## Two-Step Kernel Method Power Analysis (Dist1=Canberra, Dist2=Canberra): 20 Cell Types with 4 Rare Cell Types Kelvin Njuki

## 2025-01-28

## 0.1 Zero Imputation Method vs Two-Step Kernel Method (Dist1 = Canberra, Dist 2 = Canberra) for 20 Cell Types with 4 Rare Cell Types.

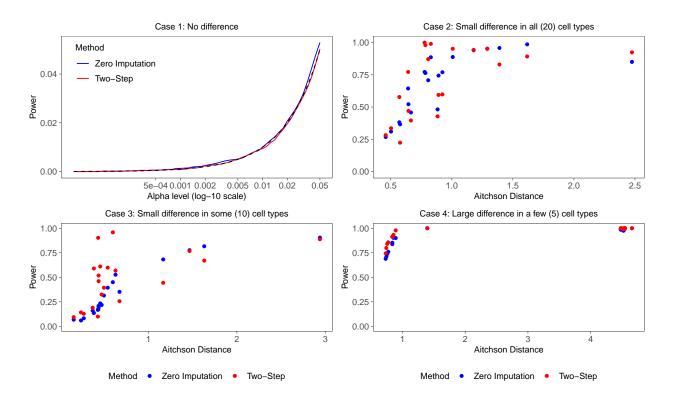


Figure 1: Type I error and power plots for zero-imputation method and two-step kernel method (Dist1 = Canberra, Dist 2 = Canberra). Maxeffects used were: case 2 = 0.004, case 3 = 0.004 and case 4 = 0.009

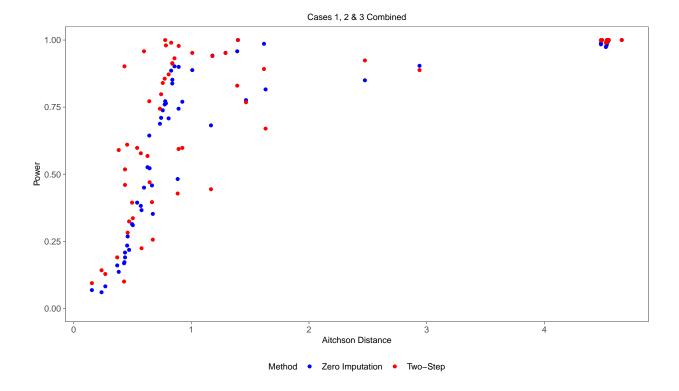


Figure 2: Power plot for all 3 cases for zero-imputation method and two-step kernel method (Dist1 = Canberra, Dist 2 = Canberra). Maxeffects used were: case 2 = 0.004, case 3 = 0.004 and case 4 = 0.009

## 0.2 Zero Imputation Method vs Two-Step Kernel Method (Dist1 = Canberra, Dist 2 = Canberra) for 20 Cell Types with 4 Rare Cell Types.

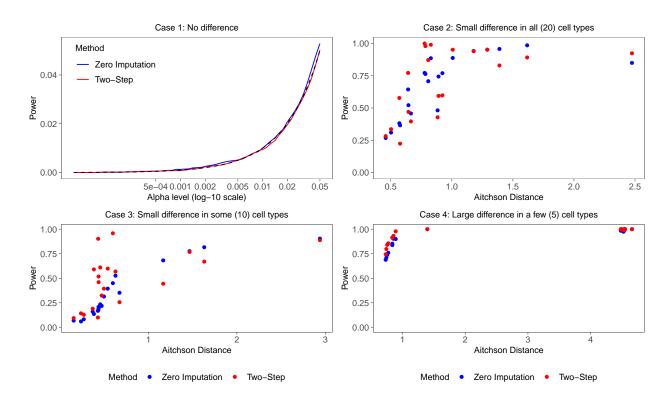


Figure 3: Type I error and power plots for zero-imputation method and two-step kernel method (Dist1 = Canberra, Dist 2 = Canberra). Maxeffects used were: case 2 = 0.004, case 3 = 0.004 and case 4 = 0.009

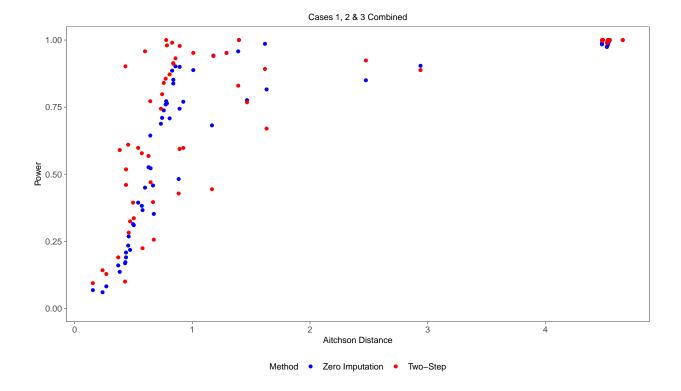


Figure 4: Power plot for all 3 cases for zero-imputation method and two-step kernel method (Dist1 = Canberra, Dist 2 = Canberra). Maxeffects used were: case 2 = 0.004, case 3 = 0.004 and case 4 = 0.009