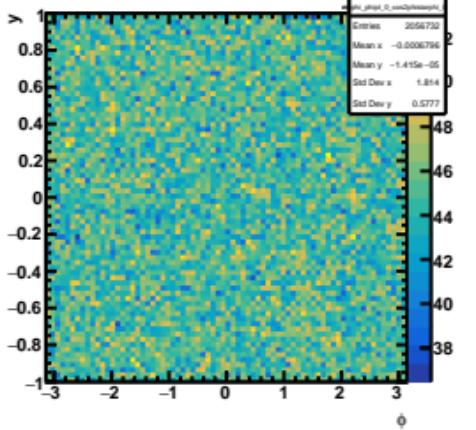
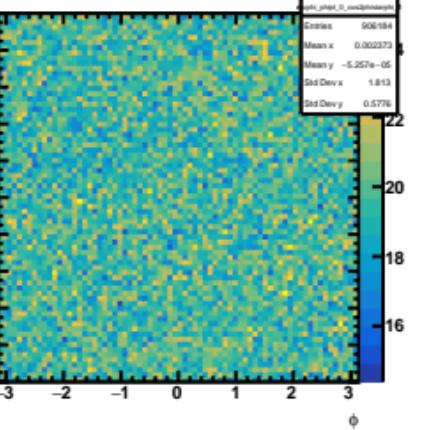
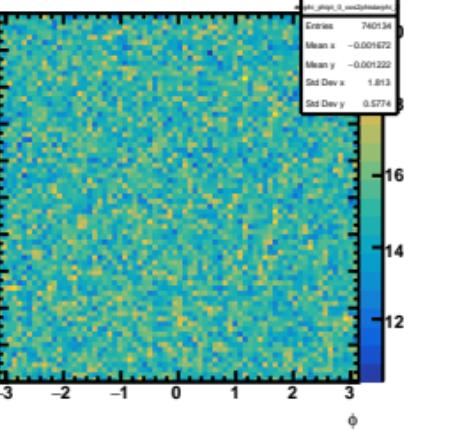
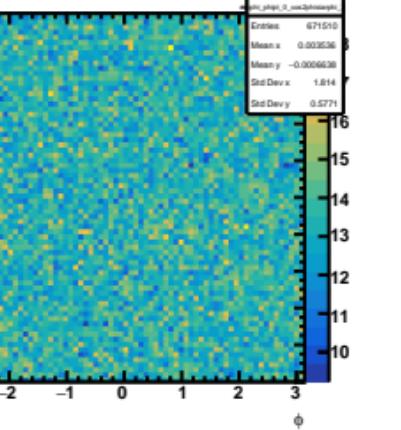
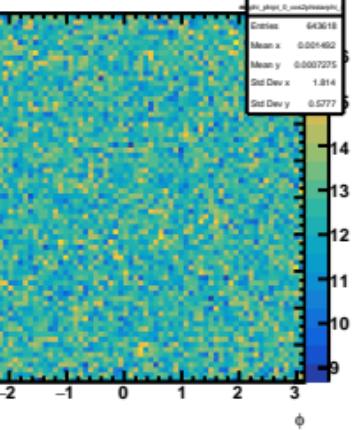
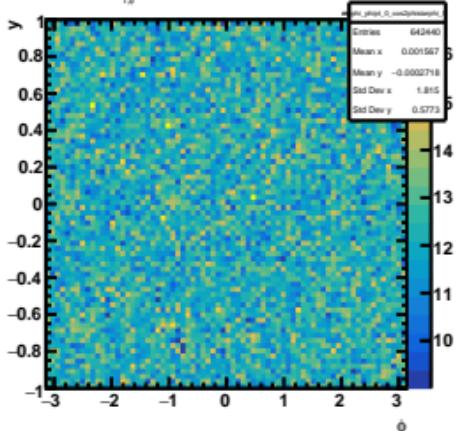
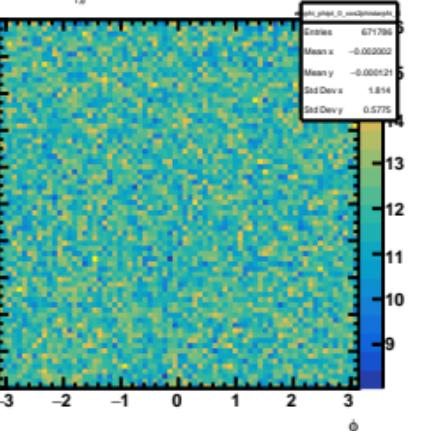
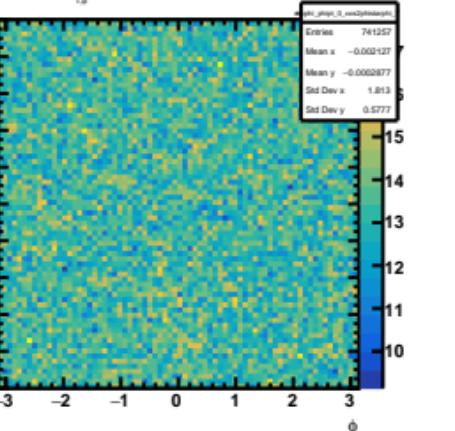
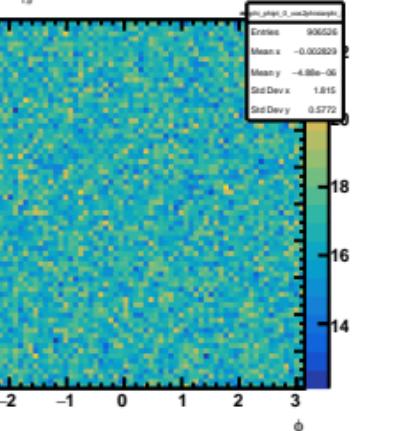
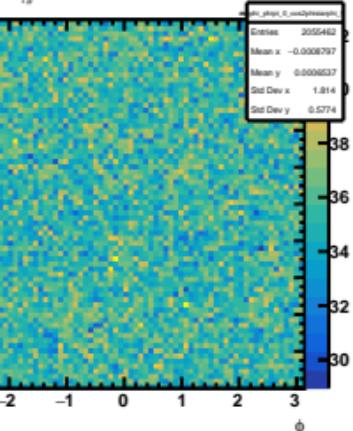
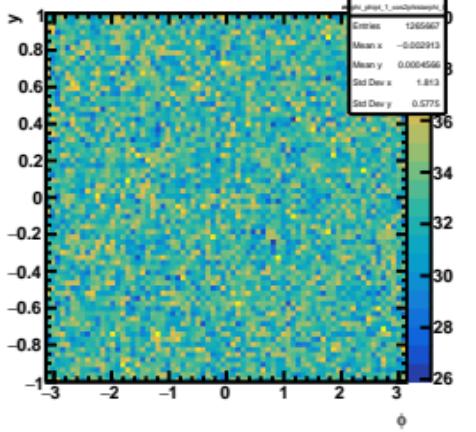
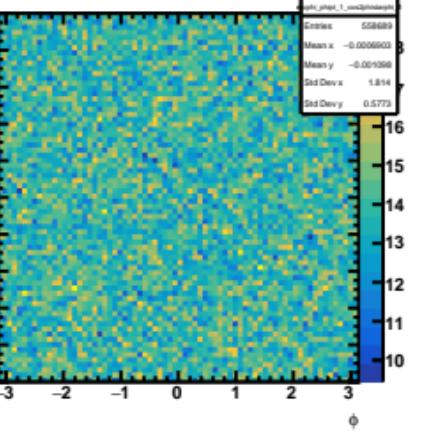
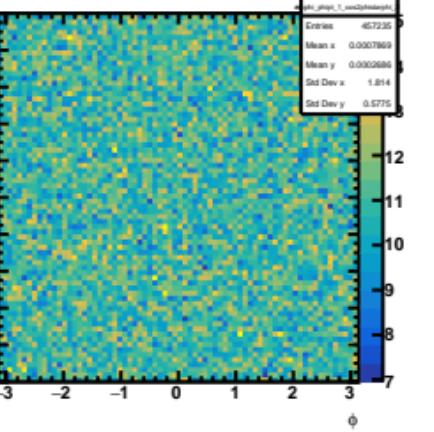
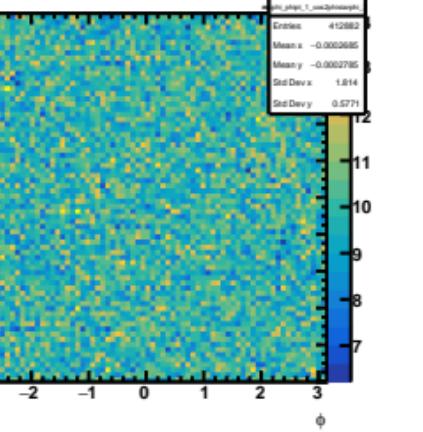
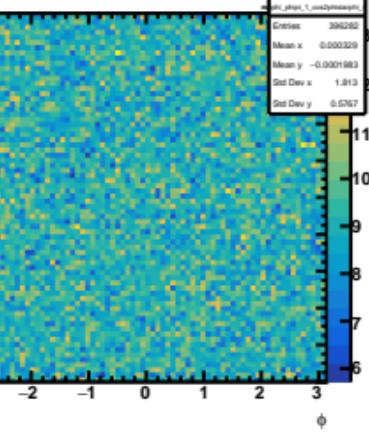
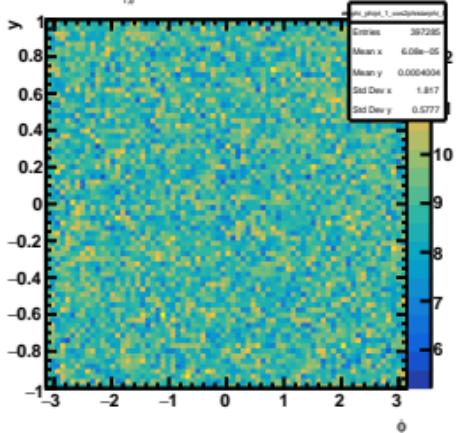
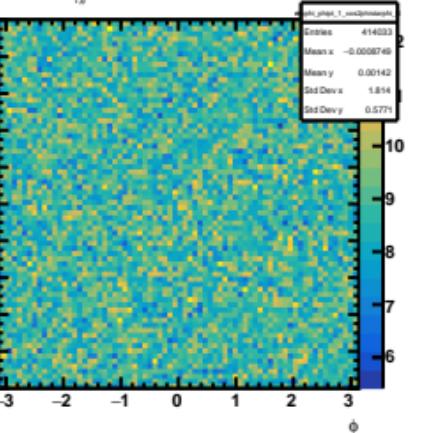
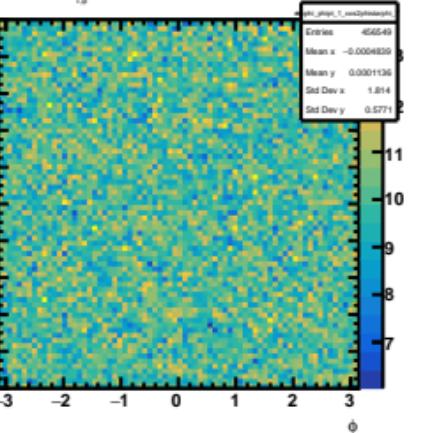
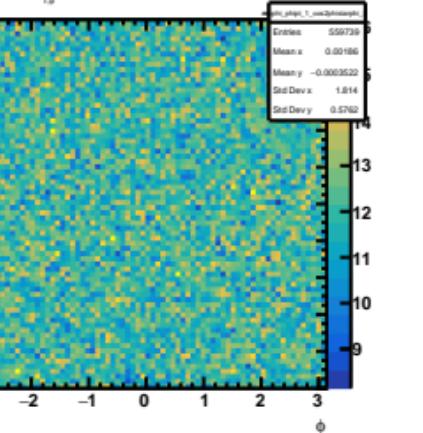
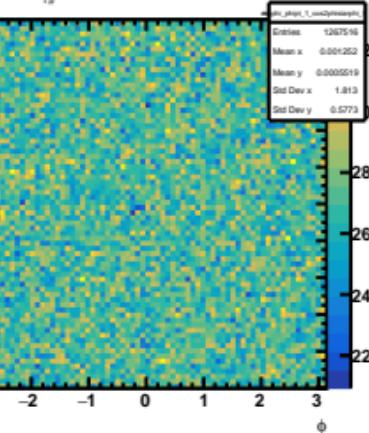
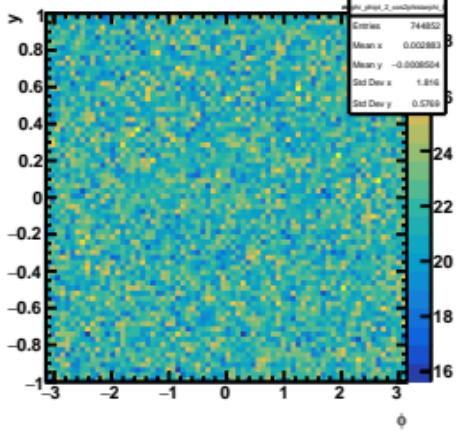
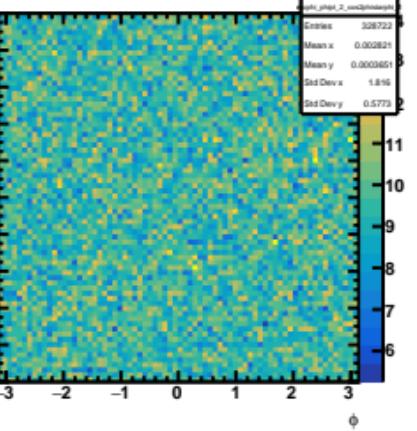
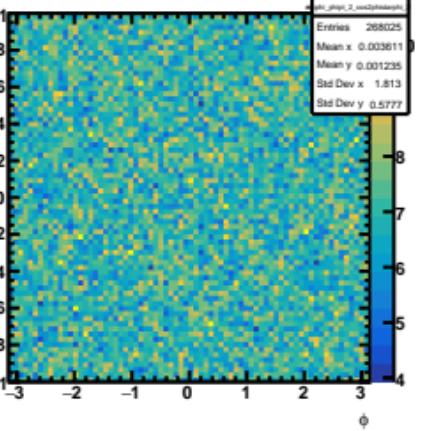
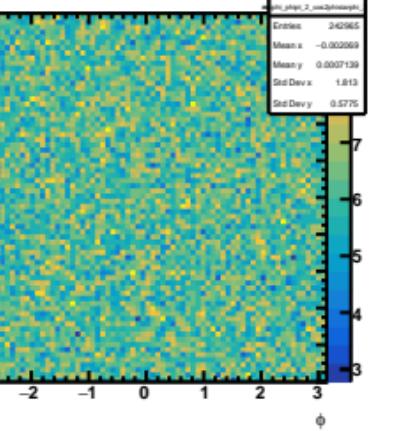
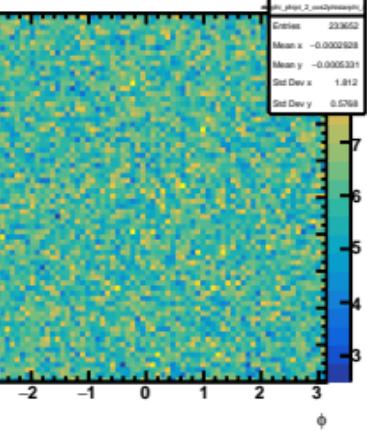
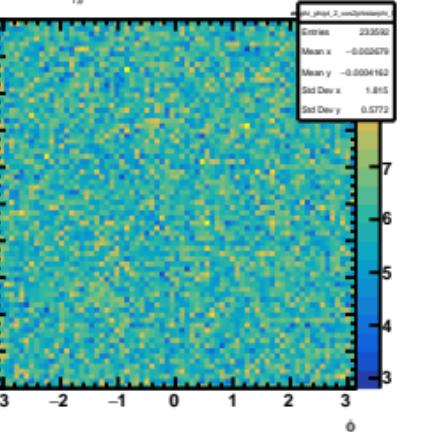
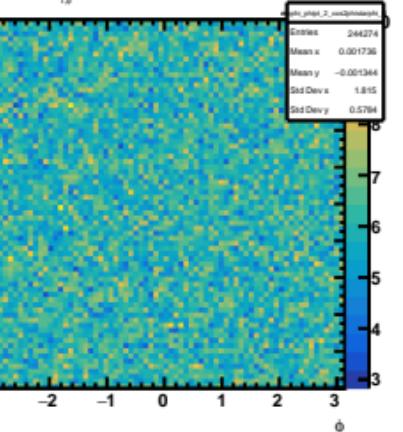
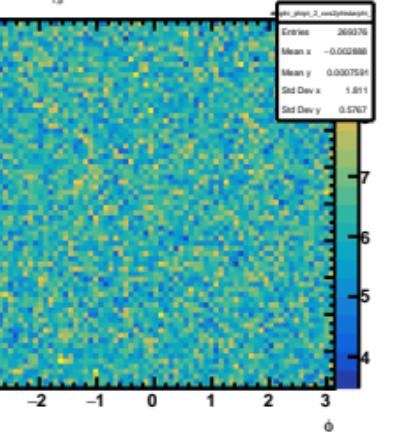
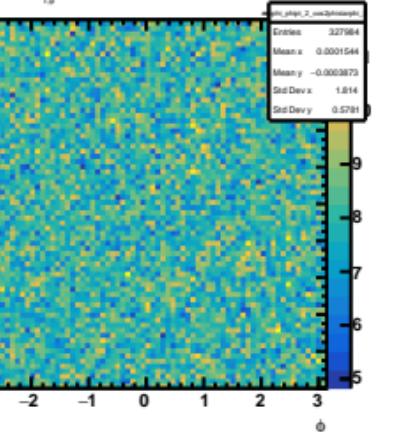
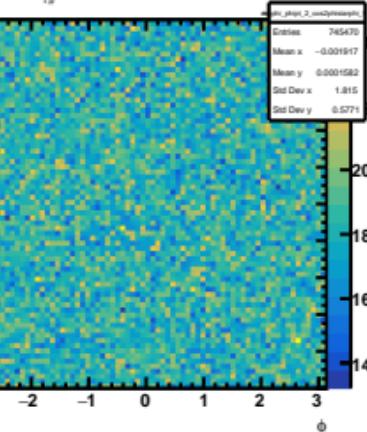
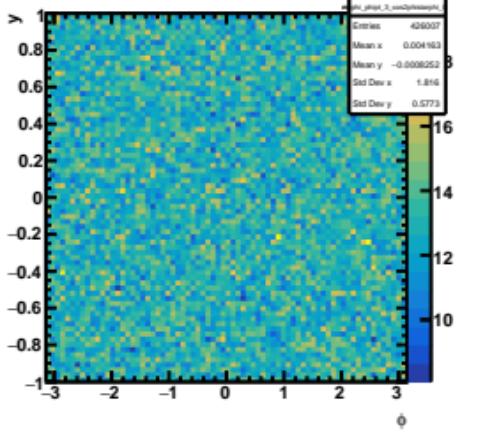
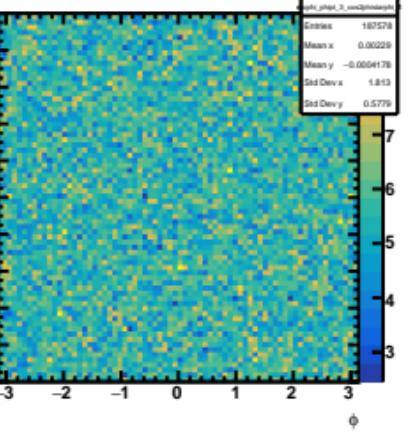
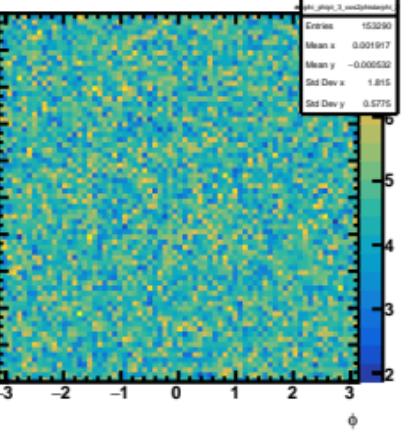
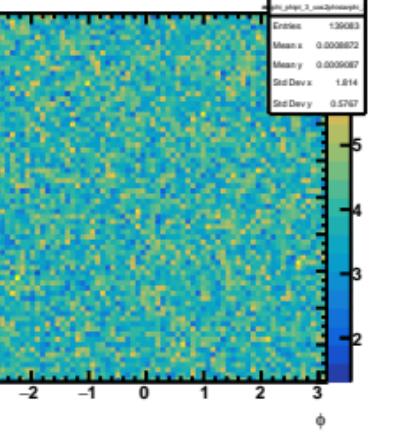
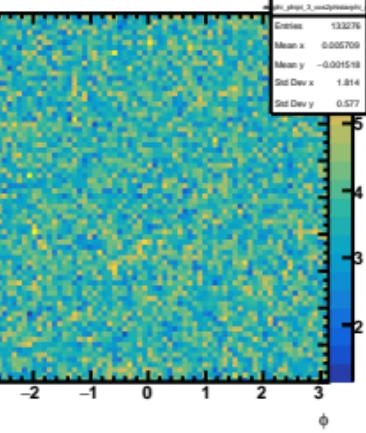
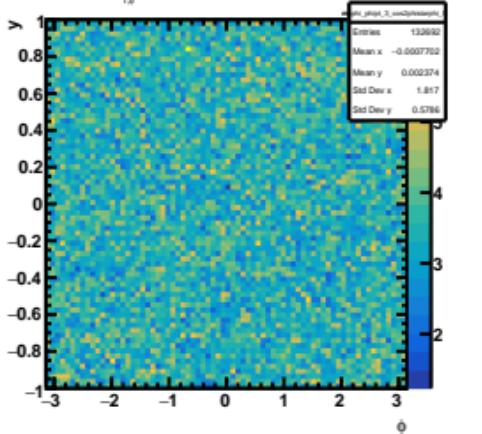
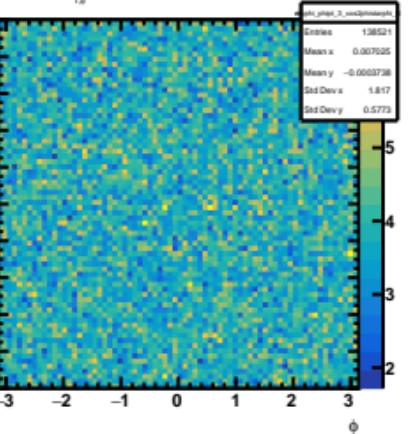
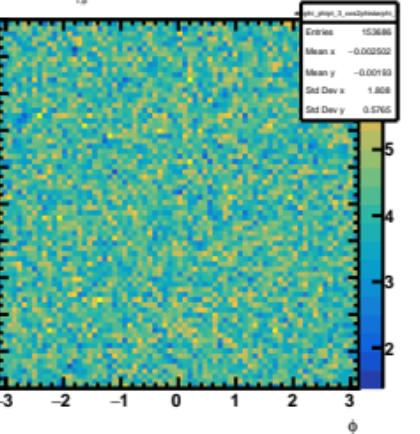
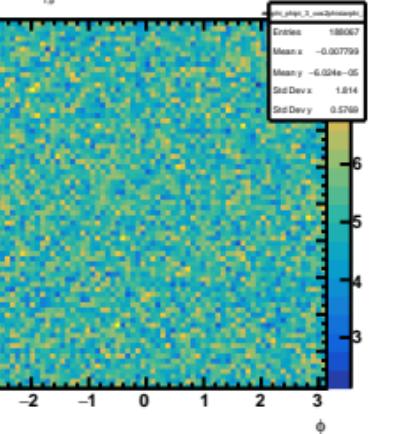
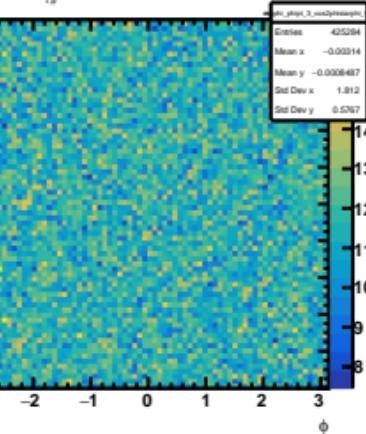
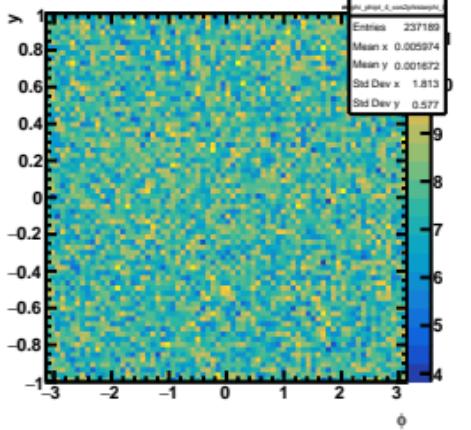
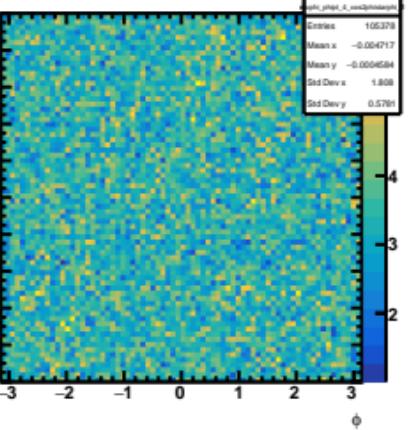
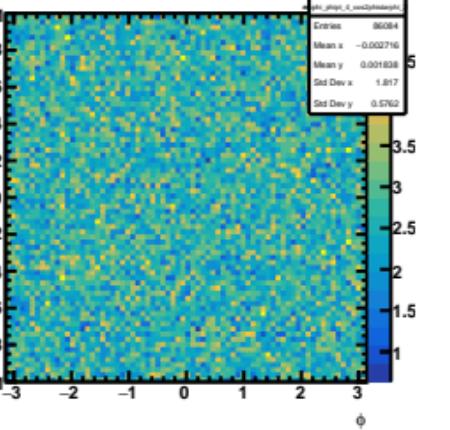
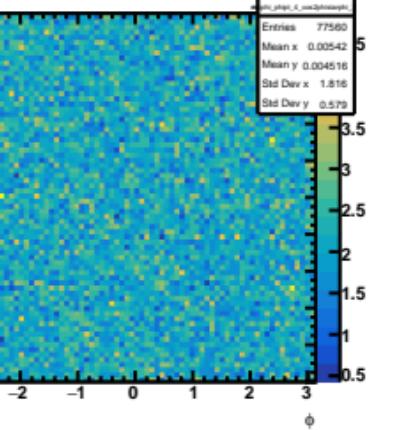
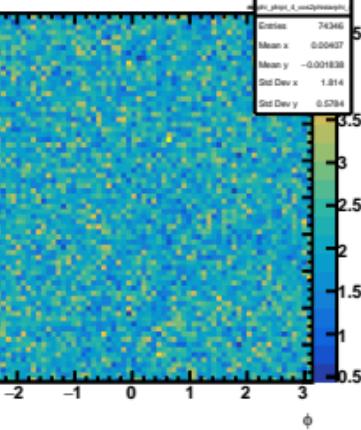
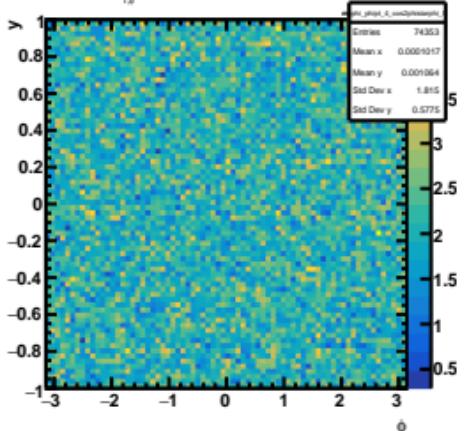
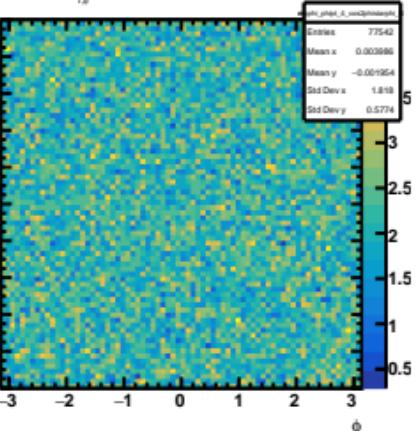
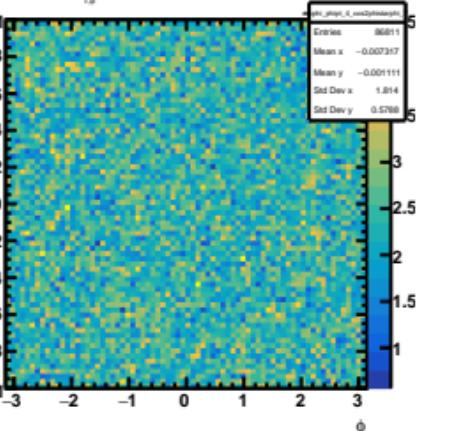
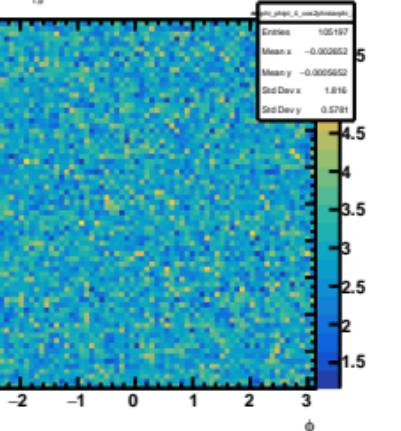
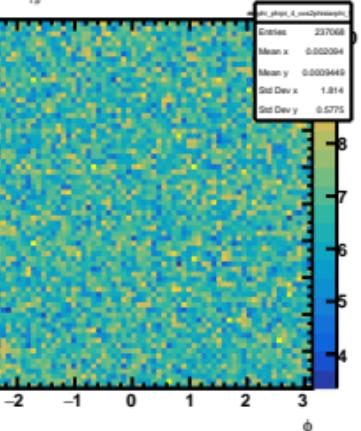


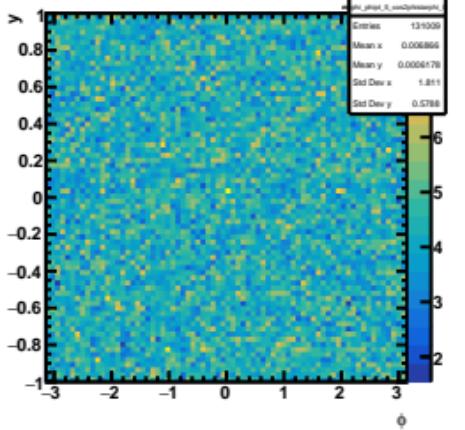
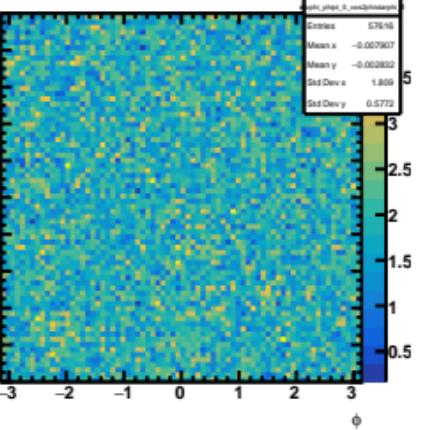
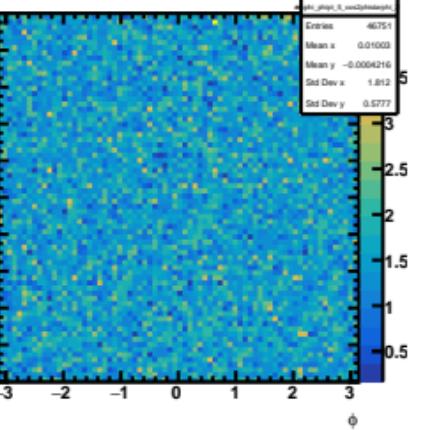
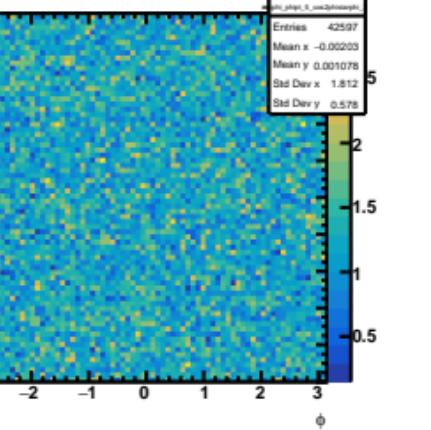
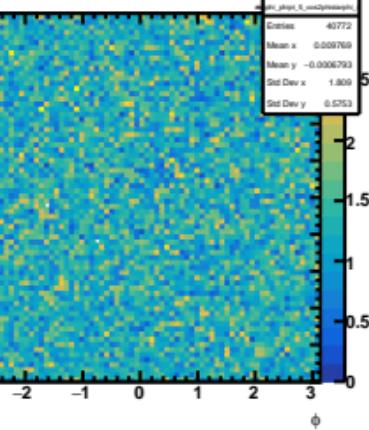
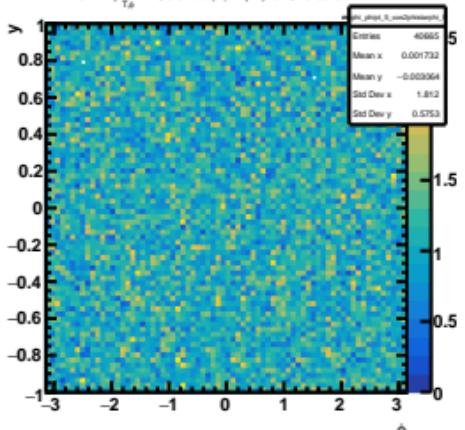
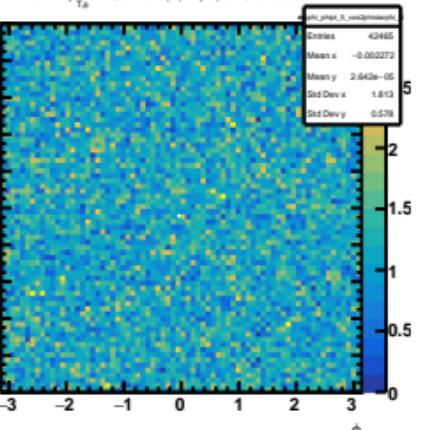
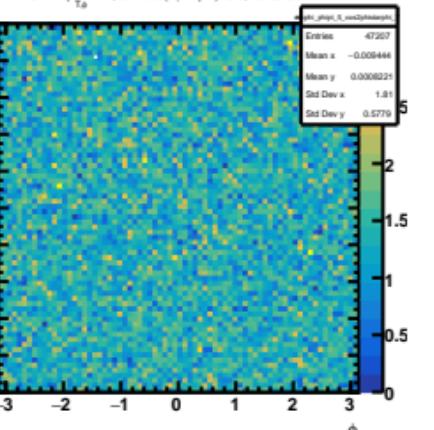
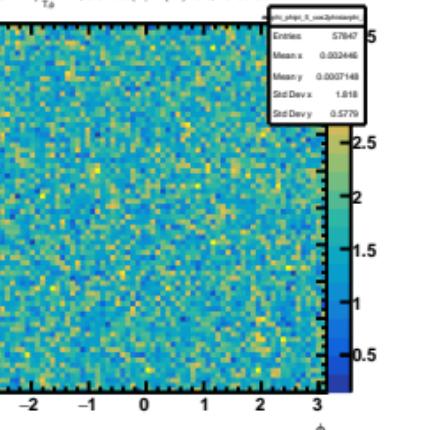
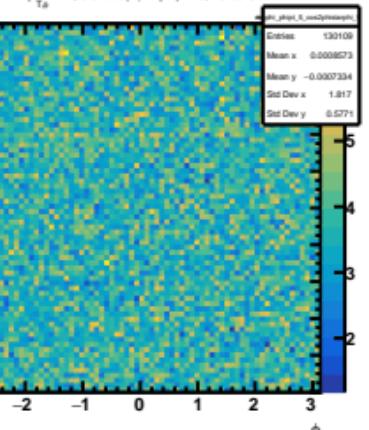
MC  $1.2 < p_{T_\phi} < 1.4$ ,  $-1.0 < \cos(2\phi^* - 2\phi) < 0.8$ , 20-60 CentMC  $1.2 < p_{T_\phi} < 1.4$ ,  $-0.8 < \cos(2\phi^* - 2\phi) < 0.6$ , 20-60 CentMC  $1.2 < p_{T_\phi} < 1.4$ ,  $-0.6 < \cos(2\phi^* - 2\phi) < 0.4$ , 20-60 CentMC  $1.2 < p_{T_\phi} < 1.4$ ,  $-0.4 < \cos(2\phi^* - 2\phi) < 0.2$ , 20-60 CentMC  $1.2 < p_{T_\phi} < 1.4$ ,  $-0.2 < \cos(2\phi^* - 2\phi) < 0.0$ , 20-60 CentMC  $1.2 < p_{T_\phi} < 1.4$ ,  $0.0 < \cos(2\phi^* - 2\phi) < 0.2$ , 20-60 CentMC  $1.2 < p_{T_\phi} < 1.4$ ,  $0.2 < \cos(2\phi^* - 2\phi) < 0.4$ , 20-60 CentMC  $1.2 < p_{T_\phi} < 1.4$ ,  $0.4 < \cos(2\phi^* - 2\phi) < 0.6$ , 20-60 CentMC  $1.2 < p_{T_\phi} < 1.4$ ,  $0.6 < \cos(2\phi^* - 2\phi) < 0.8$ , 20-60 CentMC  $1.2 < p_{T_\phi} < 1.4$ ,  $0.8 < \cos(2\phi^* - 2\phi) < 1.0$ , 20-60 Cent

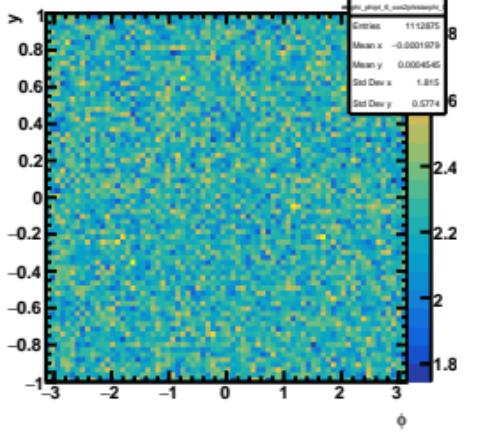
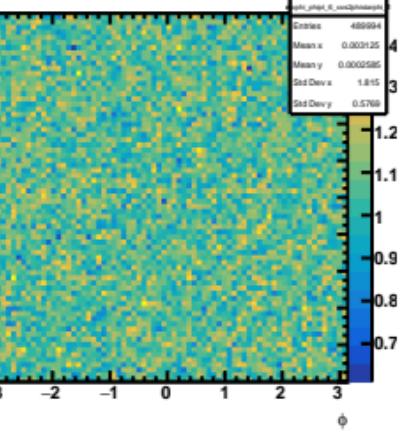
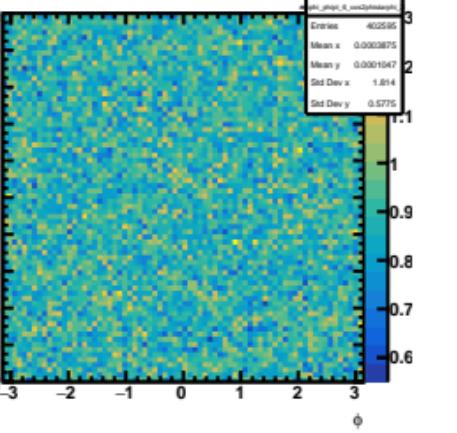
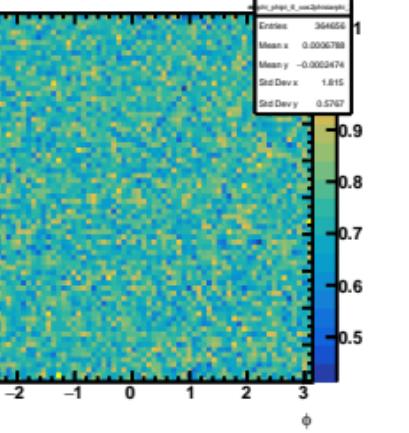
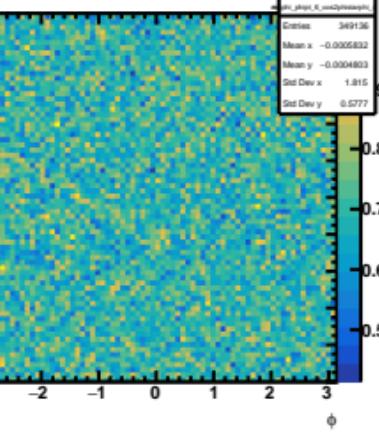
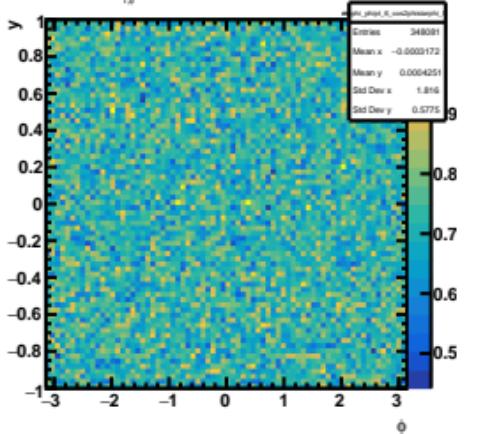
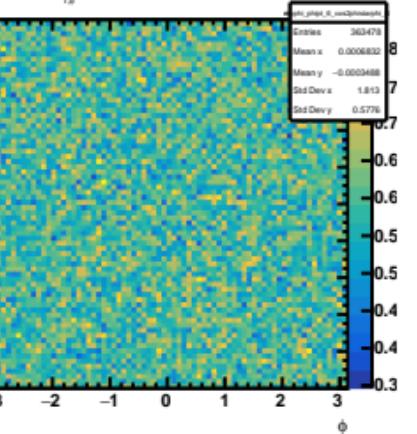
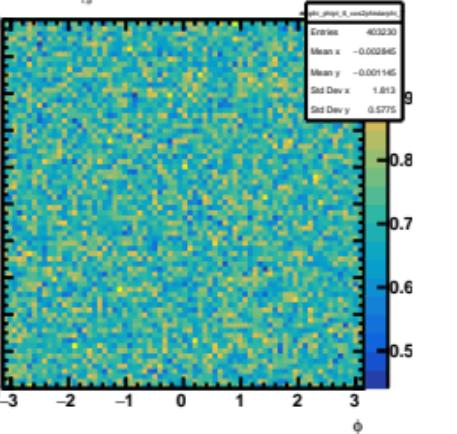
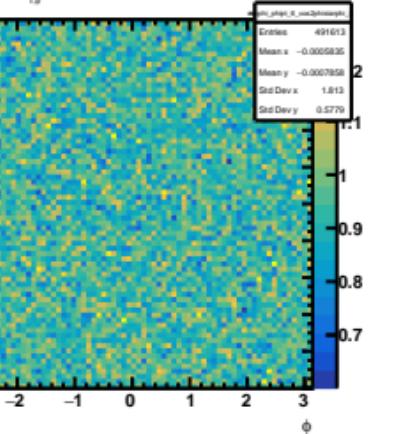
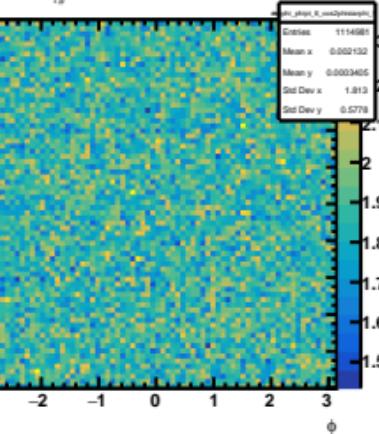
MC  $1.4 < p_{T_\phi} < 1.6$ ,  $-1.0 < \cos(2\phi^* - 2\phi) < 0.8$ , 20-60 CentMC  $1.4 < p_{T_\phi} < 1.6$ ,  $-0.8 < \cos(2\phi^* - 2\phi) < -0.6$ , 20-60 CentMC  $1.4 < p_{T_\phi} < 1.6$ ,  $-0.6 < \cos(2\phi^* - 2\phi) < -0.4$ , 20-60 CentMC  $1.4 < p_{T_\phi} < 1.6$ ,  $-0.4 < \cos(2\phi^* - 2\phi) < -0.2$ , 20-60 CentMC  $1.4 < p_{T_\phi} < 1.6$ ,  $-0.2 < \cos(2\phi^* - 2\phi) < 0.0$ , 20-60 CentMC  $1.4 < p_{T_\phi} < 1.6$ ,  $0.0 < \cos(2\phi^* - 2\phi) < 0.2$ , 20-60 CentMC  $1.4 < p_{T_\phi} < 1.6$ ,  $0.2 < \cos(2\phi^* - 2\phi) < 0.4$ , 20-60 CentMC  $1.4 < p_{T_\phi} < 1.6$ ,  $0.4 < \cos(2\phi^* - 2\phi) < 0.6$ , 20-60 CentMC  $1.4 < p_{T_\phi} < 1.6$ ,  $0.6 < \cos(2\phi^* - 2\phi) < 0.8$ , 20-60 CentMC  $1.4 < p_{T_\phi} < 1.6$ ,  $0.8 < \cos(2\phi^* - 2\phi) < 1.0$ , 20-60 Cent

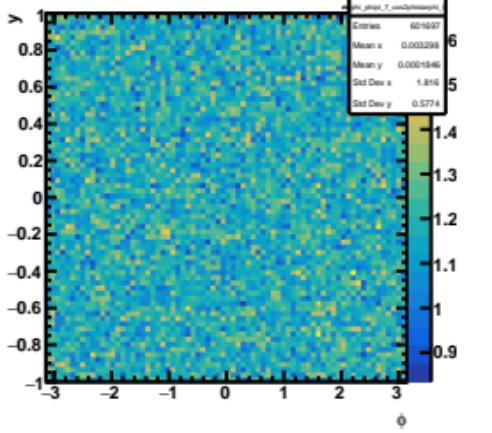
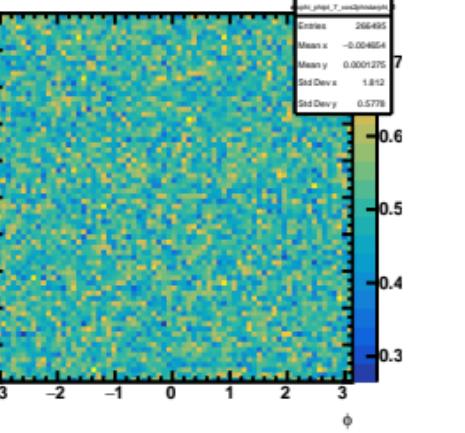
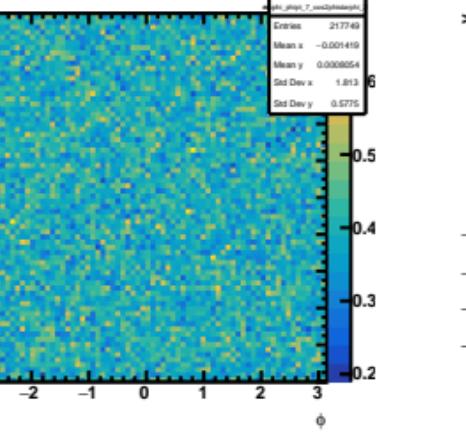
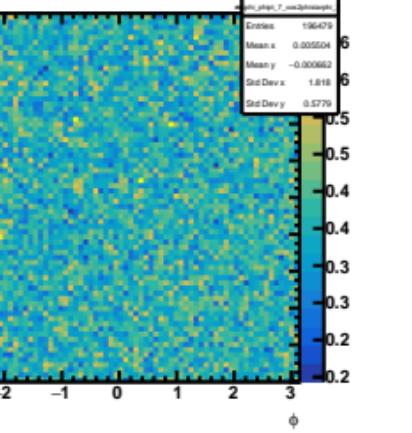
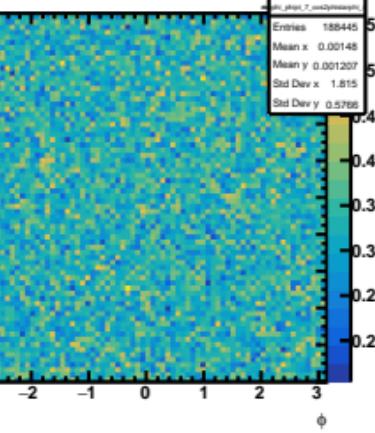
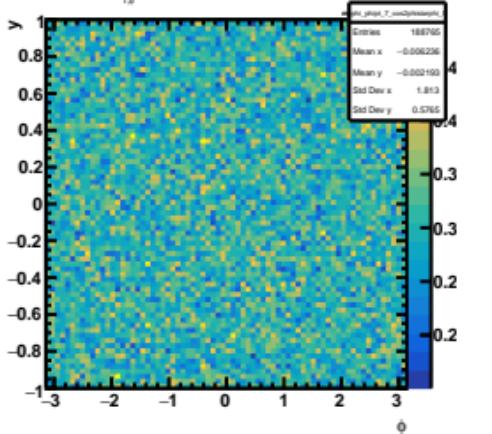
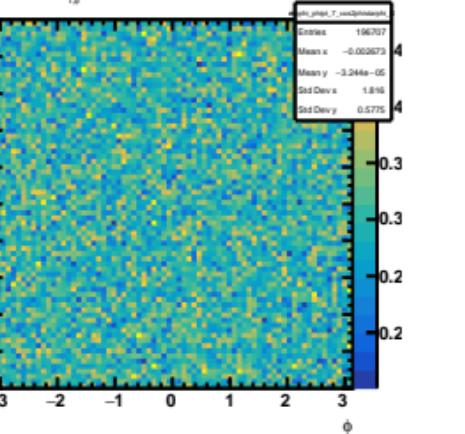
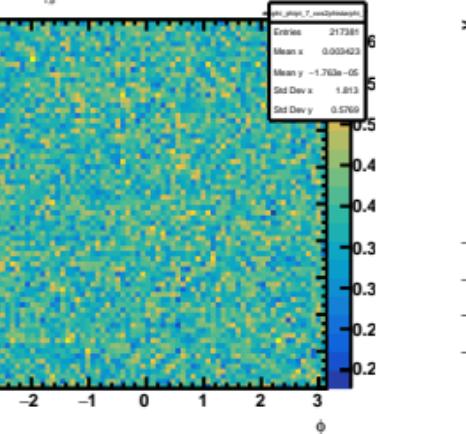
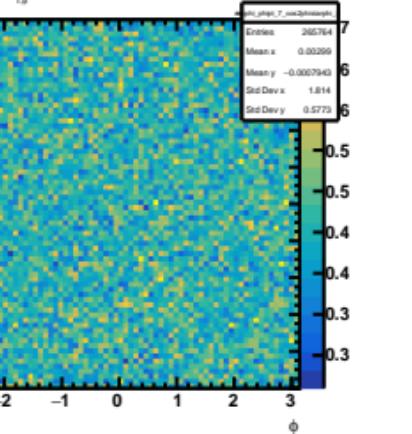
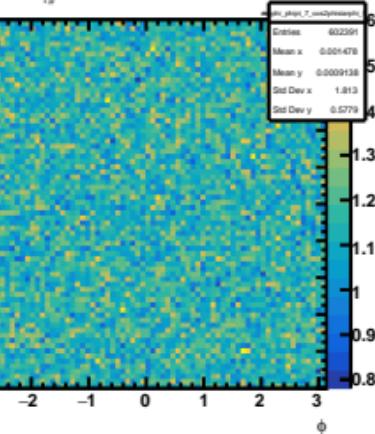
MC  $1.6 < p_{T_\phi} < 1.8$ ,  $-1.0 < \cos(2\phi^* - 2\phi) < 0.8$ , 20-60 CentMC  $1.6 < p_{T_\phi} < 1.8$ ,  $-0.8 < \cos(2\phi^* - 2\phi) < 0.6$ , 20-60 CentMC  $1.6 < p_{T_\phi} < 1.8$ ,  $-0.6 < \cos(2\phi^* - 2\phi) < 0.4$ , 20-60 CentMC  $1.6 < p_{T_\phi} < 1.8$ ,  $-0.4 < \cos(2\phi^* - 2\phi) < 0.2$ , 20-60 CentMC  $1.6 < p_{T_\phi} < 1.8$ ,  $-0.2 < \cos(2\phi^* - 2\phi) < 0.0$ , 20-60 CentMC  $1.6 < p_{T_\phi} < 1.8$ ,  $0.0 < \cos(2\phi^* - 2\phi) < 0.2$ , 20-60 CentMC  $1.6 < p_{T_\phi} < 1.8$ ,  $0.2 < \cos(2\phi^* - 2\phi) < 0.4$ , 20-60 CentMC  $1.6 < p_{T_\phi} < 1.8$ ,  $0.4 < \cos(2\phi^* - 2\phi) < 0.6$ , 20-60 CentMC  $1.6 < p_{T_\phi} < 1.8$ ,  $0.6 < \cos(2\phi^* - 2\phi) < 0.8$ , 20-60 CentMC  $1.6 < p_{T_\phi} < 1.8$ ,  $0.8 < \cos(2\phi^* - 2\phi) < 1.0$ , 20-60 Cent

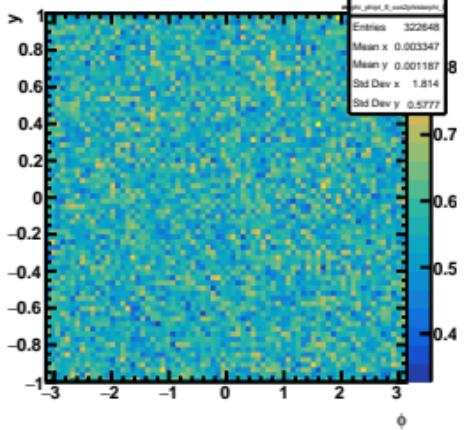
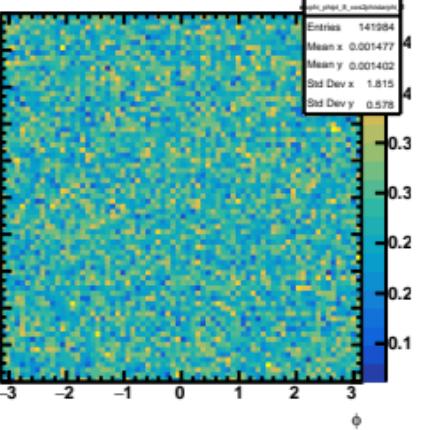
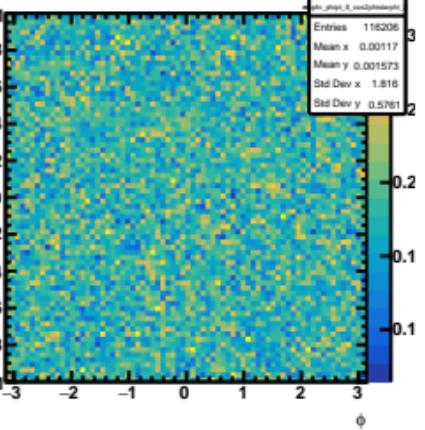
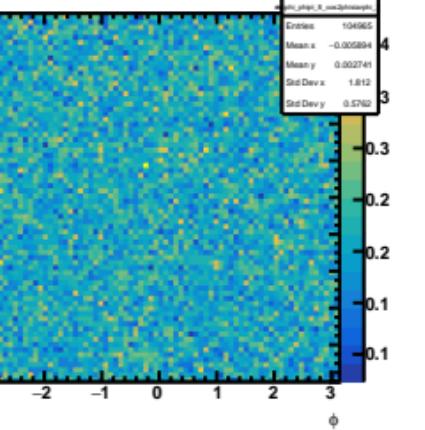
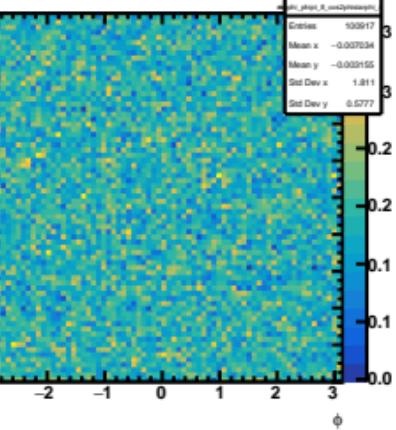
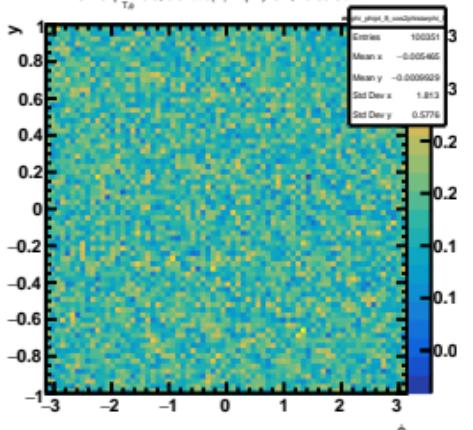
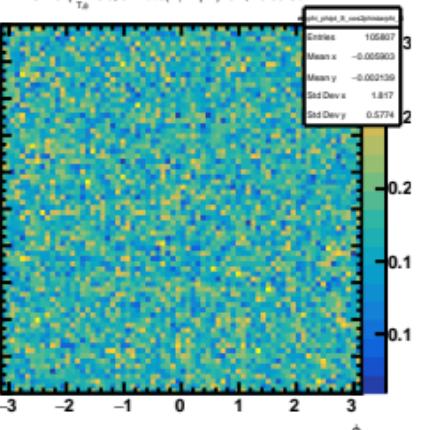
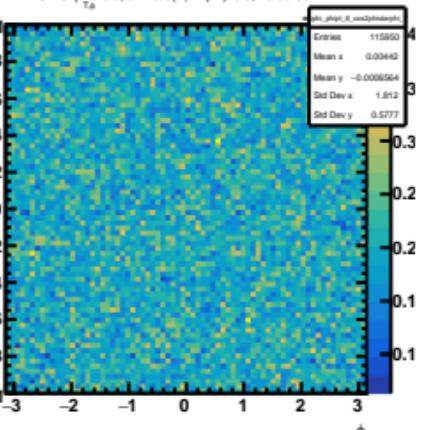
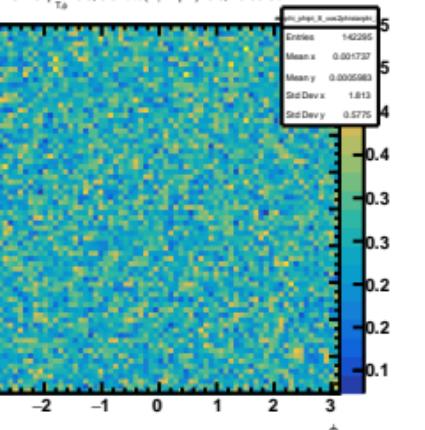
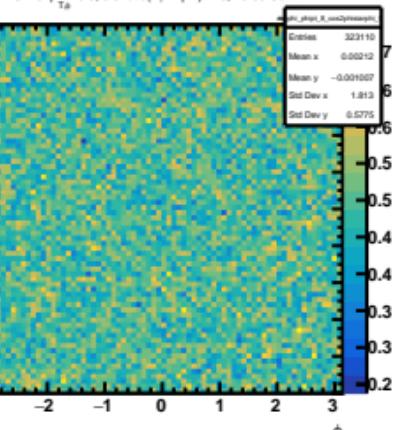
MC  $1.8 < p_T < 2.0$ ,  $-1.0 < \cos(2\phi - 2\phi_i) < 0.8$ , 20-60 CentMC  $1.8 < p_T < 2.0$ ,  $-0.8 < \cos(2\phi - 2\phi_i) < -0.6$ , 20-60 CentMC  $1.8 < p_T < 2.0$ ,  $-0.6 < \cos(2\phi - 2\phi_i) < -0.4$ , 20-60 CentMC  $1.8 < p_T < 2.0$ ,  $-0.4 < \cos(2\phi - 2\phi_i) < -0.2$ , 20-60 CentMC  $1.8 < p_T < 2.0$ ,  $-0.2 < \cos(2\phi - 2\phi_i) < 0.0$ , 20-60 CentMC  $1.8 < p_T < 2.0$ ,  $0.0 < \cos(2\phi - 2\phi_i) < 0.2$ , 20-60 CentMC  $1.8 < p_T < 2.0$ ,  $0.2 < \cos(2\phi - 2\phi_i) < 0.4$ , 20-60 CentMC  $1.8 < p_T < 2.0$ ,  $0.4 < \cos(2\phi - 2\phi_i) < 0.6$ , 20-60 CentMC  $1.8 < p_T < 2.0$ ,  $0.6 < \cos(2\phi - 2\phi_i) < 0.8$ , 20-60 CentMC  $1.8 < p_T < 2.0$ ,  $0.8 < \cos(2\phi - 2\phi_i) < 1.0$ , 20-60 Cent

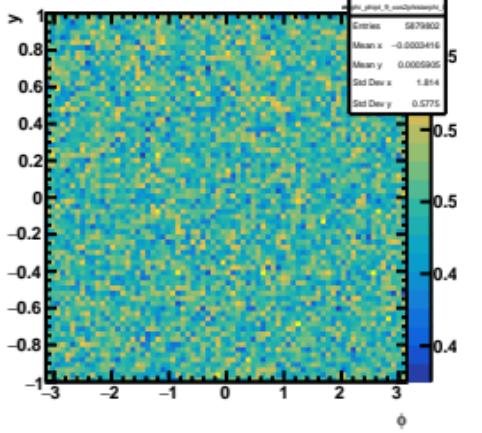
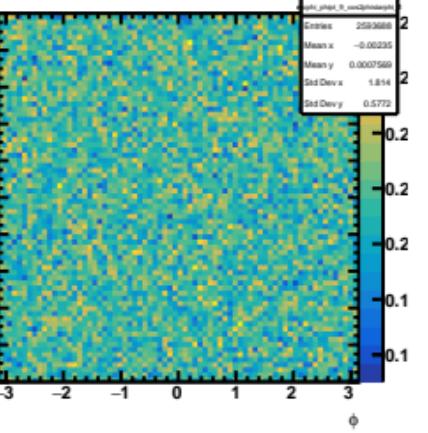
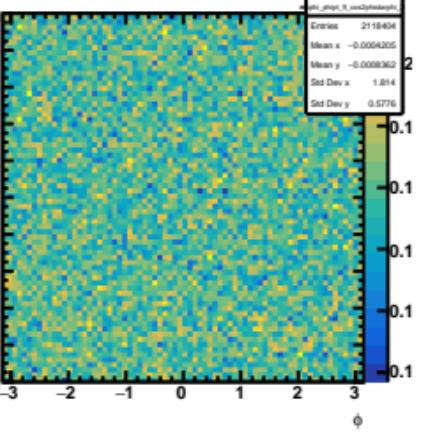
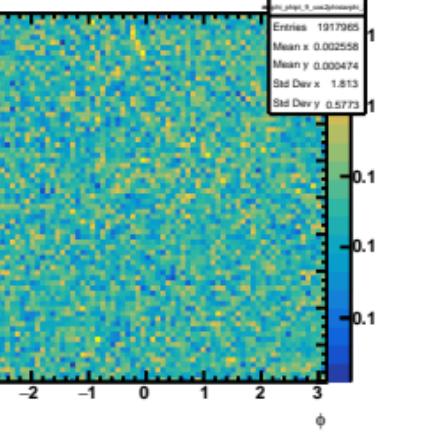
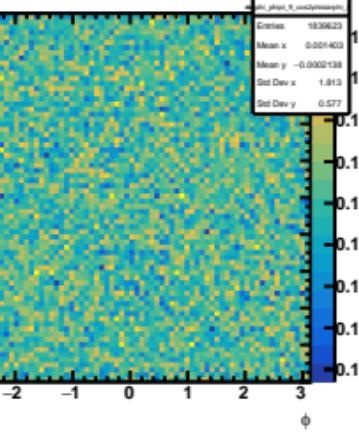
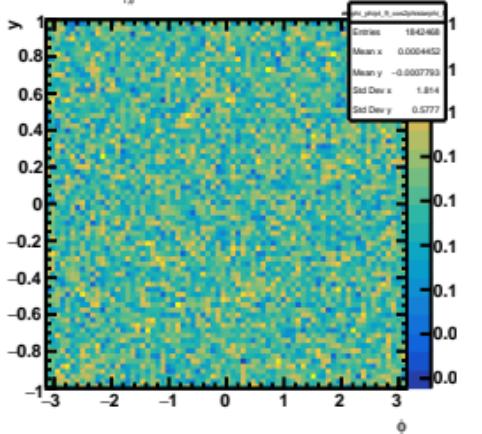
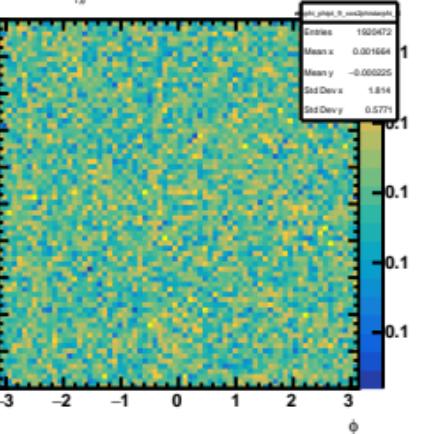
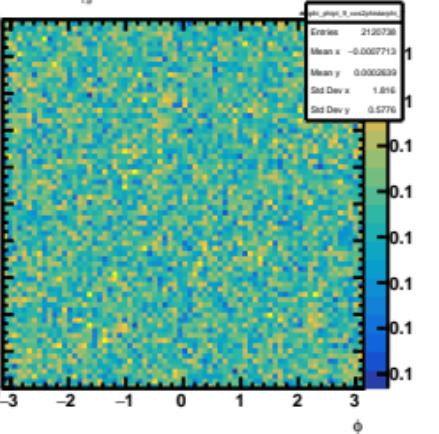
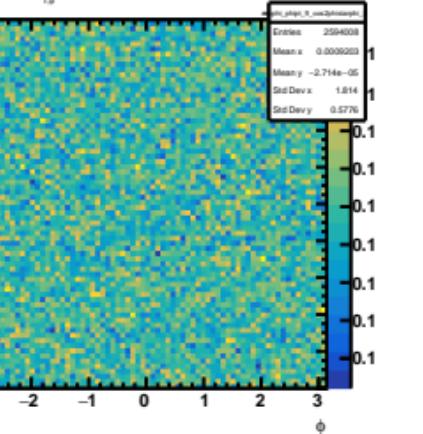
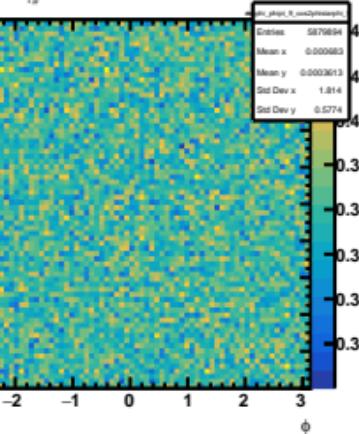
MC  $2.0 < p_{T_\phi} < 2.2$ ,  $-1.0 < \cos(2\phi^* - 2\phi) < 0.8$ , 20-60 CentMC  $2.0 < p_{T_\phi} < 2.2$ ,  $-0.8 < \cos(2\phi^* - 2\phi) < -0.6$ , 20-60 CentMC  $2.0 < p_{T_\phi} < 2.2$ ,  $-0.6 < \cos(2\phi^* - 2\phi) < -0.4$ , 20-60 CentMC  $2.0 < p_{T_\phi} < 2.2$ ,  $-0.4 < \cos(2\phi^* - 2\phi) < -0.2$ , 20-60 CentMC  $2.0 < p_{T_\phi} < 2.2$ ,  $-0.2 < \cos(2\phi^* - 2\phi) < 0.0$ , 20-60 CentMC  $2.0 < p_{T_\phi} < 2.2$ ,  $0.0 < \cos(2\phi^* - 2\phi) < 0.2$ , 20-60 CentMC  $2.0 < p_{T_\phi} < 2.2$ ,  $0.2 < \cos(2\phi^* - 2\phi) < 0.4$ , 20-60 CentMC  $2.0 < p_{T_\phi} < 2.2$ ,  $0.4 < \cos(2\phi^* - 2\phi) < 0.6$ , 20-60 CentMC  $2.0 < p_{T_\phi} < 2.2$ ,  $0.6 < \cos(2\phi^* - 2\phi) < 0.8$ , 20-60 CentMC  $2.0 < p_{T_\phi} < 2.2$ ,  $0.8 < \cos(2\phi^* - 2\phi) < 1.0$ , 20-60 Cent

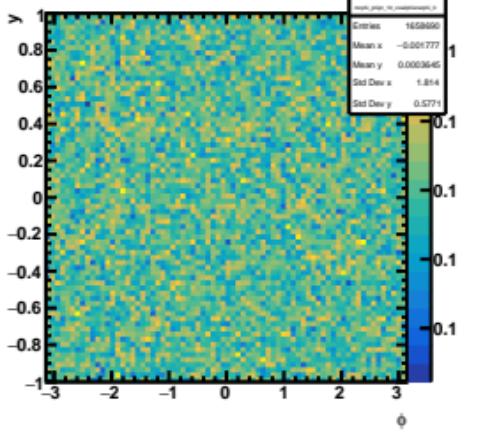
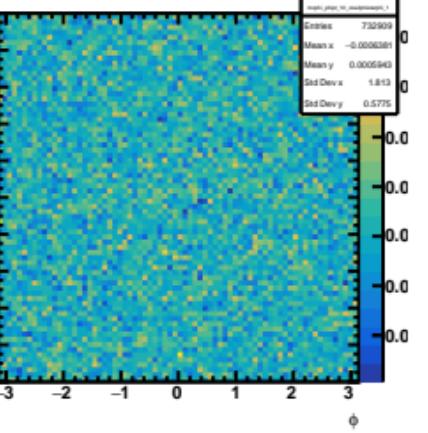
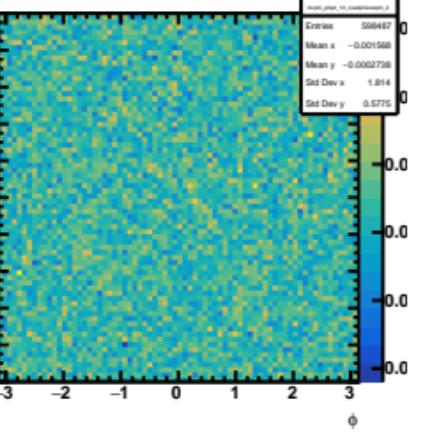
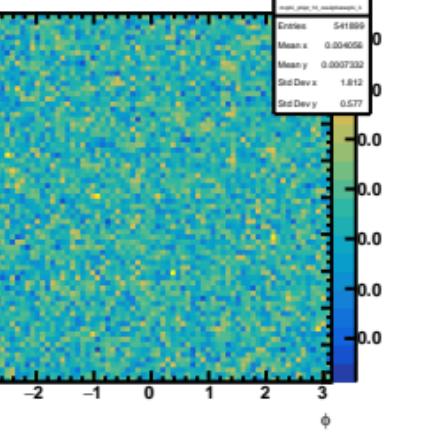
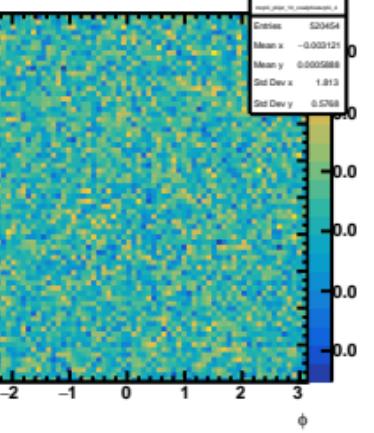
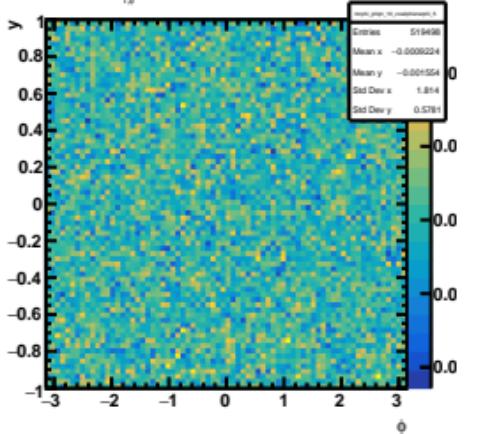
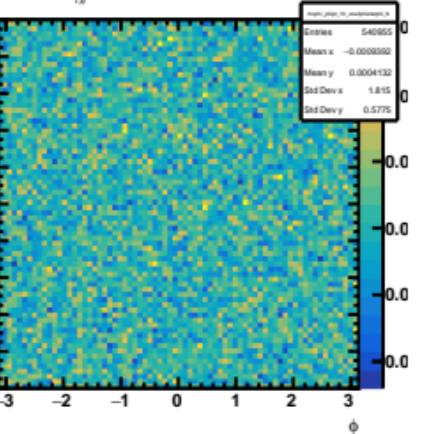
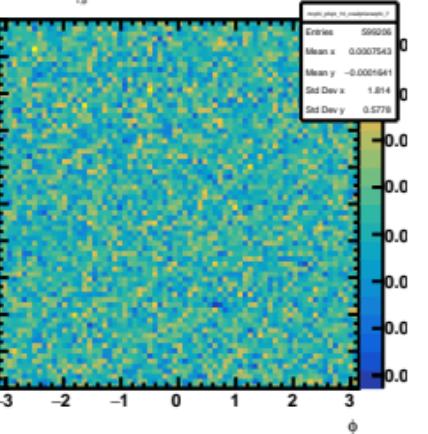
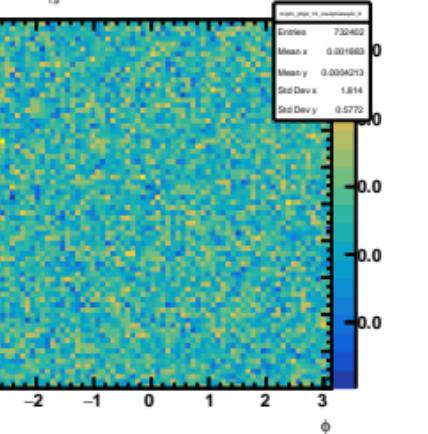
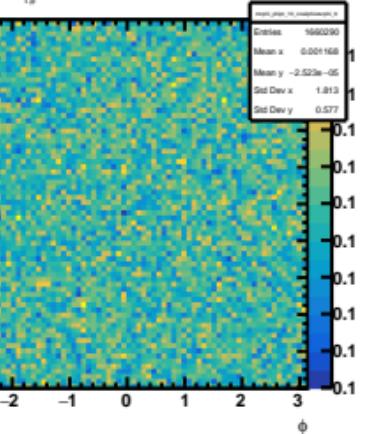
MC 2.2< $p_{T_b}$ <2.4, -1.0<cos(2 $\phi$ \*2 $\phi$ )<0.8, 20-60 CentMC 2.2< $p_{T_b}$ <2.4, -0.8<cos(2 $\phi$ \*2 $\phi$ )<-0.6, 20-60 CentMC 2.2< $p_{T_b}$ <2.4, -0.6<cos(2 $\phi$ \*2 $\phi$ )<-0.4, 20-60 CentMC 2.2< $p_{T_b}$ <2.4, -0.4<cos(2 $\phi$ \*2 $\phi$ )<-0.2, 20-60 CentMC 2.2< $p_{T_b}$ <2.4, -0.2<cos(2 $\phi$ \*2 $\phi$ )<0.0, 20-60 CentMC 2.2< $p_{T_b}$ <2.4, 0.0<cos(2 $\phi$ \*2 $\phi$ )<0.2, 20-60 CentMC 2.2< $p_{T_b}$ <2.4, 0.2<cos(2 $\phi$ \*2 $\phi$ )<0.4, 20-60 CentMC 2.2< $p_{T_b}$ <2.4, 0.4<cos(2 $\phi$ \*2 $\phi$ )<0.6, 20-60 CentMC 2.2< $p_{T_b}$ <2.4, 0.6<cos(2 $\phi$ \*2 $\phi$ )<0.8, 20-60 CentMC 2.2< $p_{T_b}$ <2.4, 0.8<cos(2 $\phi$ \*2 $\phi$ )<1.0, 20-60 Cent

MC 2.4< $p_{T_\phi}$ <2.6, -1.0<cos(2 $\phi$ \*2 $\phi$ )<-0.8, 20-60 CentMC 2.4< $p_{T_\phi}$ <2.6, -0.8<cos(2 $\phi$ \*2 $\phi$ )<-0.6, 20-60 CentMC 2.4< $p_{T_\phi}$ <2.6, -0.6<cos(2 $\phi$ \*2 $\phi$ )<-0.4, 20-60 CentMC 2.4< $p_{T_\phi}$ <2.6, -0.4<cos(2 $\phi$ \*2 $\phi$ )<-0.2, 20-60 CentMC 2.4< $p_{T_\phi}$ <2.6, -0.2<cos(2 $\phi$ \*2 $\phi$ )<0.0, 20-60 CentMC 2.4< $p_{T_\phi}$ <2.6, 0.0<cos(2 $\phi$ \*2 $\phi$ )<0.2, 20-60 CentMC 2.4< $p_{T_\phi}$ <2.6, 0.2<cos(2 $\phi$ \*2 $\phi$ )<0.4, 20-60 CentMC 2.4< $p_{T_\phi}$ <2.6, 0.4<cos(2 $\phi$ \*2 $\phi$ )<0.6, 20-60 CentMC 2.4< $p_{T_\phi}$ <2.6, 0.6<cos(2 $\phi$ \*2 $\phi$ )<0.8, 20-60 CentMC 2.4< $p_{T_\phi}$ <2.6, 0.8<cos(2 $\phi$ \*2 $\phi$ )<1.0, 20-60 Cent

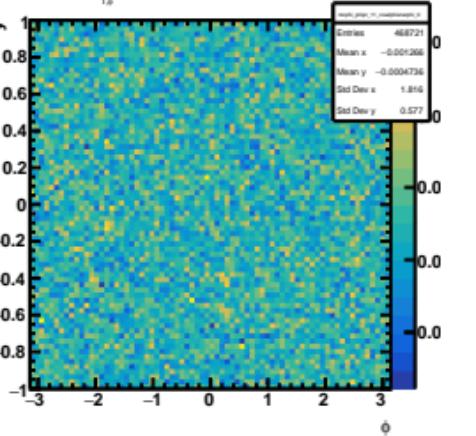
MC  $2.6 < p_{T_b} < 2.8$ ,  $-1.0 < \cos(2\phi - 2\phi_b) < 0.8$ , 20-60 CentMC  $2.6 < p_{T_b} < 2.8$ ,  $-0.8 < \cos(2\phi - 2\phi_b) < -0.6$ , 20-60 CentMC  $2.6 < p_{T_b} < 2.8$ ,  $-0.6 < \cos(2\phi - 2\phi_b) < -0.4$ , 20-60 CentMC  $2.6 < p_{T_b} < 2.8$ ,  $-0.4 < \cos(2\phi - 2\phi_b) < -0.2$ , 20-60 CentMC  $2.6 < p_{T_b} < 2.8$ ,  $-0.2 < \cos(2\phi - 2\phi_b) < 0.0$ , 20-60 CentMC  $2.6 < p_{T_b} < 2.8$ ,  $0.0 < \cos(2\phi - 2\phi_b) < 0.2$ , 20-60 CentMC  $2.6 < p_{T_b} < 2.8$ ,  $0.2 < \cos(2\phi - 2\phi_b) < 0.4$ , 20-60 CentMC  $2.6 < p_{T_b} < 2.8$ ,  $0.4 < \cos(2\phi - 2\phi_b) < 0.6$ , 20-60 CentMC  $2.6 < p_{T_b} < 2.8$ ,  $0.6 < \cos(2\phi - 2\phi_b) < 0.8$ , 20-60 CentMC  $2.6 < p_{T_b} < 2.8$ ,  $0.8 < \cos(2\phi - 2\phi_b) < 1.0$ , 20-60 Cent

MC  $2.8 < p_T < 3.0$ ,  $-1.0 < \cos(2\phi - 2\text{phi}) < 0.8$ , 20-60 CentMC  $2.8 < p_T < 3.0$ ,  $-0.8 < \cos(2\phi - 2\text{phi}) < -0.6$ , 20-60 CentMC  $2.8 < p_T < 3.0$ ,  $-0.6 < \cos(2\phi - 2\text{phi}) < -0.4$ , 20-60 CentMC  $2.8 < p_T < 3.0$ ,  $-0.4 < \cos(2\phi - 2\text{phi}) < -0.2$ , 20-60 CentMC  $2.8 < p_T < 3.0$ ,  $-0.2 < \cos(2\phi - 2\text{phi}) < 0.0$ , 20-60 CentMC  $2.8 < p_T < 3.0$ ,  $0.0 < \cos(2\phi - 2\text{phi}) < 0.2$ , 20-60 CentMC  $2.8 < p_T < 3.0$ ,  $0.2 < \cos(2\phi - 2\text{phi}) < 0.4$ , 20-60 CentMC  $2.8 < p_T < 3.0$ ,  $0.4 < \cos(2\phi - 2\text{phi}) < 0.6$ , 20-60 CentMC  $2.8 < p_T < 3.0$ ,  $0.6 < \cos(2\phi - 2\text{phi}) < 0.8$ , 20-60 CentMC  $2.8 < p_T < 3.0$ ,  $0.8 < \cos(2\phi - 2\text{phi}) < 1.0$ , 20-60 Cent

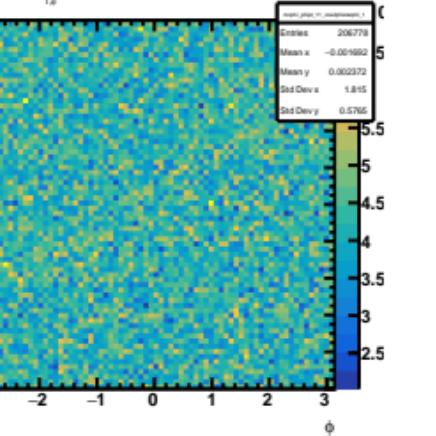
MC  $3.0 < p_{T_\phi} < 3.4$ ,  $-1.0 < \cos(2\phi - 2\text{phi}) < 0.8$ , 20-60 CentMC  $3.0 < p_{T_\phi} < 3.4$ ,  $-0.8 < \cos(2\phi - 2\text{phi}) < -0.6$ , 20-60 CentMC  $3.0 < p_{T_\phi} < 3.4$ ,  $-0.6 < \cos(2\phi - 2\text{phi}) < -0.4$ , 20-60 CentMC  $3.0 < p_{T_\phi} < 3.4$ ,  $-0.4 < \cos(2\phi - 2\text{phi}) < -0.2$ , 20-60 CentMC  $3.0 < p_{T_\phi} < 3.4$ ,  $-0.2 < \cos(2\phi - 2\text{phi}) < 0.0$ , 20-60 CentMC  $3.0 < p_{T_\phi} < 3.4$ ,  $0.0 < \cos(2\phi - 2\text{phi}) < 0.2$ , 20-60 CentMC  $3.0 < p_{T_\phi} < 3.4$ ,  $0.2 < \cos(2\phi - 2\text{phi}) < 0.4$ , 20-60 CentMC  $3.0 < p_{T_\phi} < 3.4$ ,  $0.4 < \cos(2\phi - 2\text{phi}) < 0.6$ , 20-60 CentMC  $3.0 < p_{T_\phi} < 3.4$ ,  $0.6 < \cos(2\phi - 2\text{phi}) < 0.8$ , 20-60 CentMC  $3.0 < p_{T_\phi} < 3.4$ ,  $0.8 < \cos(2\phi - 2\text{phi}) < 1.0$ , 20-60 Cent

MC 3.4< $p_{T_\phi}$ <3.8, -1<cos(2 $\phi$ \*2 $\phi$ )<0.8, 20-60 CentMC 3.4< $p_{T_\phi}$ <3.8, -0.8<cos(2 $\phi$ \*2 $\phi$ )<-0.6, 20-60 CentMC 3.4< $p_{T_\phi}$ <3.8, -0.6<cos(2 $\phi$ \*2 $\phi$ )<-0.4, 20-60 CentMC 3.4< $p_{T_\phi}$ <3.8, -0.4<cos(2 $\phi$ \*2 $\phi$ )<-0.2, 20-60 CentMC 3.4< $p_{T_\phi}$ <3.8, -0.2<cos(2 $\phi$ \*2 $\phi$ )<0.0, 20-60 CentMC 3.4< $p_{T_\phi}$ <3.8, 0.0<cos(2 $\phi$ \*2 $\phi$ )<0.2, 20-60 CentMC 3.4< $p_{T_\phi}$ <3.8, 0.2<cos(2 $\phi$ \*2 $\phi$ )<0.4, 20-60 CentMC 3.4< $p_{T_\phi}$ <3.8, 0.4<cos(2 $\phi$ \*2 $\phi$ )<0.6, 20-60 CentMC 3.4< $p_{T_\phi}$ <3.8, 0.6<cos(2 $\phi$ \*2 $\phi$ )<0.8, 20-60 CentMC 3.4< $p_{T_\phi}$ <3.8, 0.8<cos(2 $\phi$ \*2 $\phi$ )<1.0, 20-60 Cent

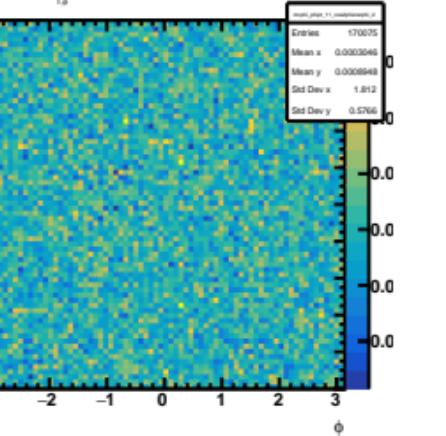
MC  $3.8 < p_{T_\phi} < 4.2, -1.0 < \cos(2\phi^* - 2\phi) < 0.8, 20-60$  Cent



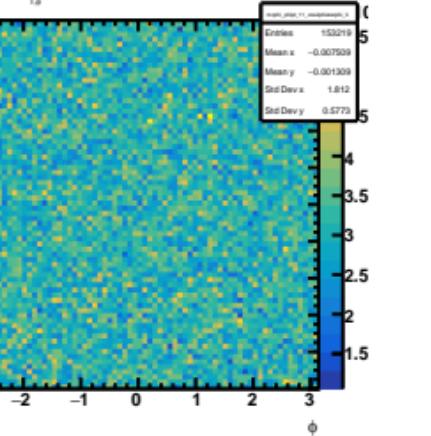
MC  $3.8 < p_{T_\phi} < 4.2, -0.8 < \cos(2\phi^* - 2\phi) < -0.6, 20-60$  Cent



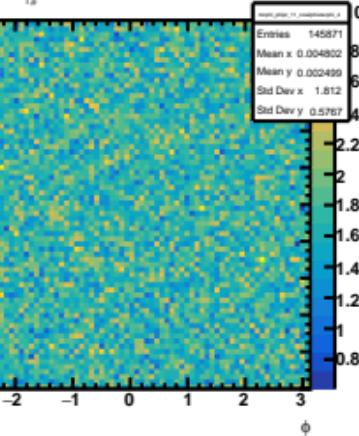
MC  $3.8 < p_{T_\phi} < 4.2, -0.6 < \cos(2\phi^* - 2\phi) < -0.4, 20-60$  Cent



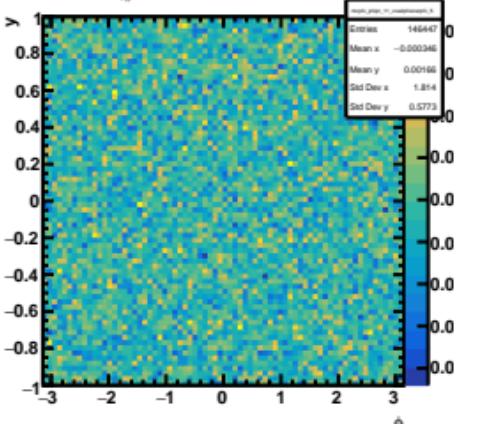
MC  $3.8 < p_{T_\phi} < 4.2, -0.4 < \cos(2\phi^* - 2\phi) < -0.2, 20-60$  Cent



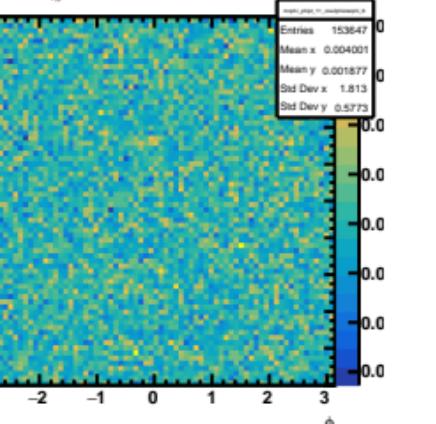
MC  $3.8 < p_{T_\phi} < 4.2, -0.2 < \cos(2\phi^* - 2\phi) < 0.0, 20-60$  Cent



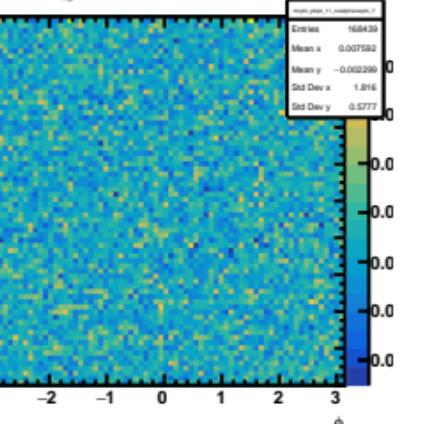
MC  $3.8 < p_{T_\phi} < 4.2, 0.0 < \cos(2\phi^* - 2\phi) < 0.2, 20-60$  Cent



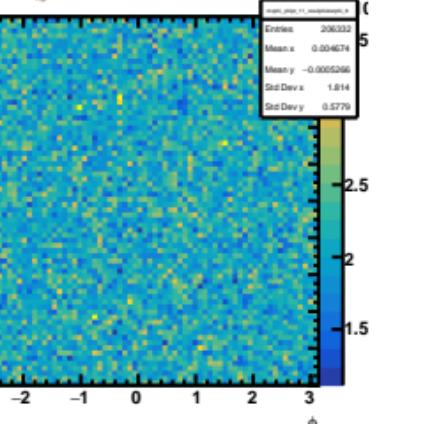
MC  $3.8 < p_{T_\phi} < 4.2, 0.2 < \cos(2\phi^* - 2\phi) < 0.4, 20-60$  Cent



MC  $3.8 < p_{T_\phi} < 4.2, 0.4 < \cos(2\phi^* - 2\phi) < 0.6, 20-60$  Cent



MC  $3.8 < p_{T_\phi} < 4.2, 0.6 < \cos(2\phi^* - 2\phi) < 0.8, 20-60$  Cent



MC  $3.8 < p_{T_\phi} < 4.2, 0.8 < \cos(2\phi^* - 2\phi) < 1.0, 20-60$  Cent

