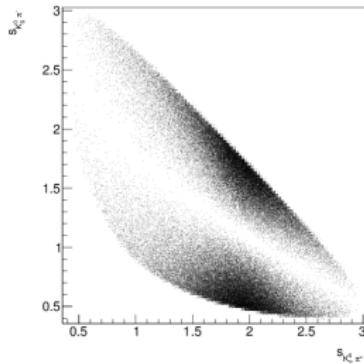
m_0^2 for $K_0^*(1410)^+$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $K_0^*(1410)^+$

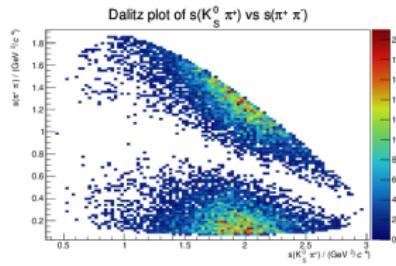
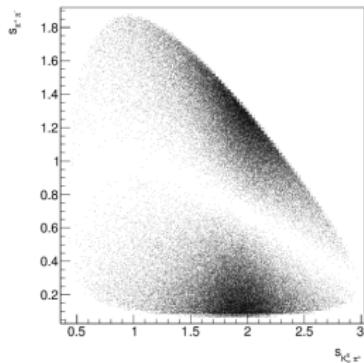
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $K_0^*(1410)^+$

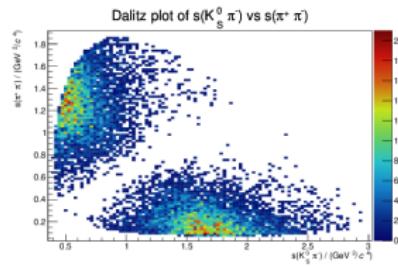
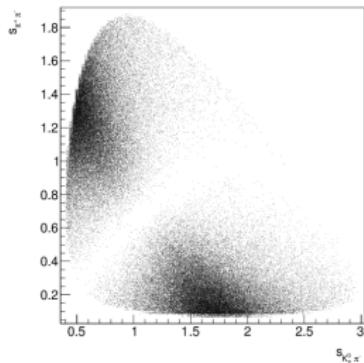
s01_vs_s12



Left “Regenerated”, right “Original”

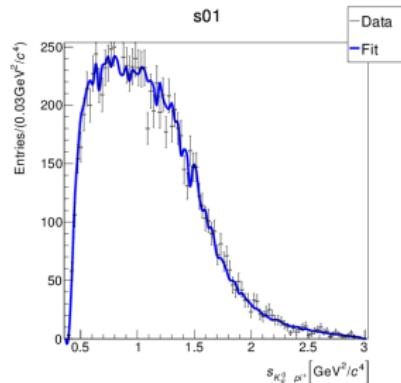
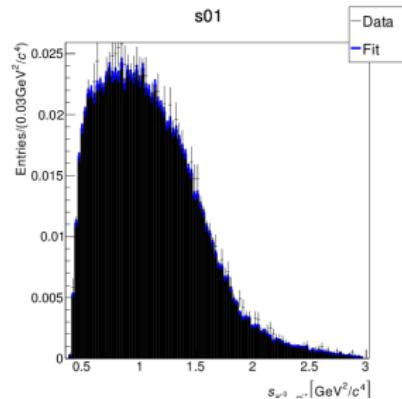
m_{π}^2 vs m_0^2 for $K_0^*(1410)^+$

s02_vs_s12



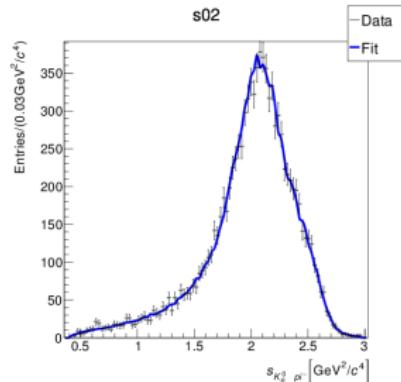
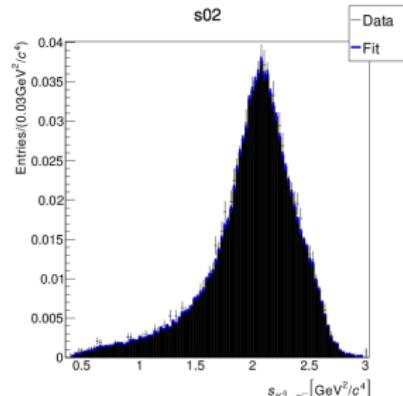
Left “Regenerated”, right “Original”

m_+^2 for $K_0^*(1430)^-$



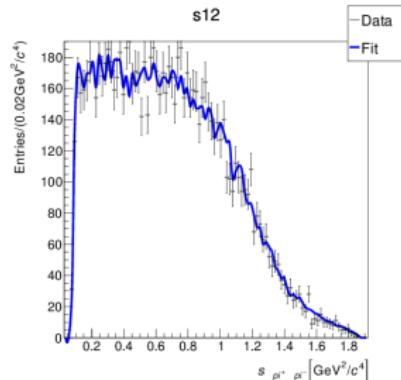
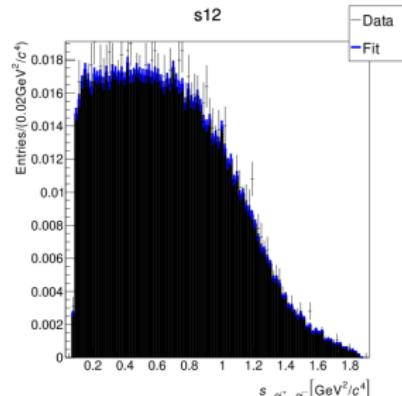
Left “Regenerated Model”, right “Original Model (with fit line)”

m^2 for $K_0^*(1430)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

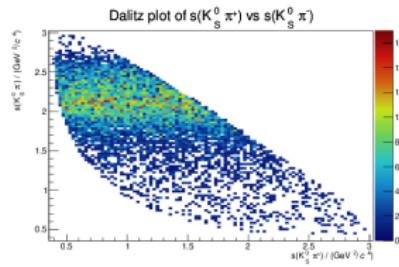
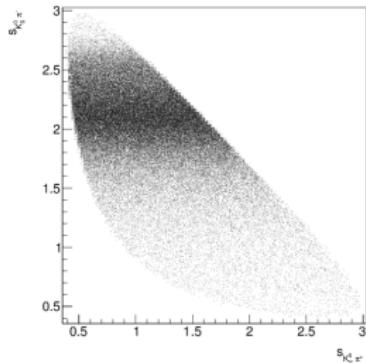
m_0^2 for $K_0^*(1430)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $K_0^*(1430)^-$

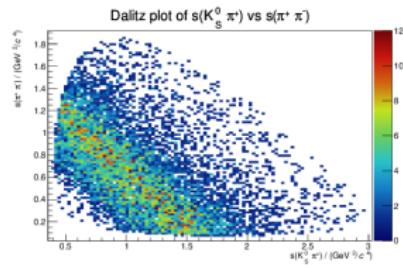
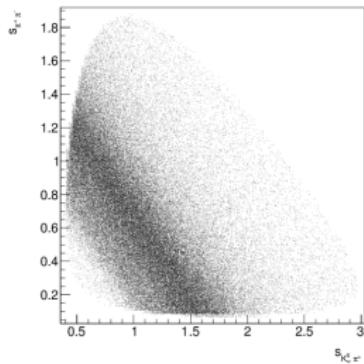
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $K_0^*(1430)^-$

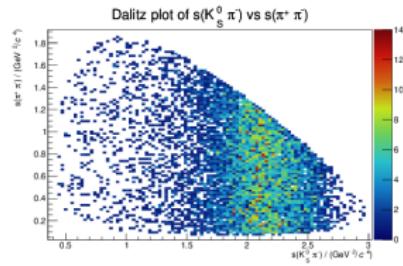
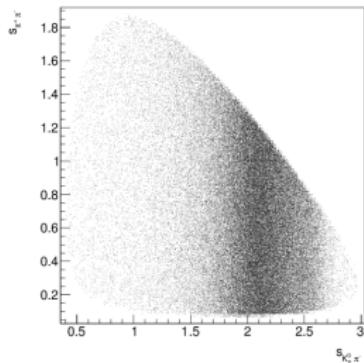
s01_vs_s12



Left “Regenerated”, right “Original”

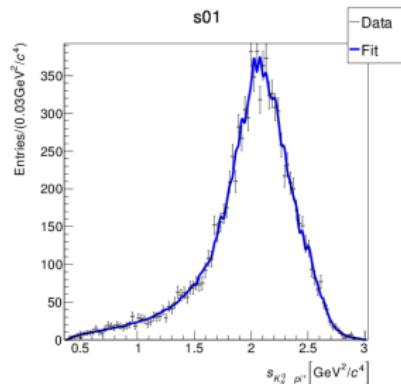
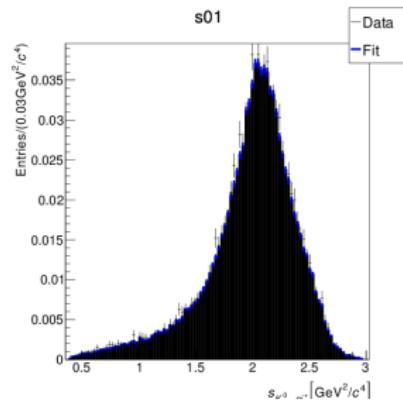
m_{π}^2 vs m_0^2 for $K_0^*(1430)^-$

s02_vs_s12



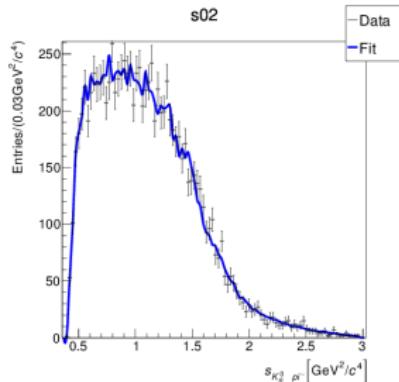
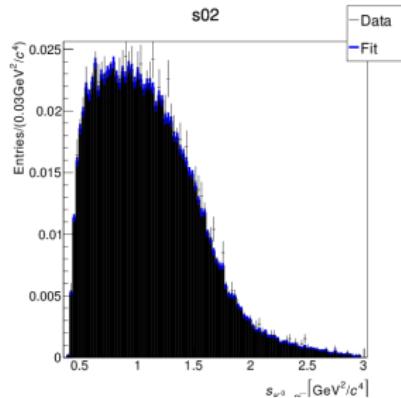
Left “Regenerated”, right “Original”

m_+^2 for $K_0^*(1430)^+$



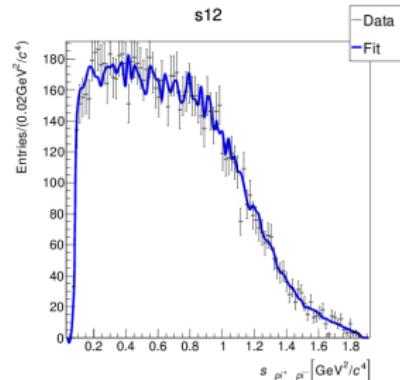
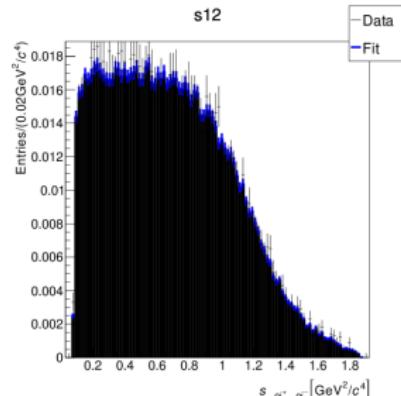
Left “Regenerated Model”, right “Original Model (with fit line)”

m_-^2 for $K_0^*(1430)^+$



Left “Regenerated Model”, right “Original Model (with fit line)”

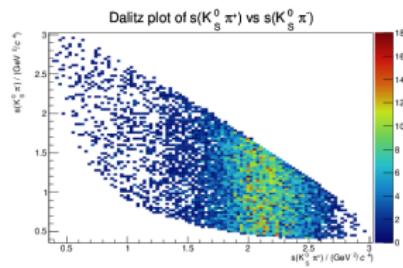
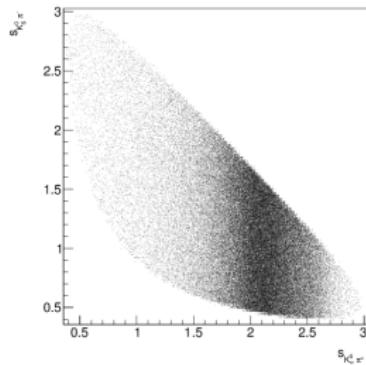
m_0^2 for $K_0^*(1430)^+$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $K_0^*(1430)^+$

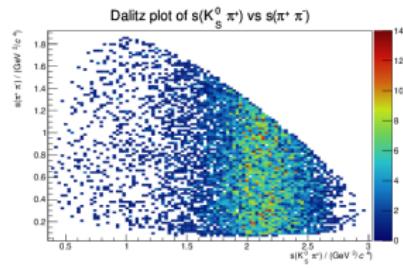
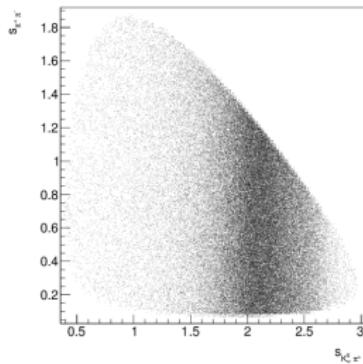
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $K_0^*(1430)^+$

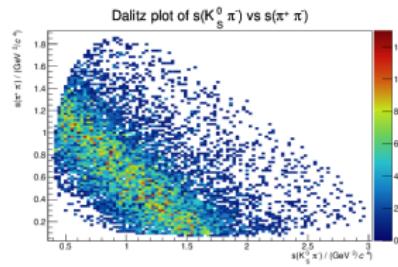
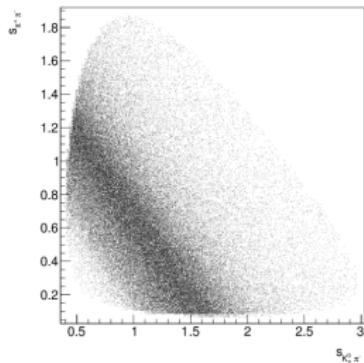
s01_vs_s12



Left “Regenerated”, right “Original”

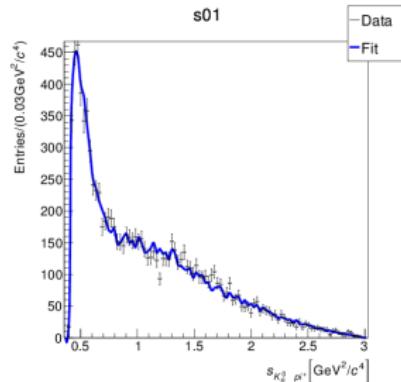
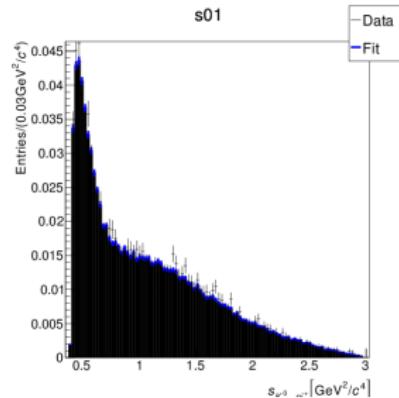
m_{π}^2 vs m_0^2 for $K_0^*(1430)^+$

s02_vs_s12



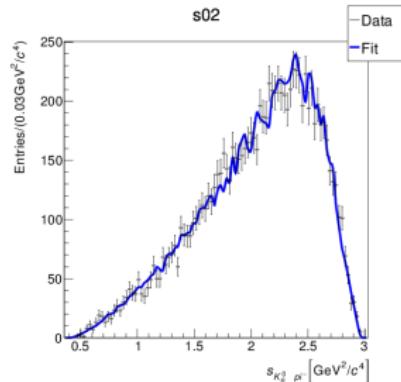
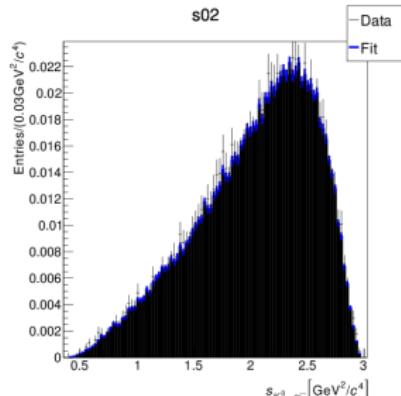
Left “Regenerated”, right “Original”

m_+^2 for $K_0^*(1680)^-$



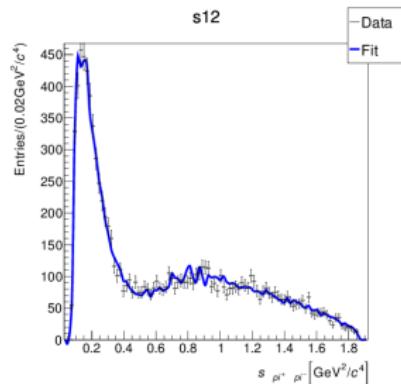
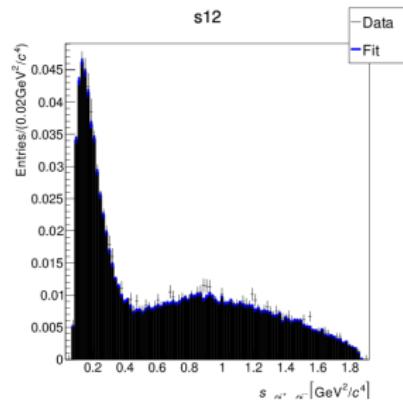
Left “Regenerated Model”, right “Original Model (with fit line)”

m^2 for $K_0^*(1680)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

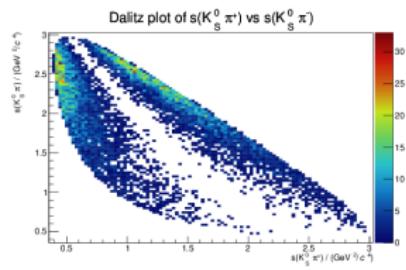
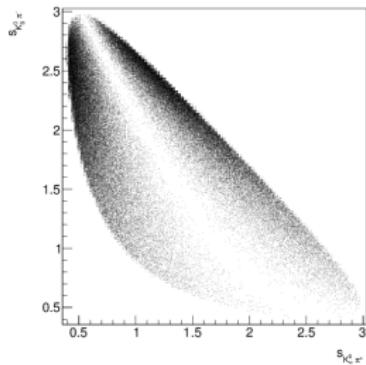
m_0^2 for $K_0^*(1680)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $K_0^*(1680)^-$

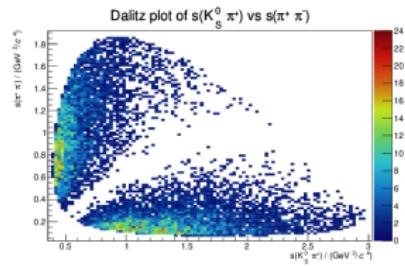
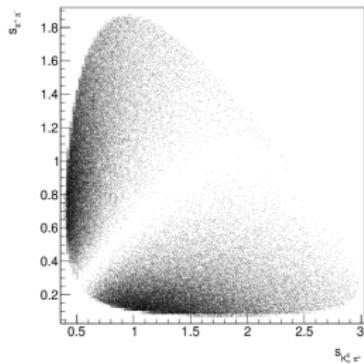
s01_vs_s02



Left “Regenerated”, right “Original”

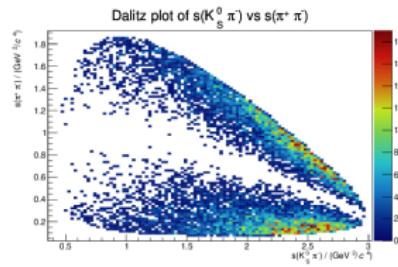
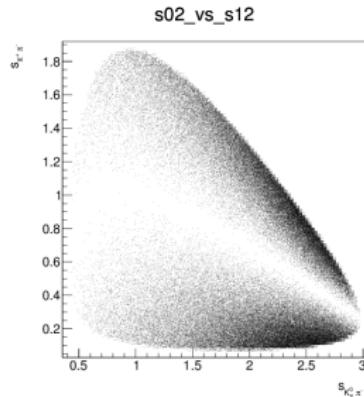
m_+^2 vs m_0^2 for $K_0^*(1680)^-$

s01_vs_s12



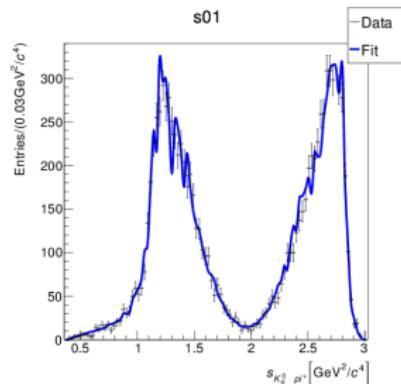
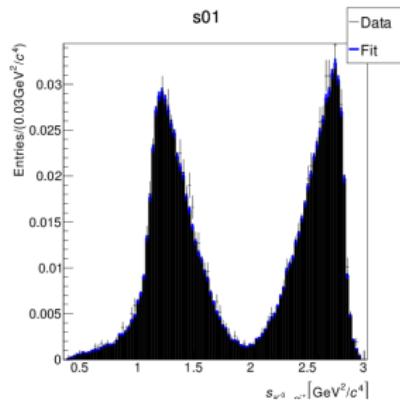
Left “Regenerated”, right “Original”

m_{π}^2 vs m_0^2 for $K_0^*(1680)^-$



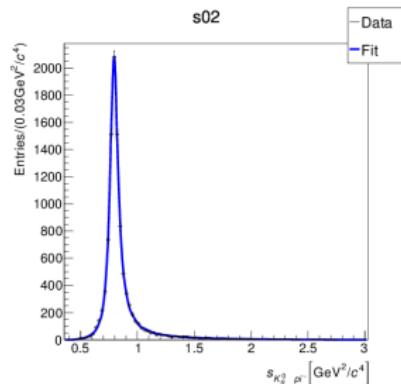
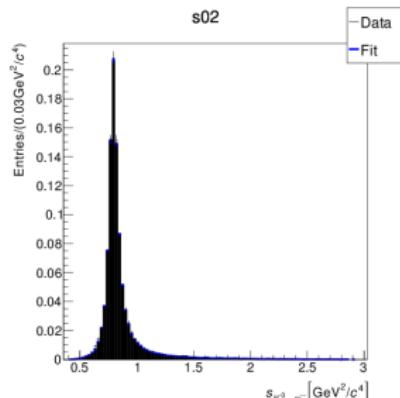
Left “Regenerated”, right “Original”

m_+^2 for $K_0^*(892)^-$



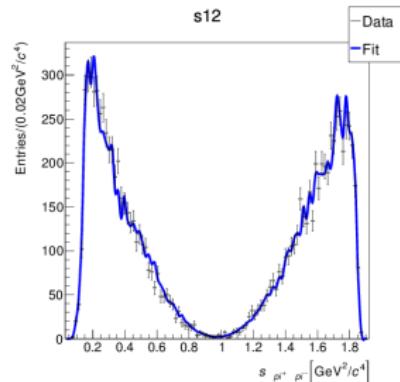
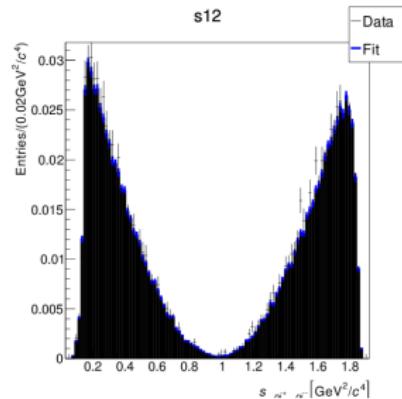
Left “Regenerated Model”, right “Original Model (with fit line)”

m^2 for $K_0^*(892)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

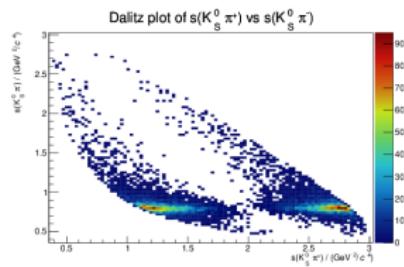
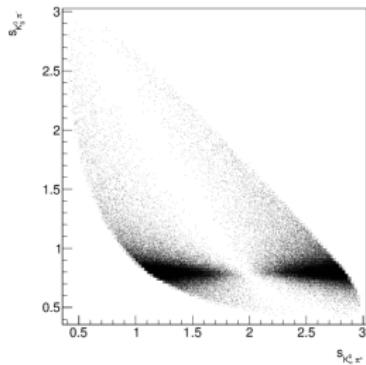
m_0^2 for $K_0^*(892)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $K_0^*(892)^-$

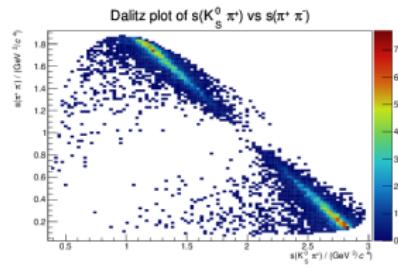
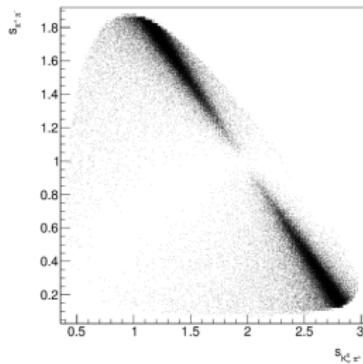
s01_vs_s02



Left “Regenerated”, right “Original”

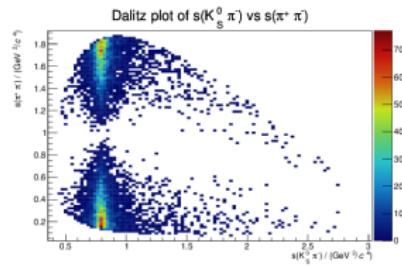
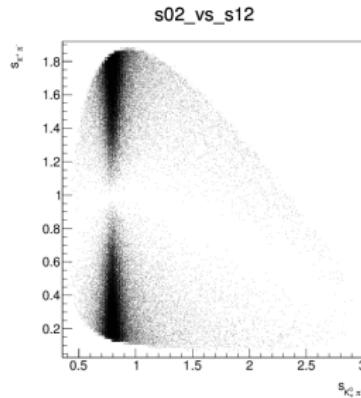
m_+^2 vs m_0^2 for $K_0^*(892)^-$

s01_vs_s12



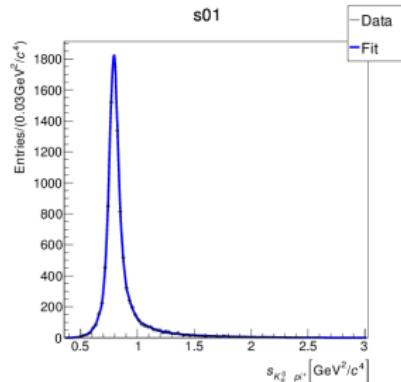
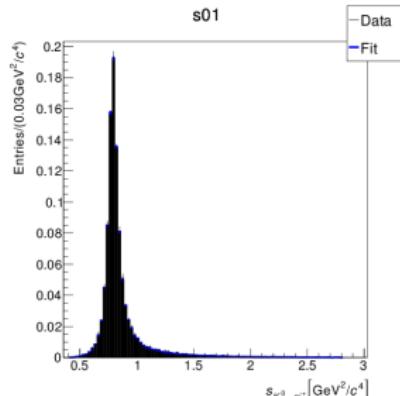
Left “Regenerated”, right “Original”

m_{π}^2 vs m_0^2 for $K_0^*(892)^-$



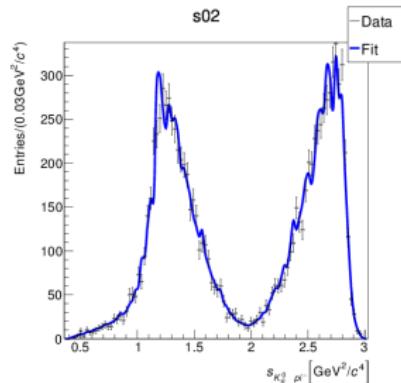
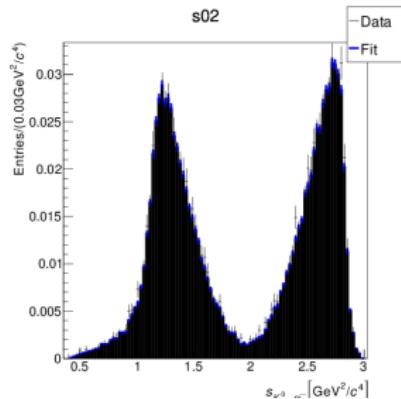
Left “Regenerated”, right “Original”

m_+^2 for $K_0^*(892)^+$



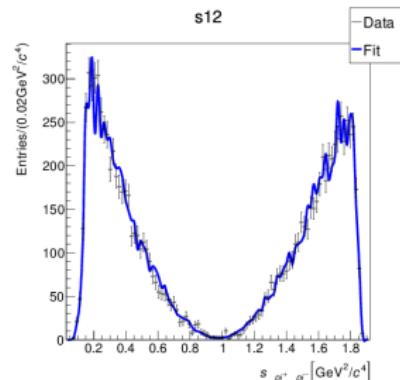
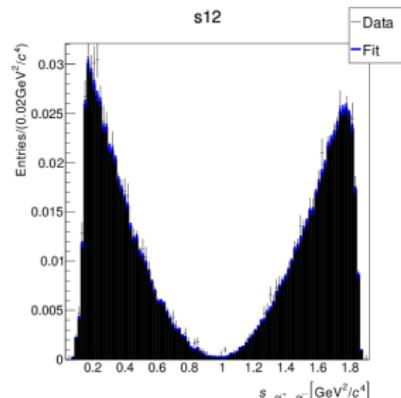
Left “Regenerated Model”, right “Original Model (with fit line)”

m_-^2 for $K_0^*(892)^+$



Left “Regenerated Model”, right “Original Model (with fit line)”

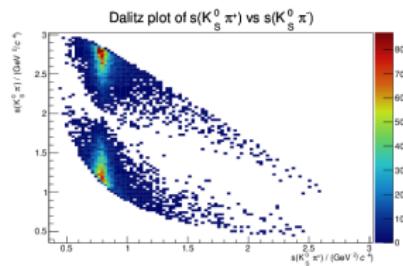
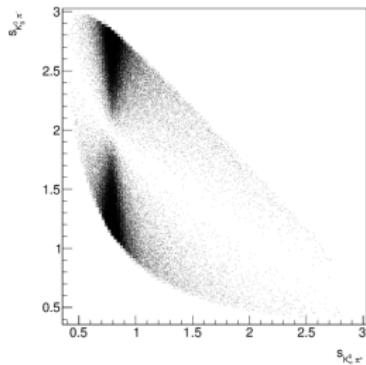
m_0^2 for $K_0^*(892)^+$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $K_0^*(892)^+$

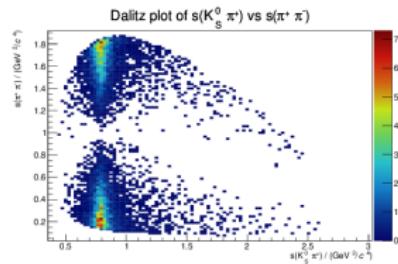
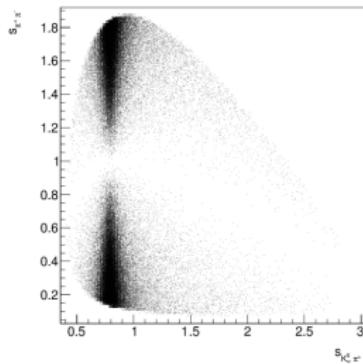
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $K_0^*(892)^+$

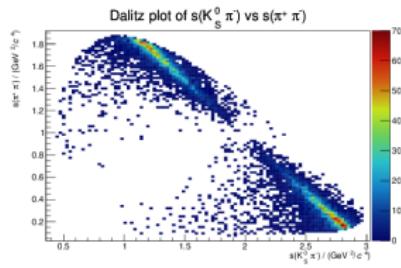
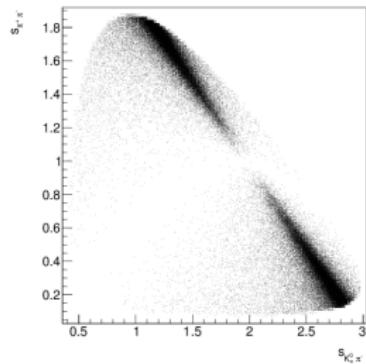
s01_vs_s12



Left “Regenerated”, right “Original”

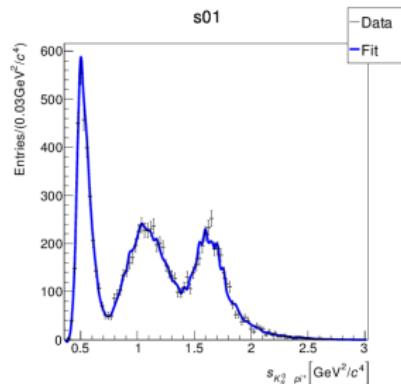
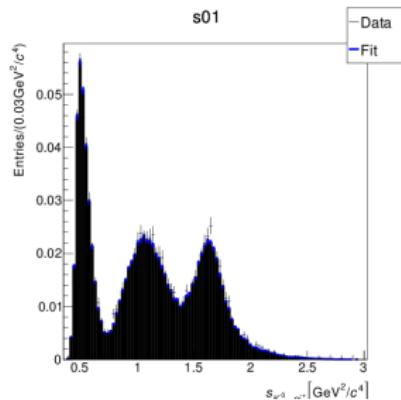
m_-^2 vs m_0^2 for $K_0^*(892)^+$

s02_vs_s12



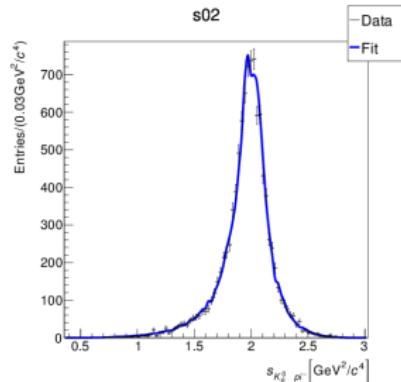
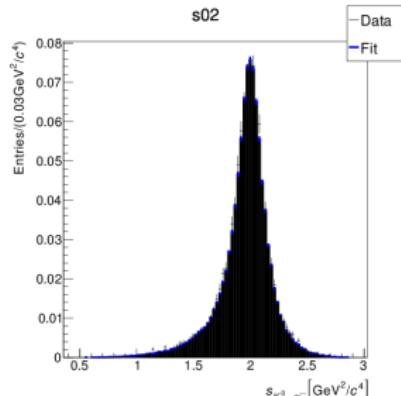
Left “Regenerated”, right “Original”

m_+^2 for $K_2^*(1430)^-$



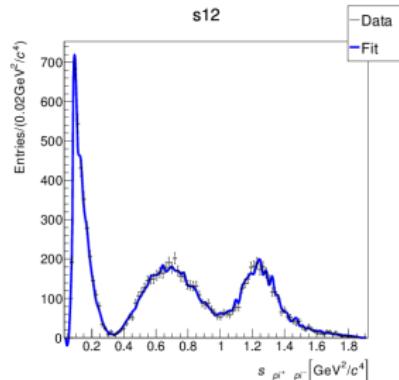
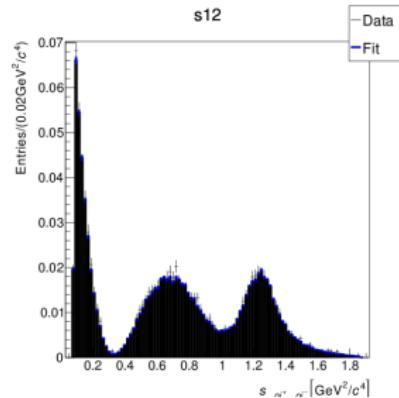
Left “Regenerated Model”, right “Original Model (with fit line)”

m^2 for $K_2^*(1430)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

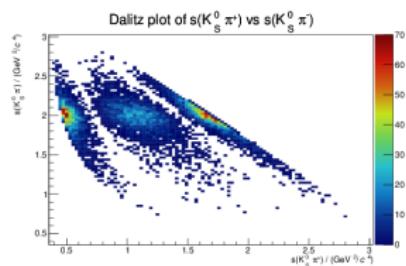
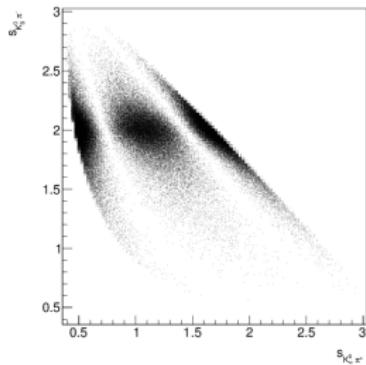
m_0^2 for $K_2^*(1430)^-$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $K_2^*(1430)^-$

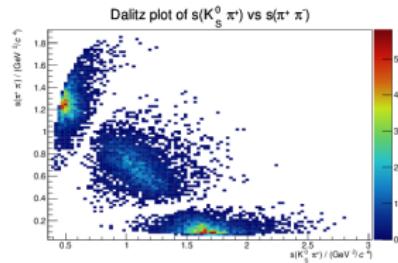
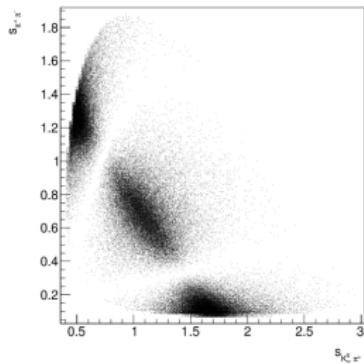
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $K_2^*(1430)^-$

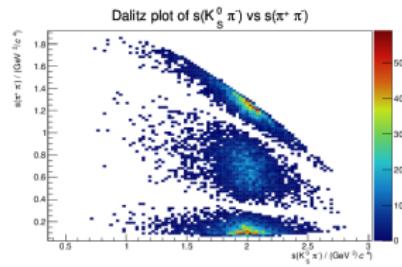
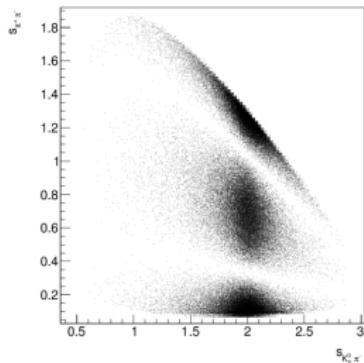
s01_vs_s12



Left “Regenerated”, right “Original”

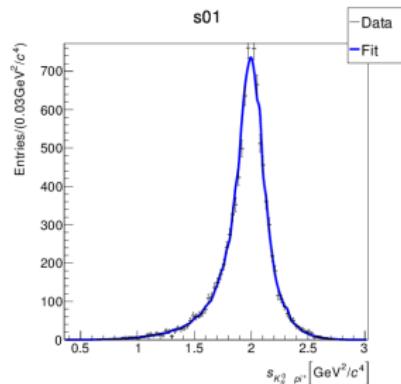
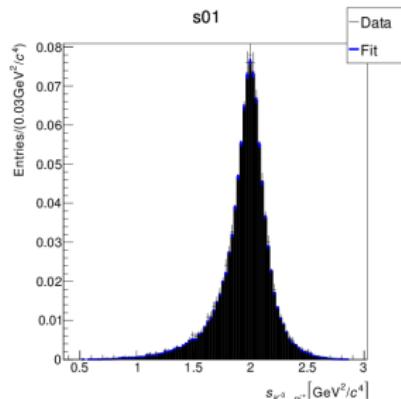
m_{π}^2 vs m_0^2 for $K_2^*(1430)^-$

s02_vs_s12



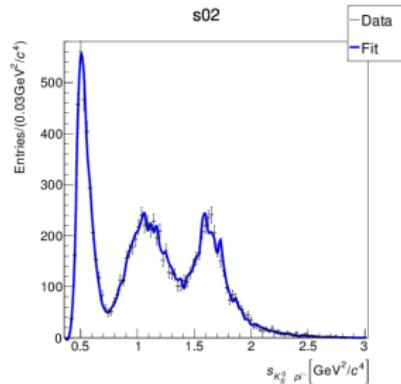
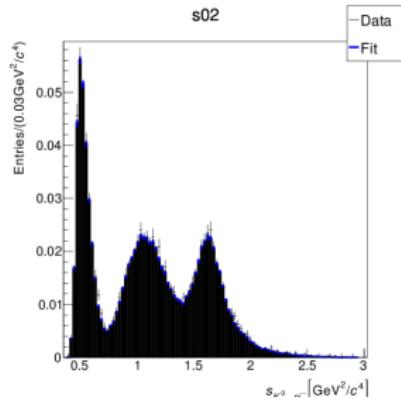
Left “Regenerated”, right “Original”

m_+^2 for $K_2^*(1430)^+$



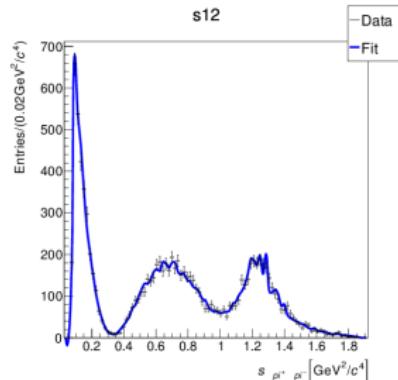
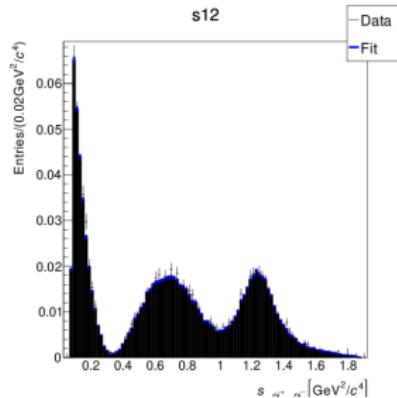
Left “Regenerated Model”, right “Original Model (with fit line)”

m_-^2 for $K_2^*(1430)^+$



Left “Regenerated Model”, right “Original Model (with fit line)”

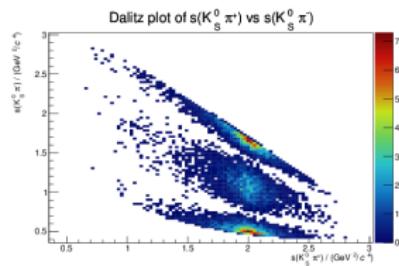
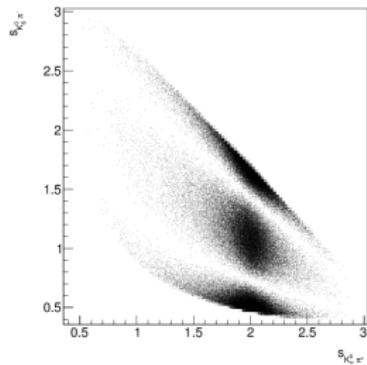
m_0^2 for $K_2^*(1430)^+$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $K_2^*(1430)^+$

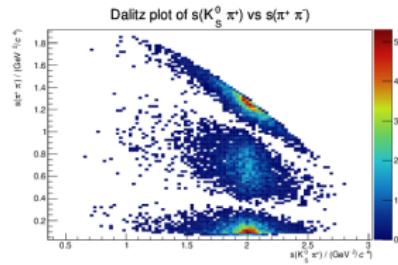
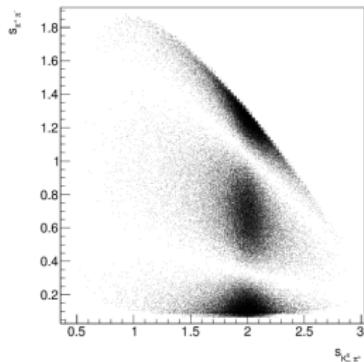
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $K_2^*(1430)^+$

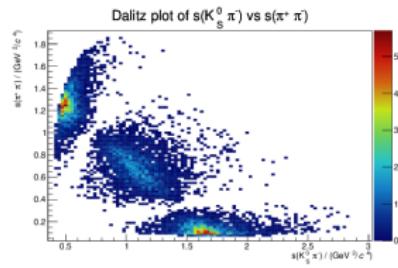
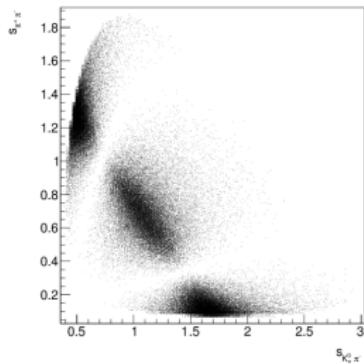
s01_vs_s12



Left “Regenerated”, right “Original”

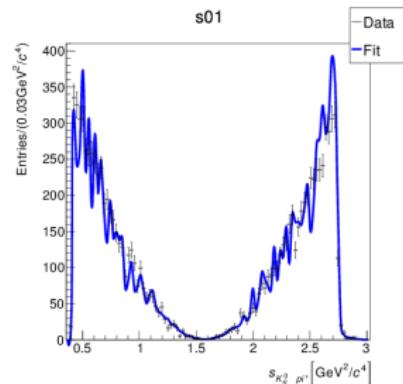
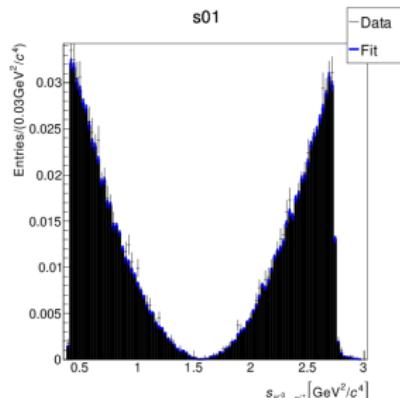
m_{π}^2 vs m_0^2 for $K_2^*(1430)^+$

s02_vs_s12



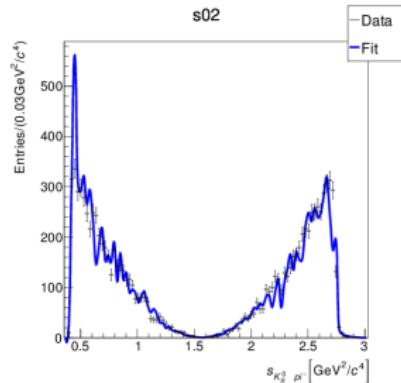
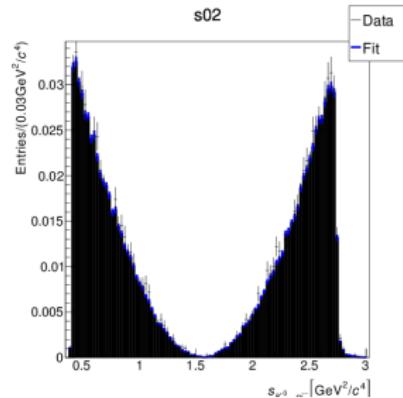
Left “Regenerated”, right “Original”

m_+^2 for $\omega(782)^0$



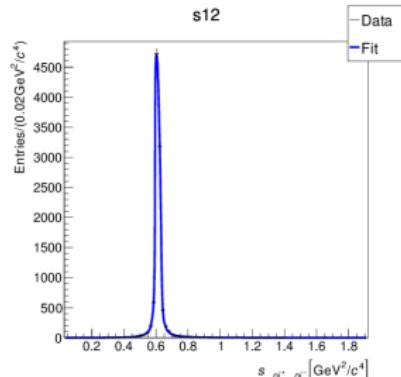
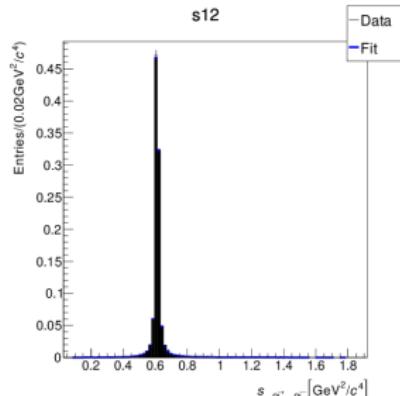
Left “Regenerated Model”, right “Original Model (with fit line)”

m^2 for $\omega(782)^0$



Left “Regenerated Model”, right “Original Model (with fit line)”

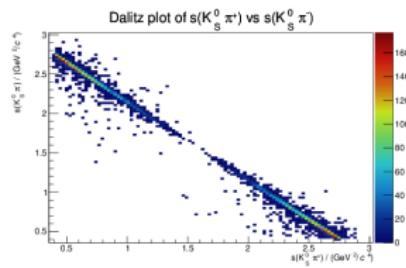
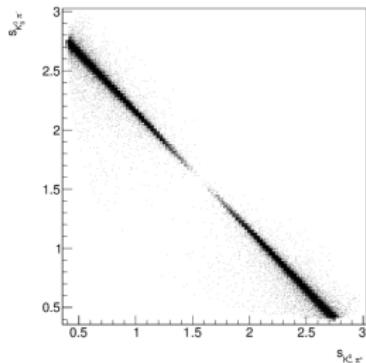
m_0^2 for $\omega(782)^0$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $\omega(782)^0$

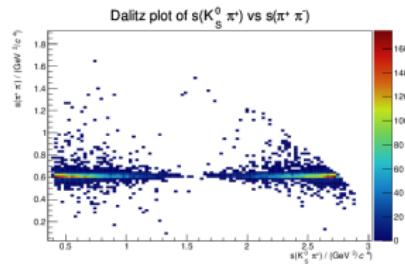
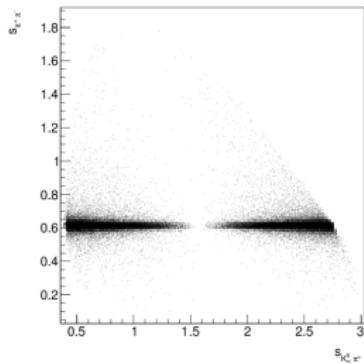
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $\omega(782)^0$

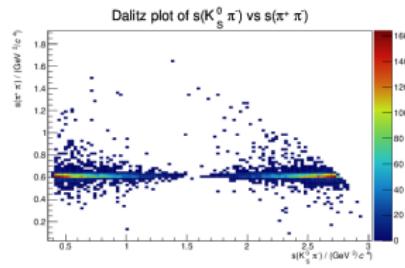
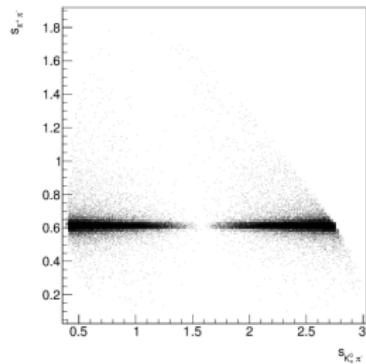
s01_vs_s12



Left “Regenerated”, right “Original”

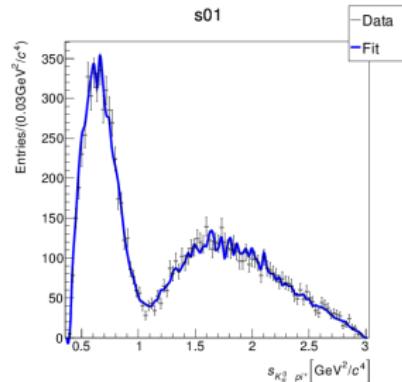
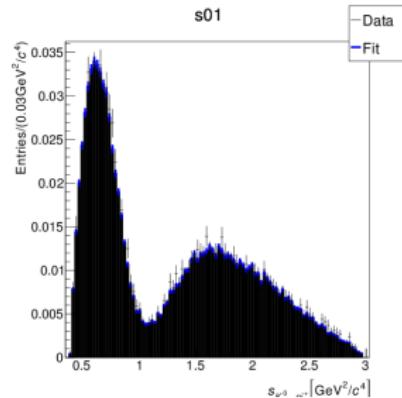
m_{π}^2 vs m_0^2 for $\omega(782)^0$

s02_vs_s12



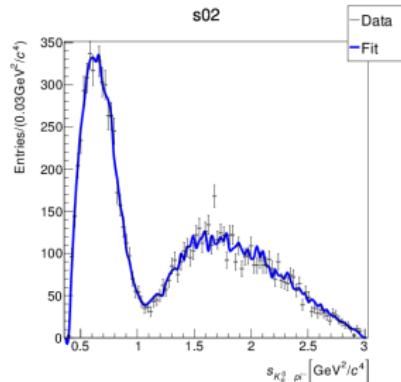
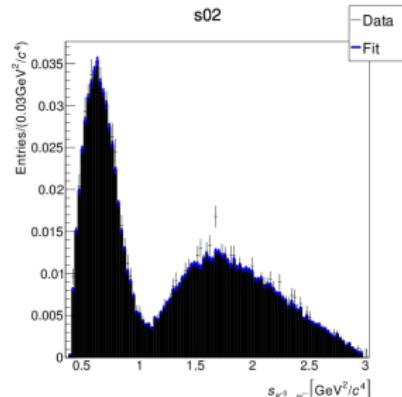
Left “Regenerated”, right “Original”

m_+^2 for $\rho(1450)^0$



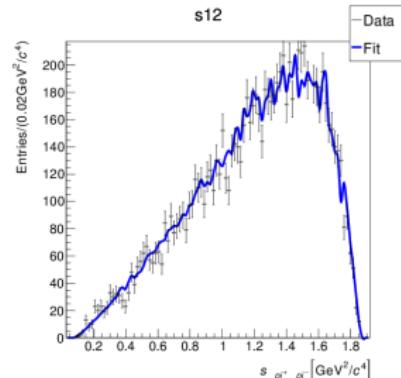
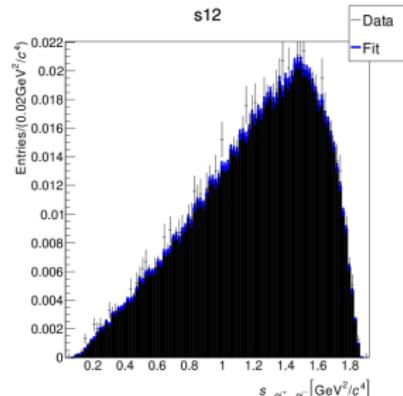
Left “Regenerated Model”, right “Original Model (with fit line)”

m^2 for $\rho(1450)^0$



Left “Regenerated Model”, right “Original Model (with fit line)”

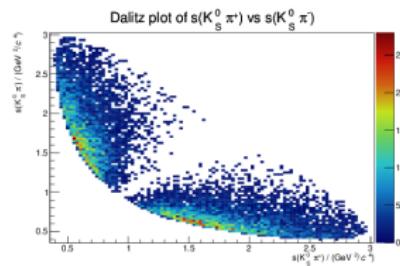
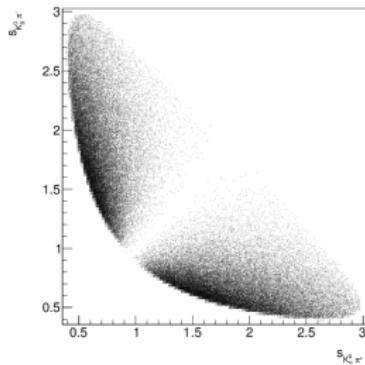
m_0^2 for $\rho(1450)^0$



Left “Regenerated Model”, right “Original Model (with fit line)”

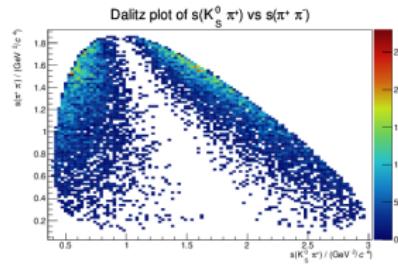
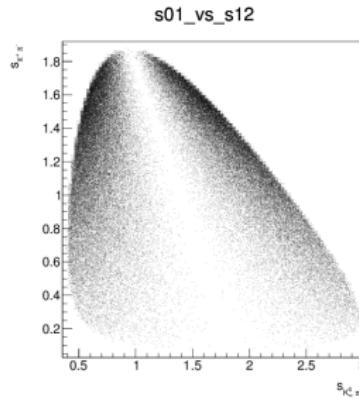
m_+^2 vs m_-^2 for $\rho(1450)^0$

s01_vs_s02



Left “Regenerated”, right “Original”

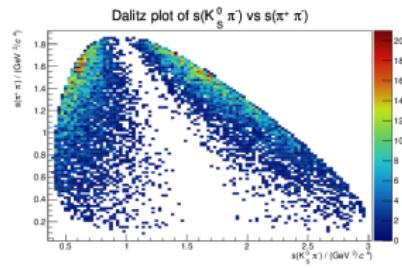
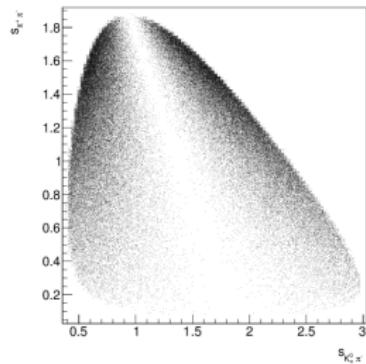
m_+^2 vs m_0^2 for $\rho(1450)^0$



Left “Regenerated”, right “Original”

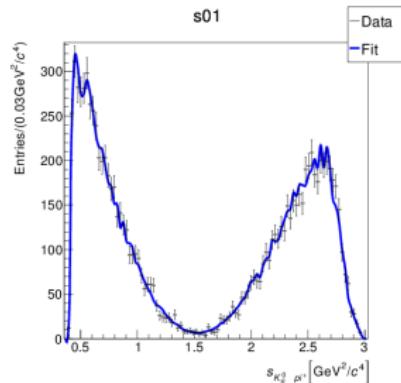
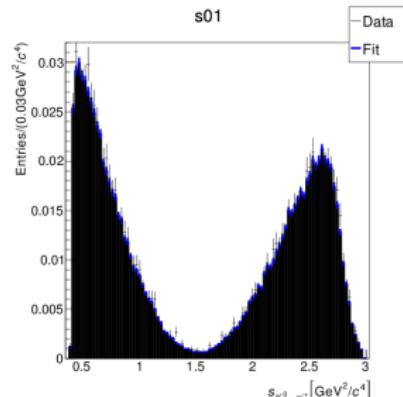
m_{π}^2 vs m_0^2 for $\rho(1450)^0$

s02_vs_s12



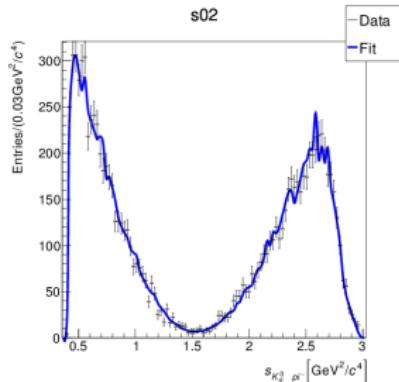
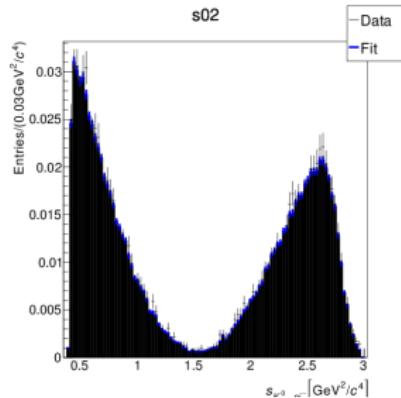
Left “Regenerated”, right “Original”

m_+^2 for $\rho(770)^0$



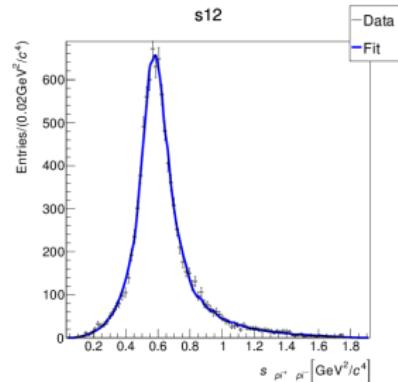
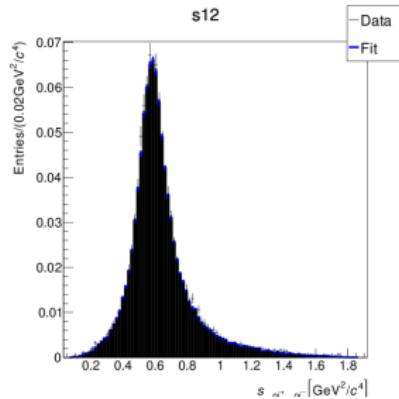
Left “Regenerated Model”, right “Original Model (with fit line)”

m^2 for $\rho(770)^0$



Left “Regenerated Model”, right “Original Model (with fit line)”

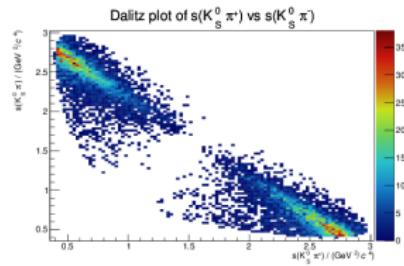
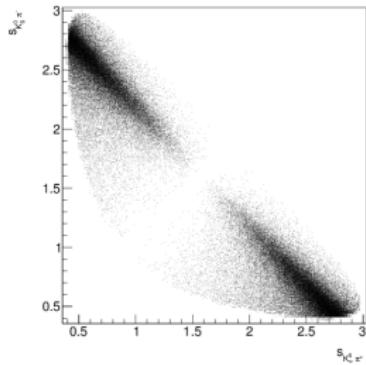
m_0^2 for $\rho(770)^0$



Left “Regenerated Model”, right “Original Model (with fit line)”

m_+^2 vs m_-^2 for $\rho(770)^0$

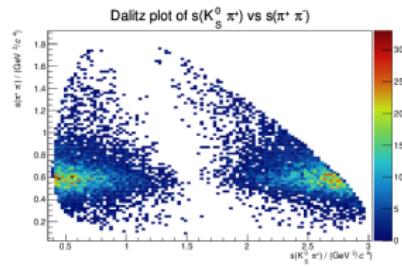
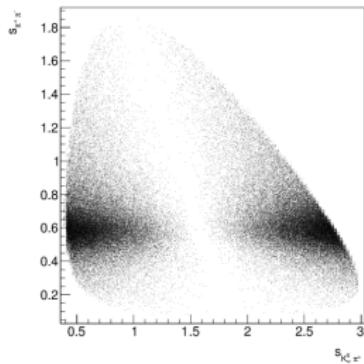
s01_vs_s02



Left “Regenerated”, right “Original”

m_+^2 vs m_0^2 for $\rho(770)^0$

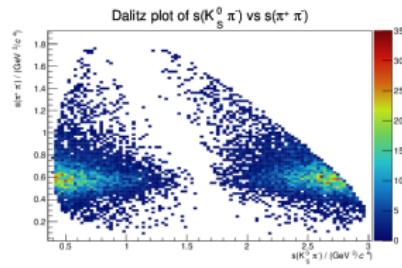
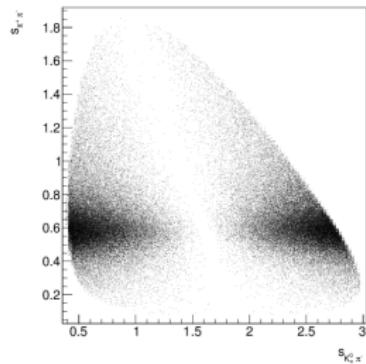
s01_vs_s12



Left “Regenerated”, right “Original”

m_{π}^2 vs m_0^2 for $\rho(770)^0$

s02_vs_s12



Left “Regenerated”, right “Original”