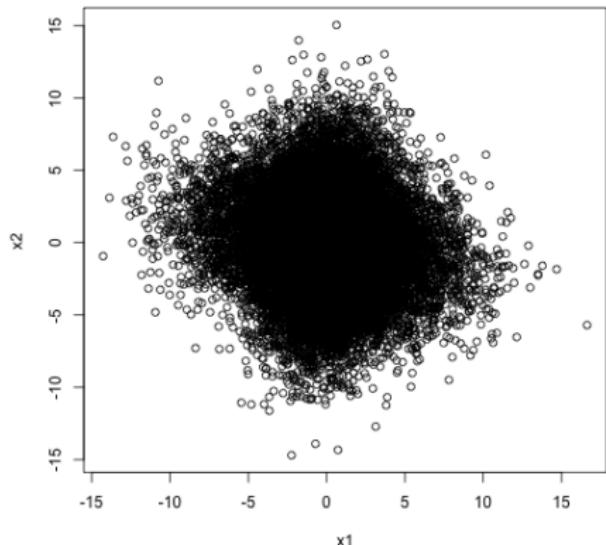


Cluster Statistics

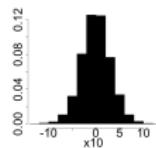
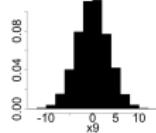
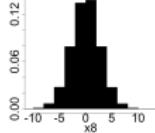
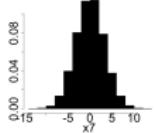
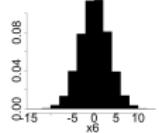
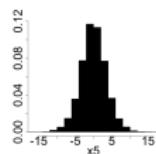
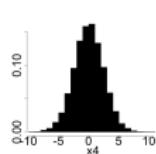
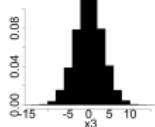
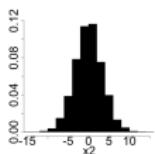
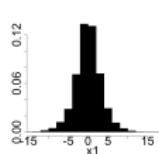
Population dynamics V 5.4

February 3, 2019

Results for $K = 1$.

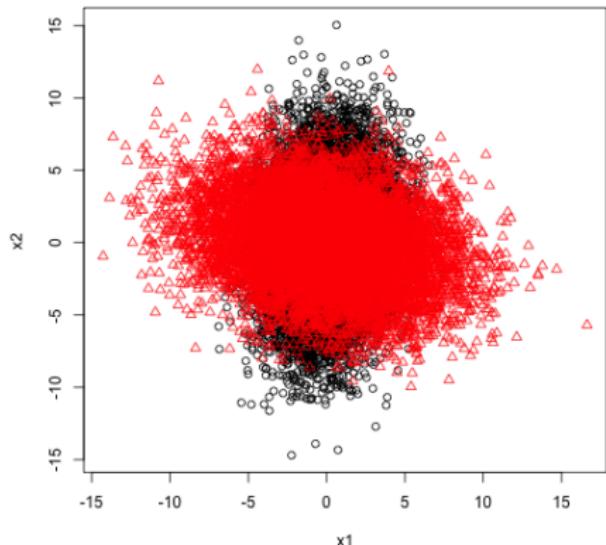


Results for $K = 1$. Cluster 1.

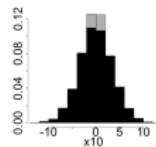
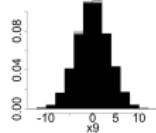
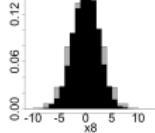
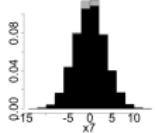
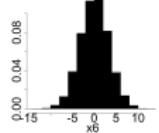
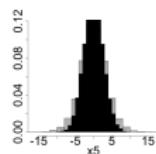
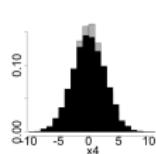
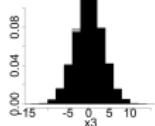
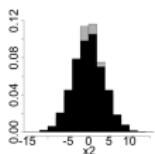
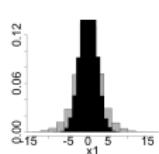


cluster size=20000;

Results for $K = 2$.

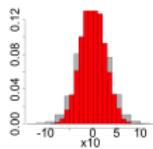
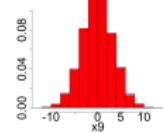
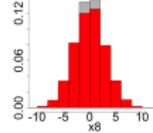
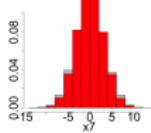
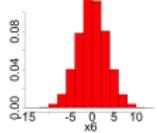
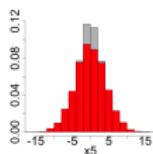
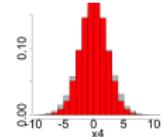
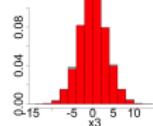
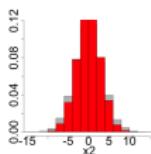
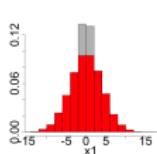


Results for $K = 2$. Cluster 1.



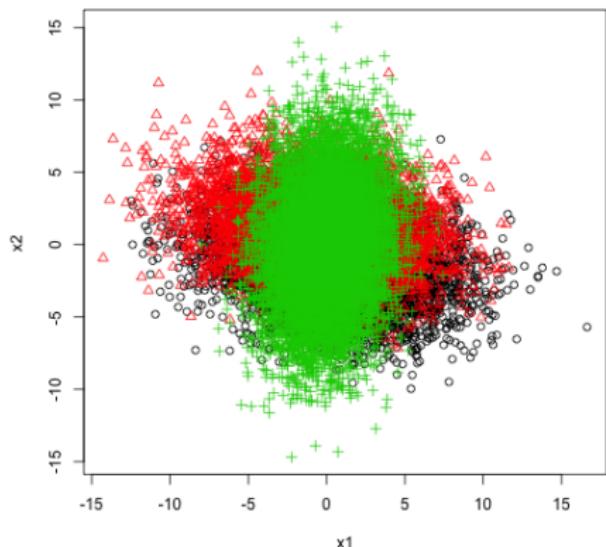
cluster size=9987;

Results for $K = 2$. Cluster 2.

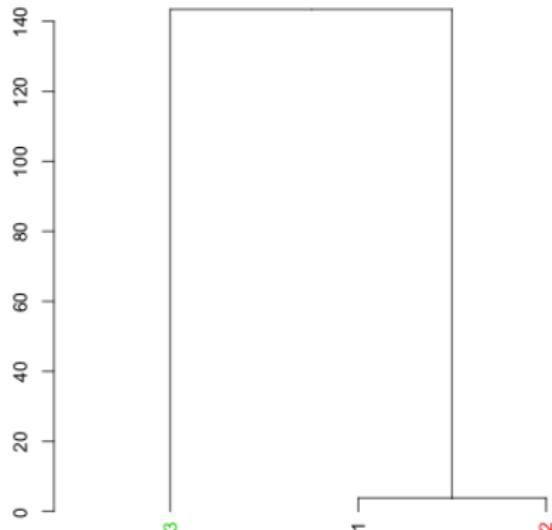


cluster size=10013;

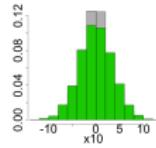
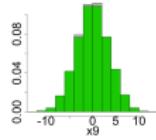
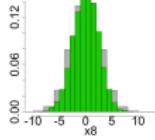
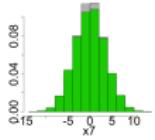
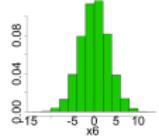
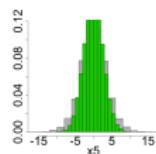
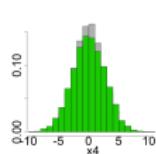
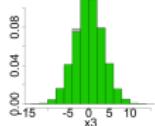
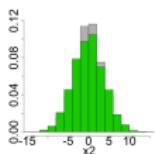
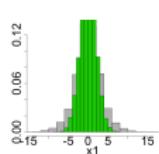
Results for $K = 3$.



Results for $K = 3$. Kullback–Leibler divergence.

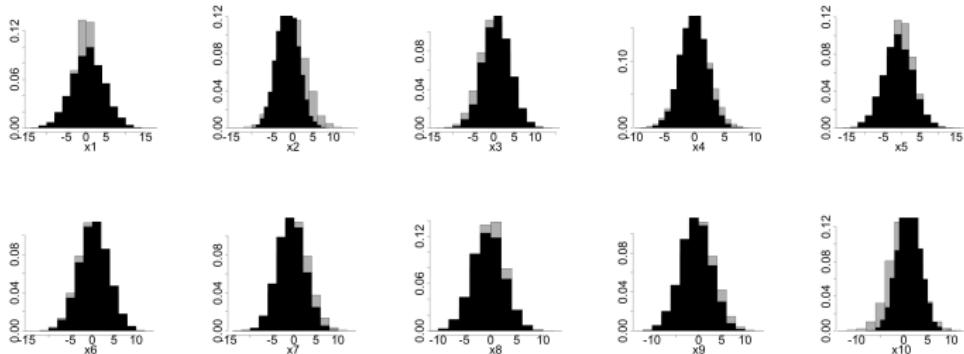


Results for $K = 3$. Cluster 3.



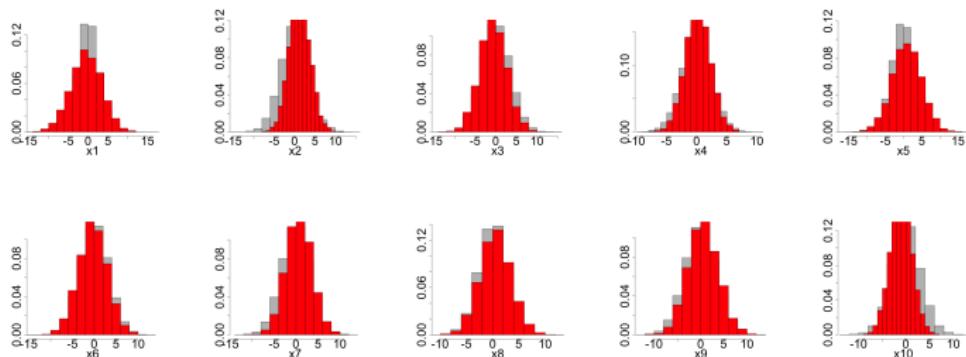
cluster size=9885;

Results for $K = 3$. Cluster 1.



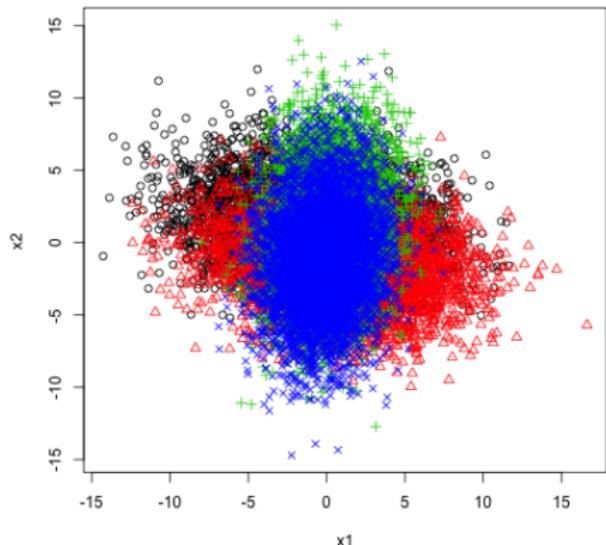
cluster size=5017;

Results for $K = 3$. Cluster 2.

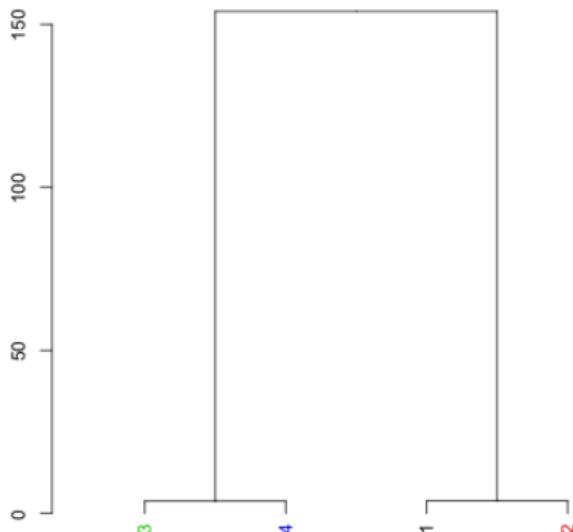


cluster size=5098;

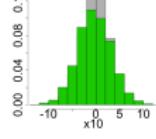
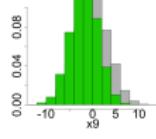
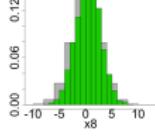
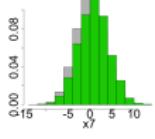
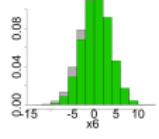
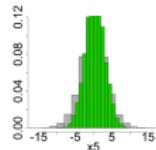
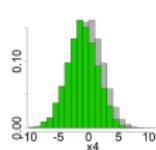
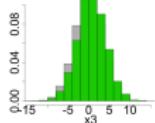
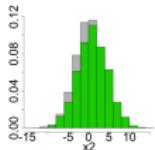
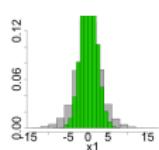
Results for $K = 4$.



Results for $K = 4$. Kullback–Leibler divergence.

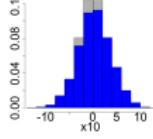
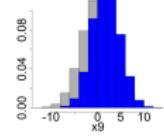
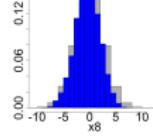
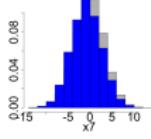
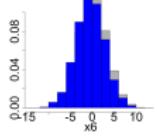
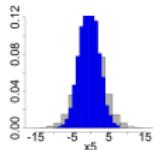
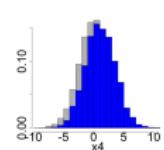
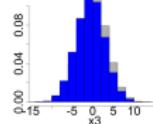
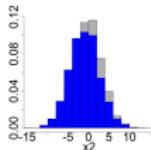
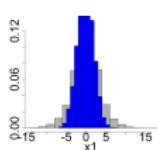


Results for $K = 4$. Cluster 3.



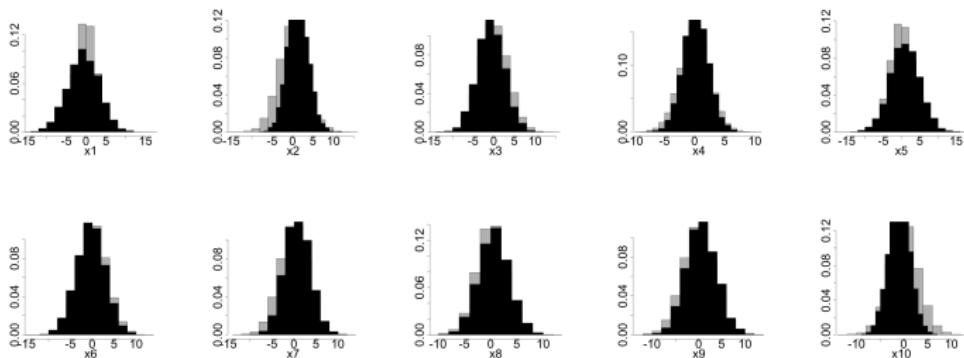
cluster size=4907;

Results for $K = 4$. Cluster 4.



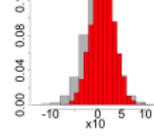
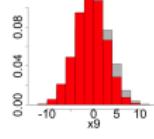
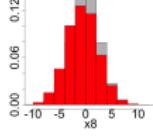
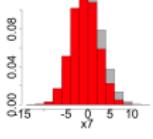
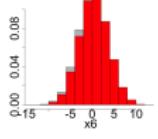
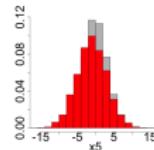
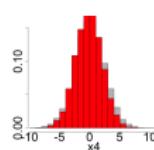
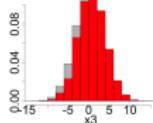
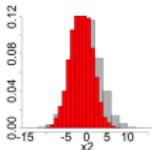
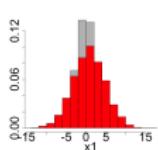
cluster size=5071;

Results for $K = 4$. Cluster 1.



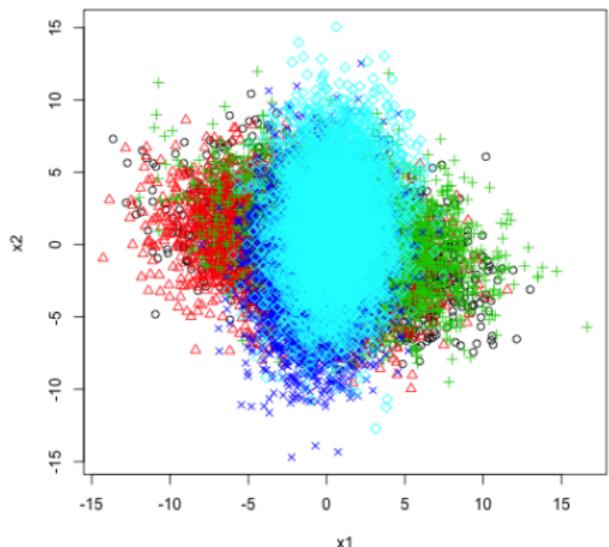
cluster size=5081;

Results for $K = 4$. Cluster 2.

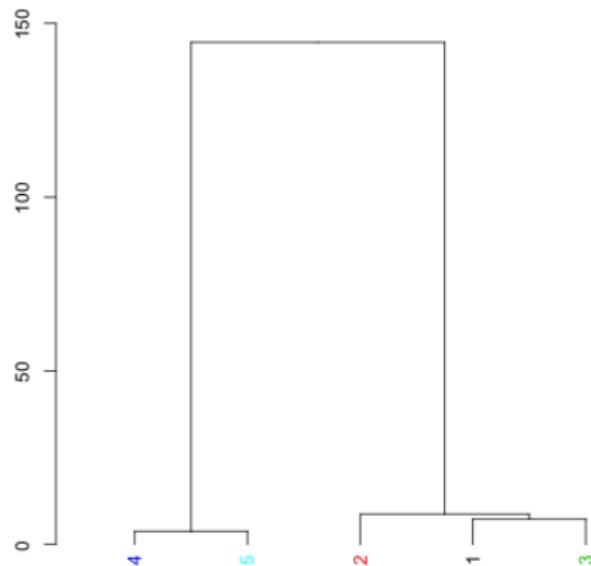


cluster size=4941;

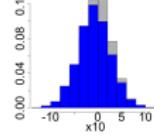
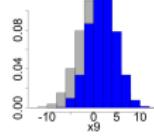
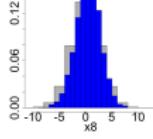
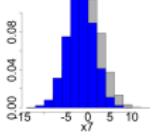
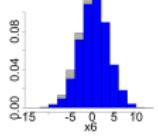
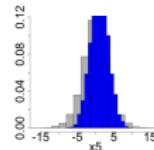
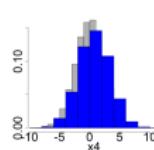
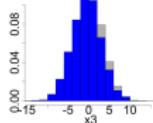
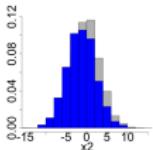
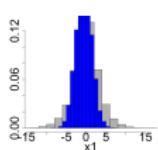
Results for $K = 5$.



Results for $K = 5$. Kullback–Leibler divergence.

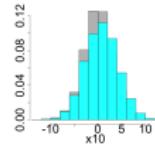
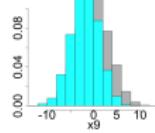
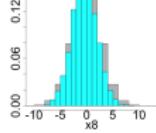
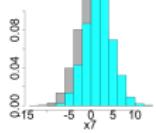
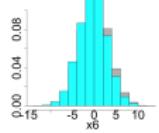
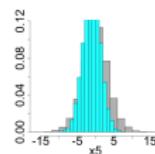
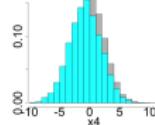
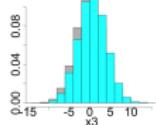
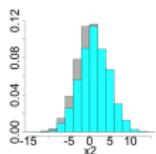
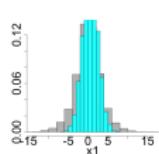


Results for $K = 5$. Cluster 4.



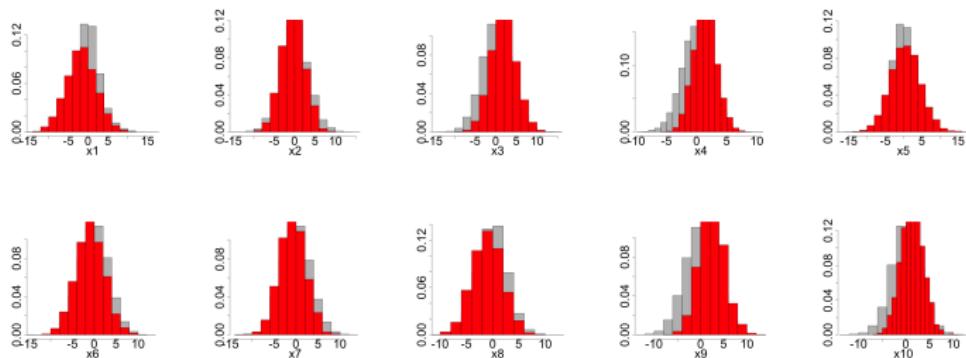
cluster size=4925;

Results for $K = 5$. Cluster 5.



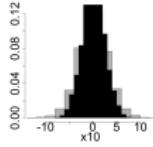
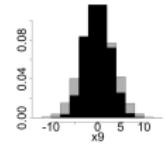
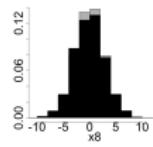
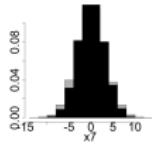
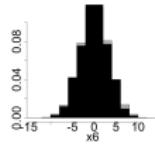
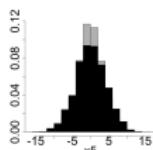
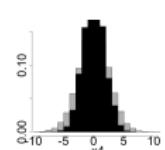
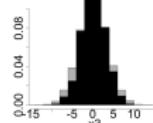
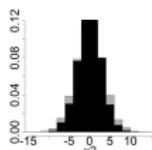
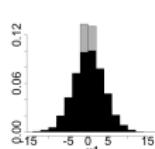
cluster size=4979;

Results for $K = 5$. Cluster 2.



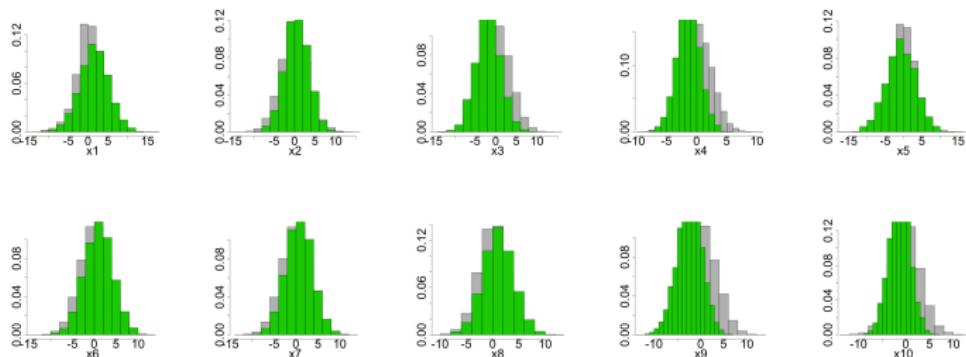
cluster size=3372;

Results for $K = 5$. Cluster 1.



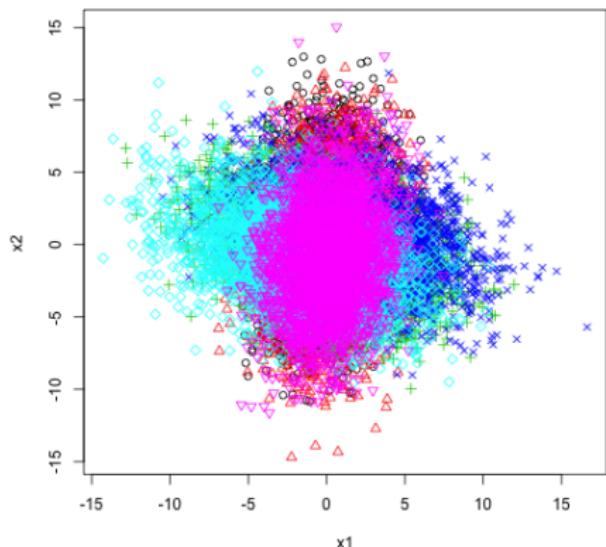
cluster size=3326;

Results for $K = 5$. Cluster 3.

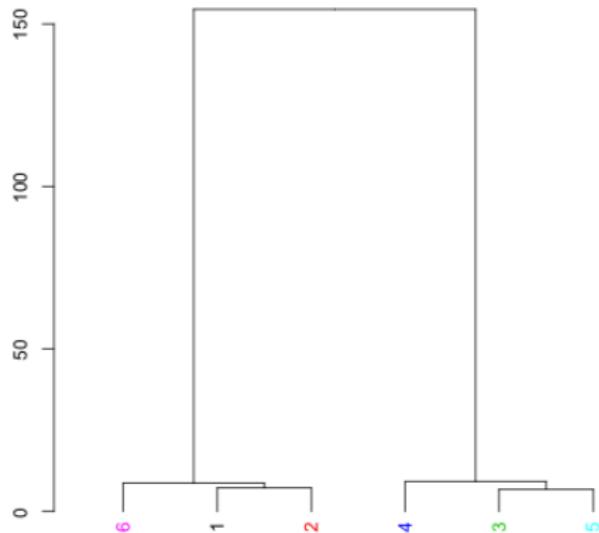


cluster size=3398;

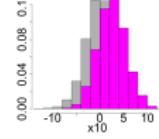
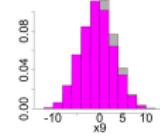
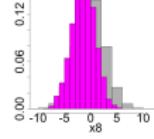
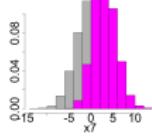
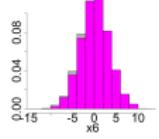
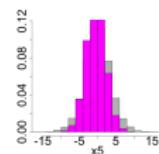
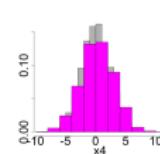
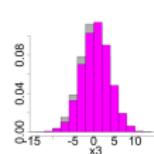
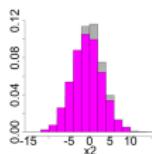
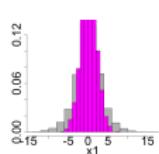
Results for $K = 6$.



Results for $K = 6$. Kullback–Leibler divergence.

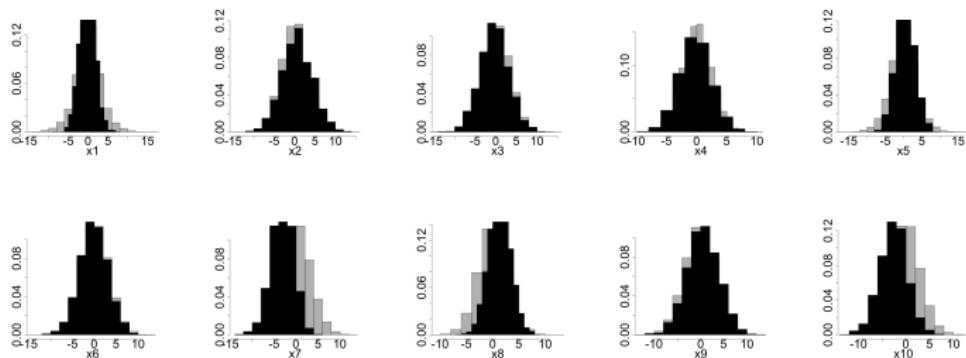


Results for $K = 6$. Cluster 6.



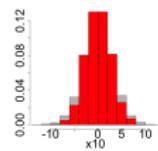
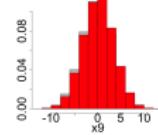
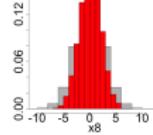
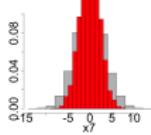
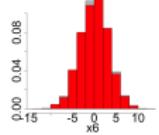
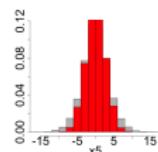
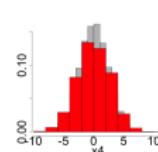
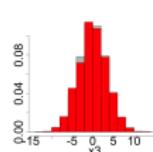
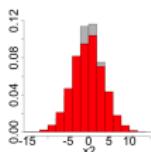
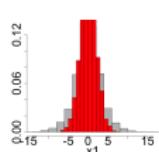
cluster size=3331;

Results for $K = 6$. Cluster 1.



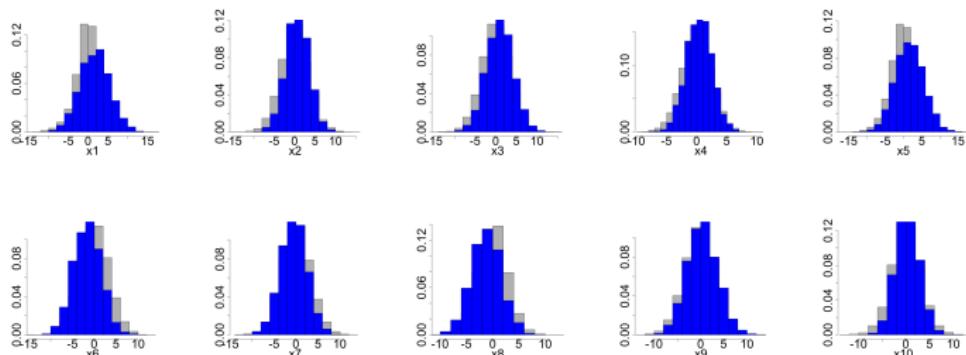
cluster size=3260;

Results for $K = 6$. Cluster 2.



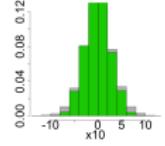
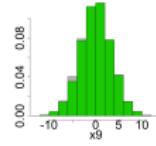
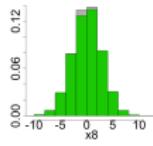
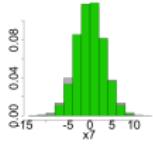
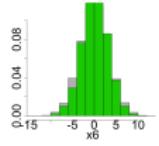
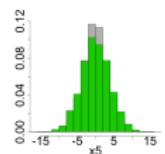
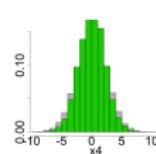
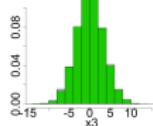
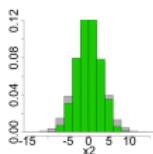
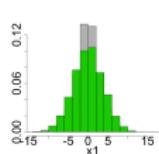
cluster size=3385;

Results for $K = 6$. Cluster 4.



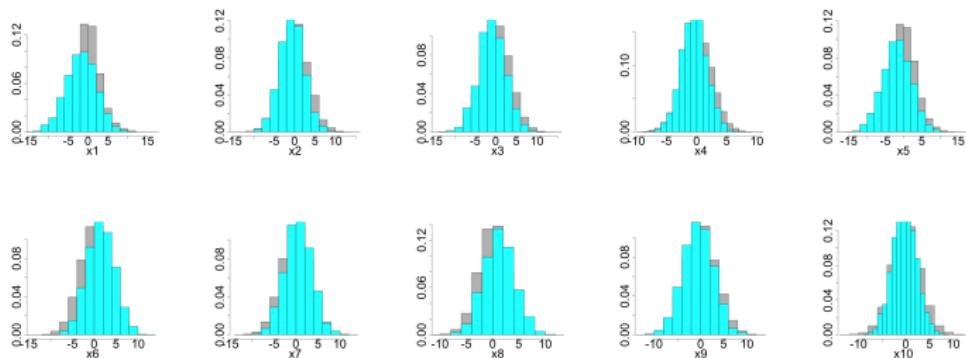
cluster size=3344;

Results for $K = 6$. Cluster 3.



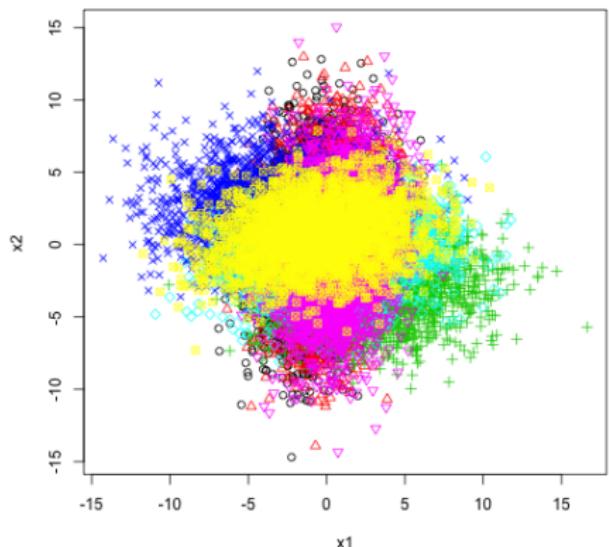
cluster size=3406;

Results for $K = 6$. Cluster 5.

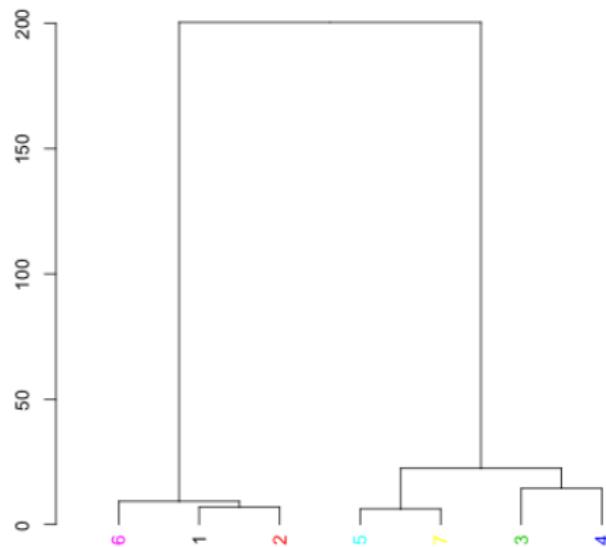


cluster size=3274;

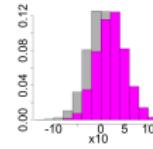
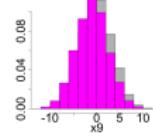
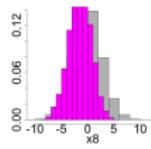
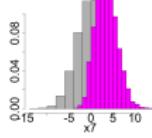
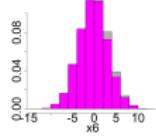
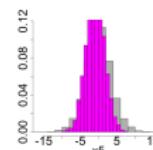
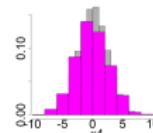
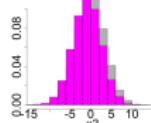
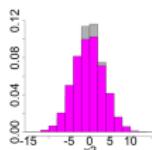
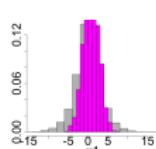
Results for $K = 7$.



Results for $K = 7$. Kullback–Leibler divergence.

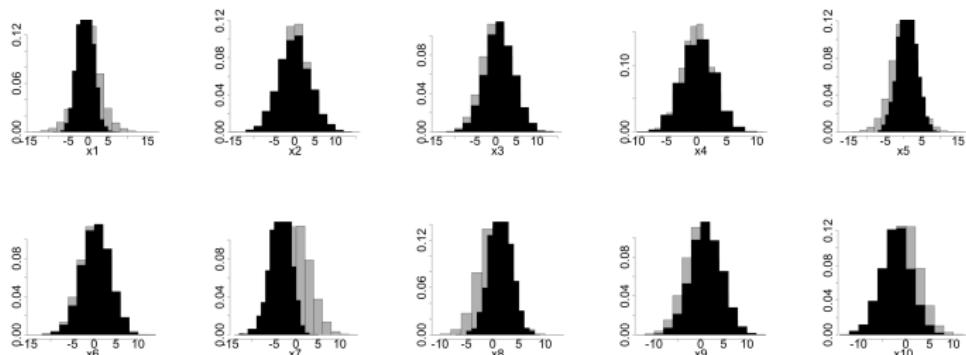


Results for $K = 7$. Cluster 6.



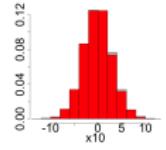
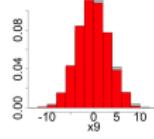
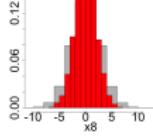
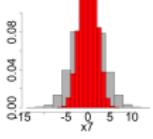
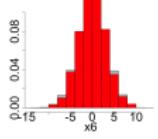
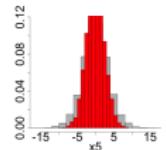
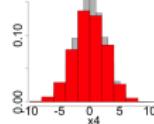
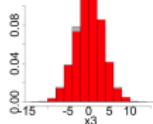
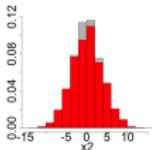
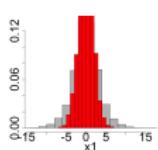
cluster size=3292;

Results for $K = 7$. Cluster 1.



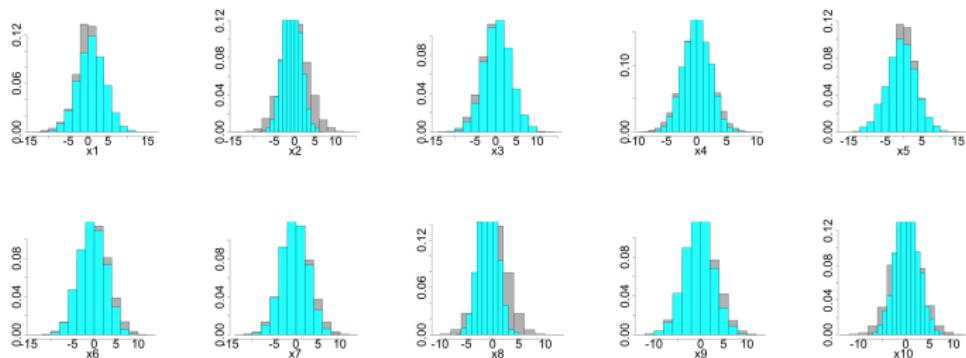
cluster size=3245;

Results for $K = 7$. Cluster 2.



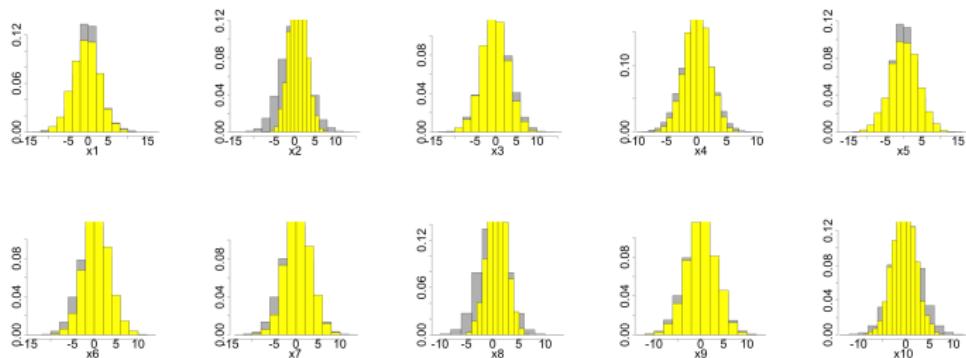
cluster size=3392;

Results for $K = 7$. Cluster 5.



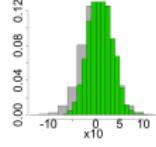
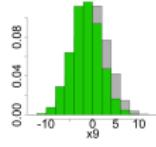
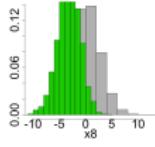
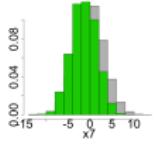
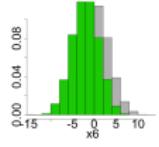
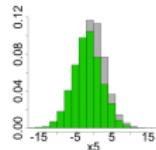
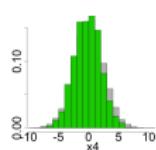
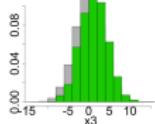
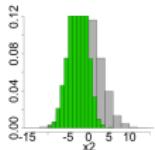
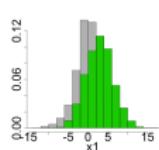
cluster size=2567;

Results for $K = 7$. Cluster 7.



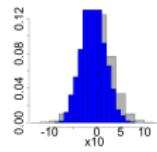
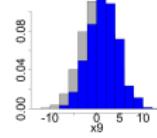
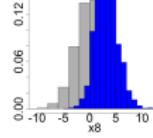
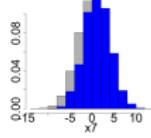
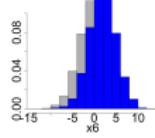
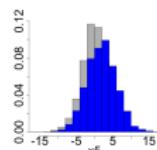
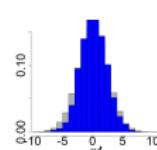
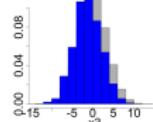
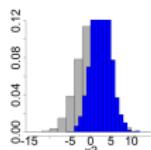
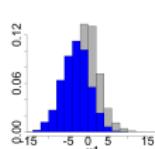
cluster size=2567;

Results for $K = 7$. Cluster 3.



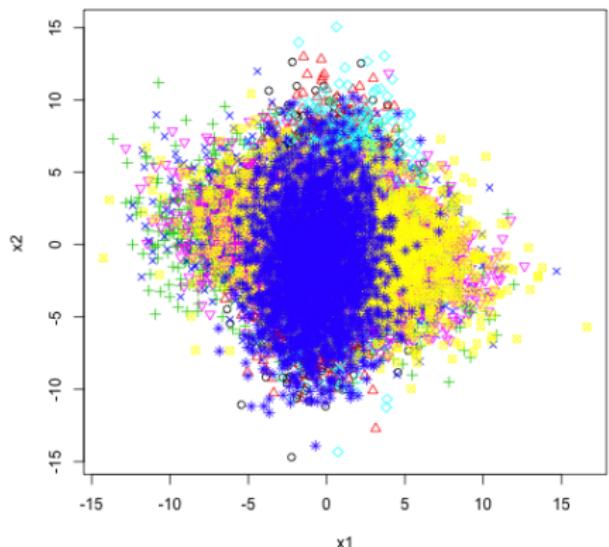
cluster size=2427;

Results for $K = 7$. Cluster 4.

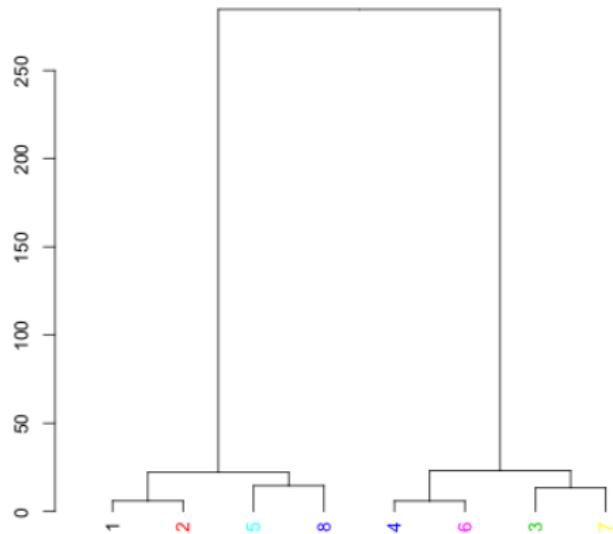


cluster size=2510;

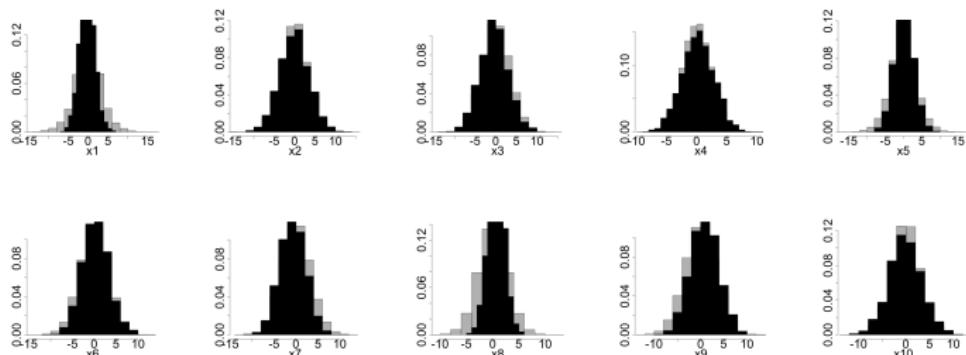
Results for $K = 8$.



Results for $K = 8$. Kullback–Leibler divergence.

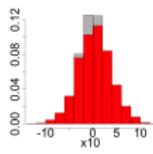
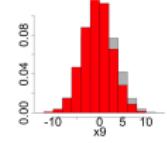
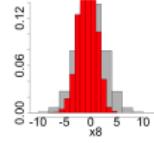
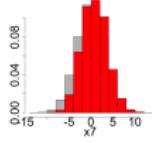
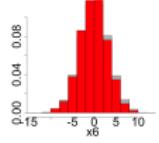
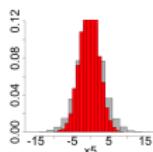
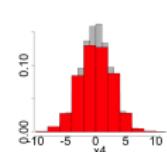
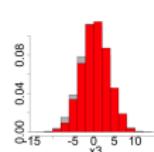
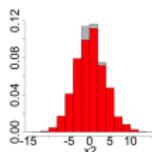
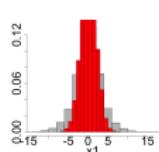


Results for $K = 8$. Cluster 1.



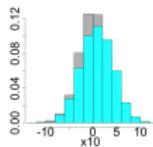
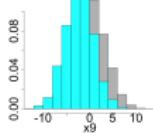
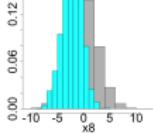
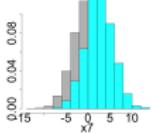
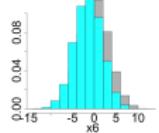
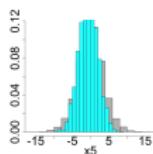
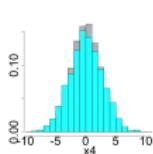
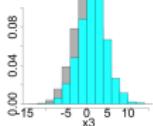
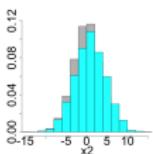
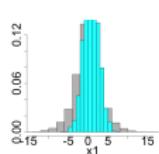
cluster size=2495;

Results for $K = 8$. Cluster 2.



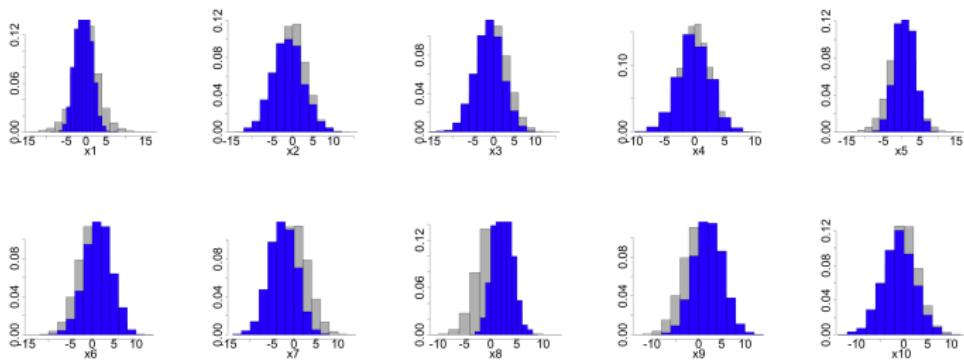
cluster size=2591;

Results for $K = 8$. Cluster 5.



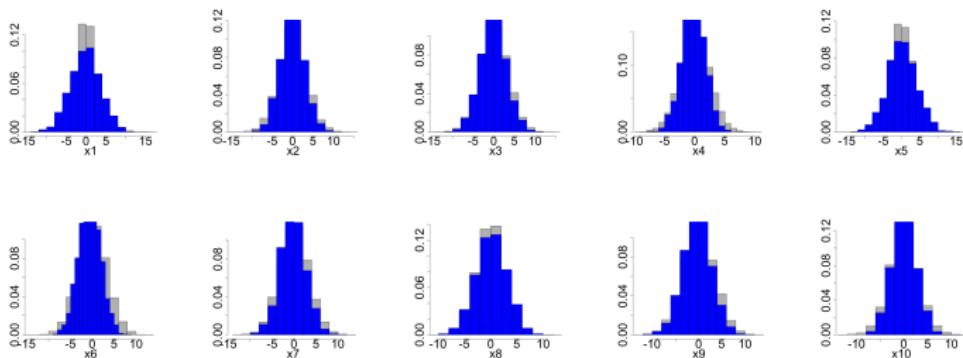
cluster size=2461;

Results for $K = 8$. Cluster 8.



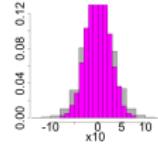
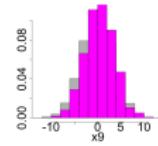
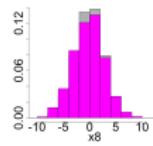
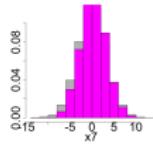
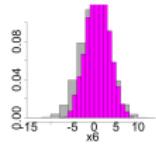
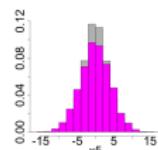
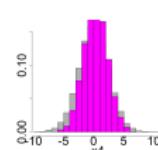
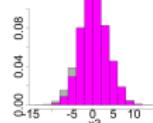
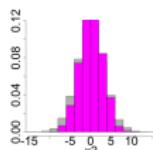
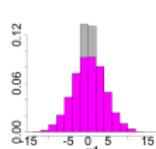
cluster size=2451;

Results for $K = 8$. Cluster 4.



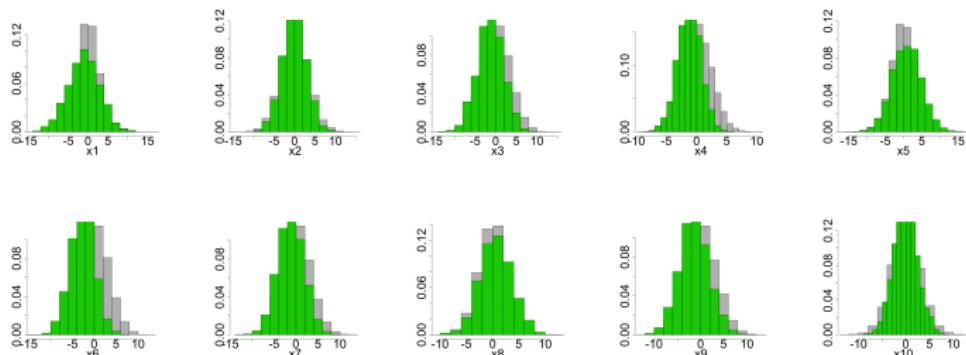
cluster size=2477;

Results for $K = 8$. Cluster 6.



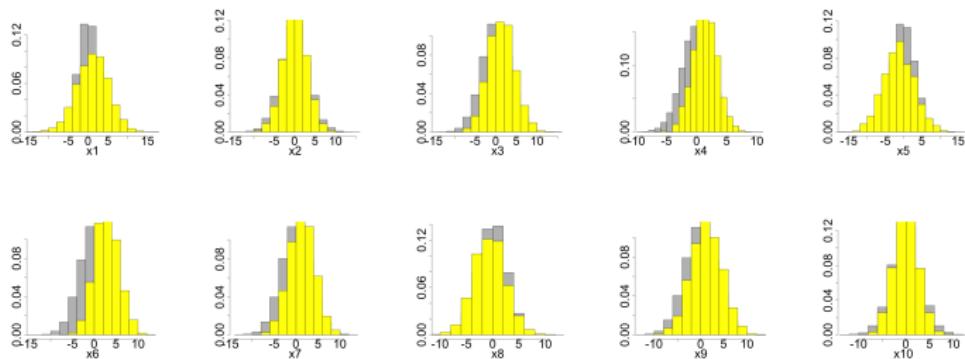
cluster size=2503;

Results for $K = 8$. Cluster 3.



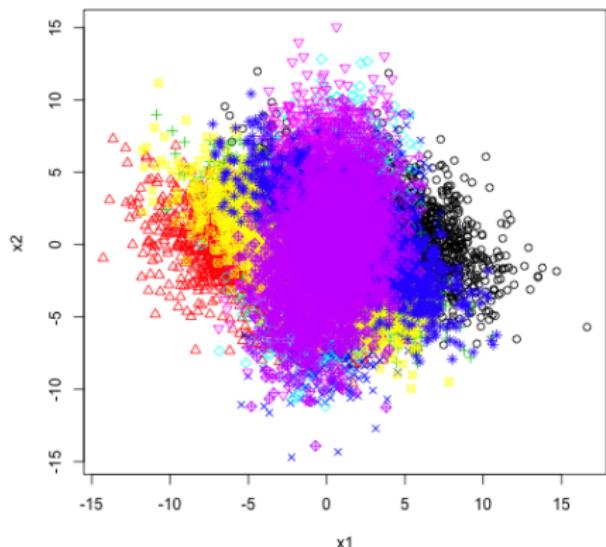
cluster size=2663;

Results for $K = 8$. Cluster 7.

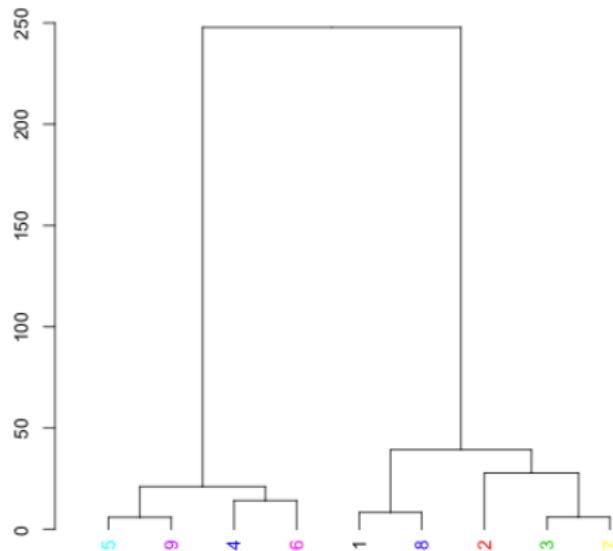


cluster size=2359;

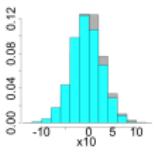
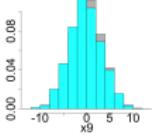
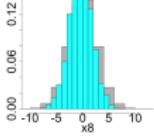
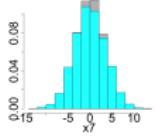
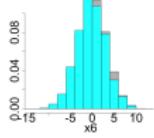
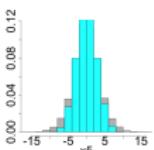
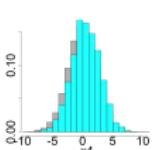
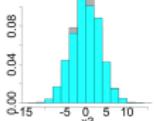
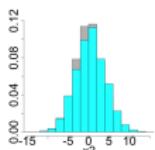
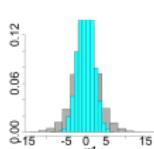
Results for $K = 9$.



Results for $K = 9$. Kullback–Leibler divergence.

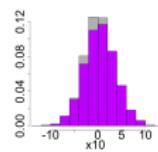
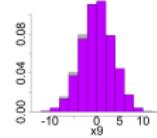
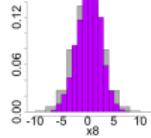
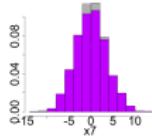
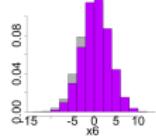
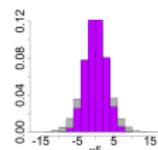
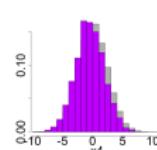
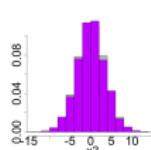
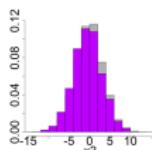
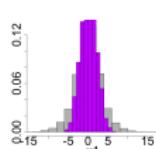


Results for $K = 9$. Cluster 5.



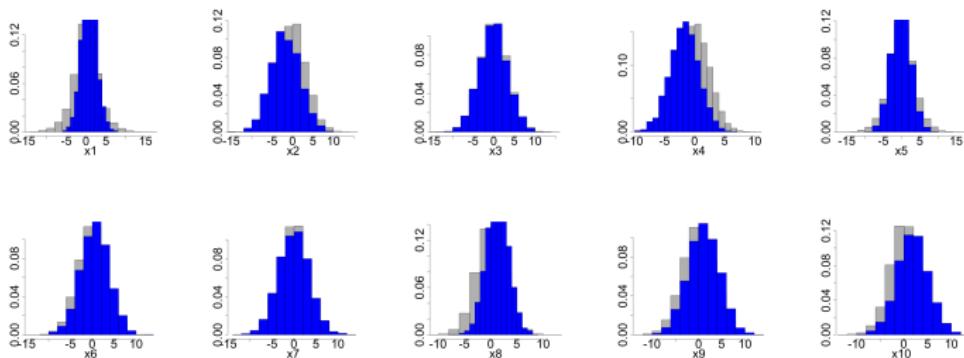
cluster size=2522;

Results for $K = 9$. Cluster 9.



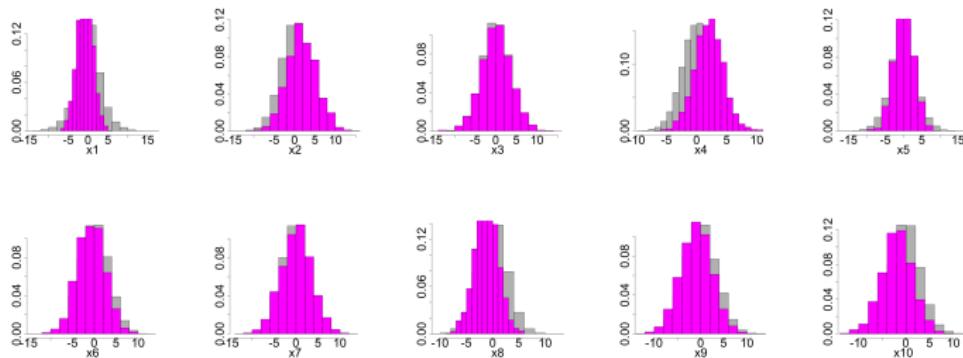
cluster size=2610;

Results for $K = 9$. Cluster 4.



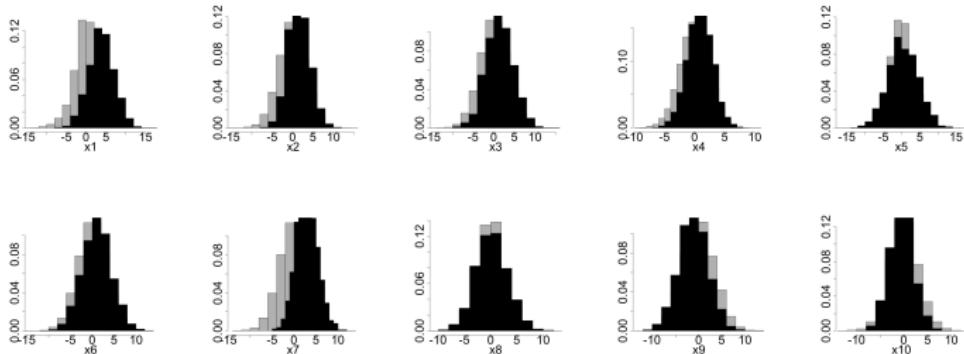
cluster size=2519;

Results for $K = 9$. Cluster 6.



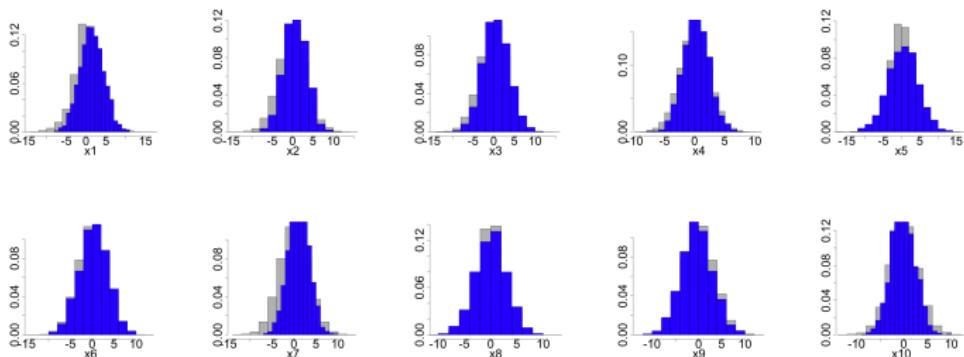
cluster size=2284;

Results for $K = 9$. Cluster 1.



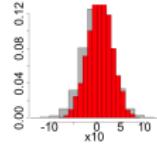
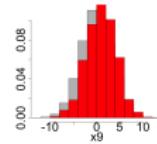
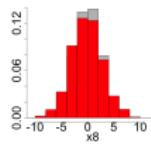
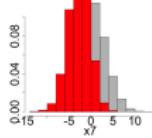
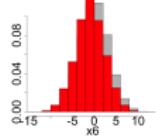
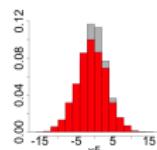
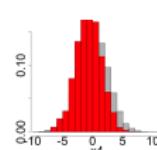
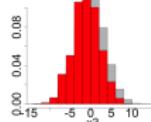
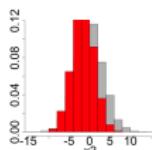
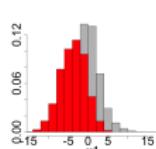
cluster size=1903;

Results for $K = 9$. Cluster 8.



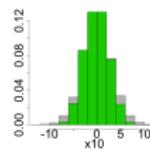
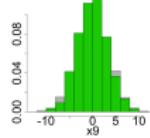
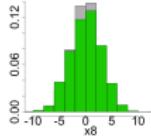
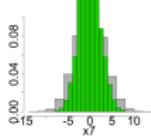
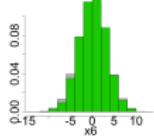
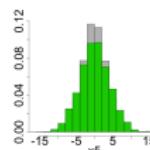
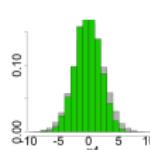
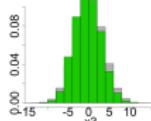
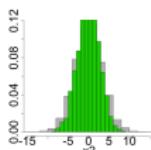
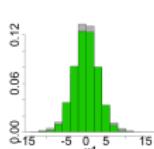
cluster size=2095;

Results for $K = 9$. Cluster 2.



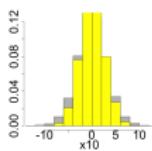
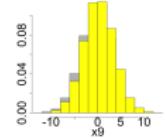
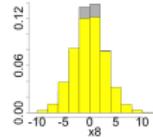
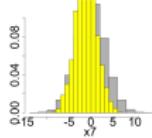
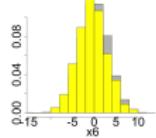
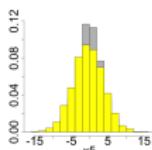
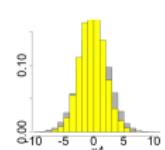
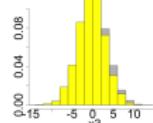
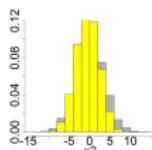
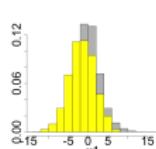
cluster size=1912;

Results for $K = 9$. Cluster 3.



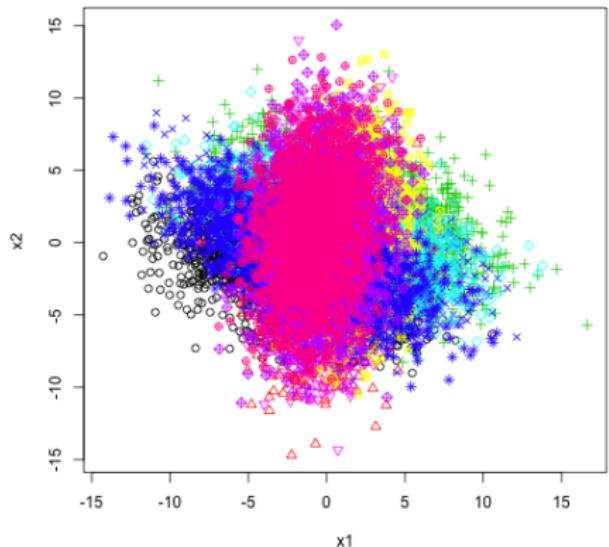
cluster size=2162;

Results for $K = 9$. Cluster 7.

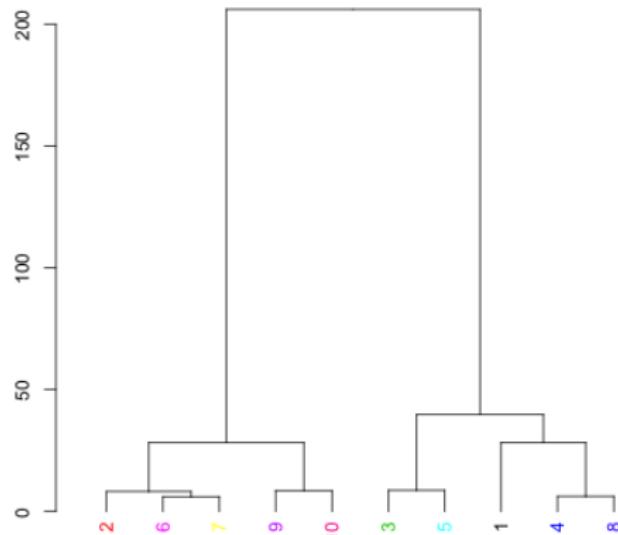


cluster size=1993;

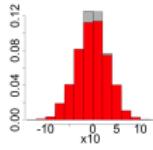
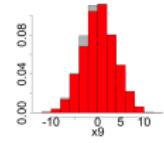
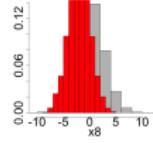
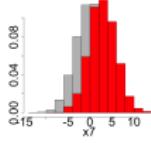
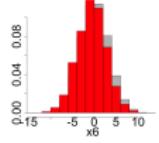
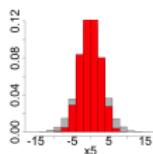
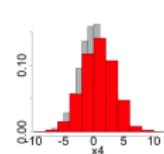
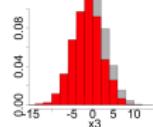
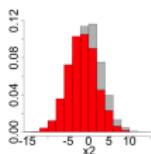
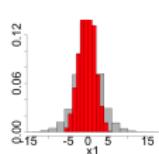
Results for $K = 10$.



Results for $K = 10$. Kullback–Leibler divergence.

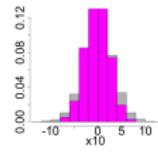
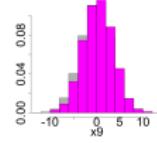
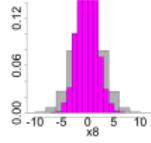
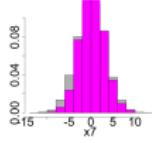
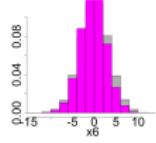
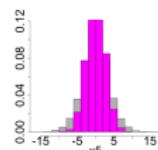
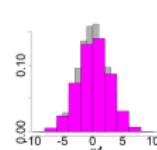
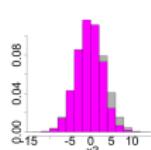
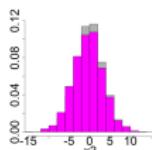
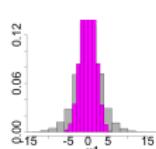


Results for $K = 10$. Cluster 2.



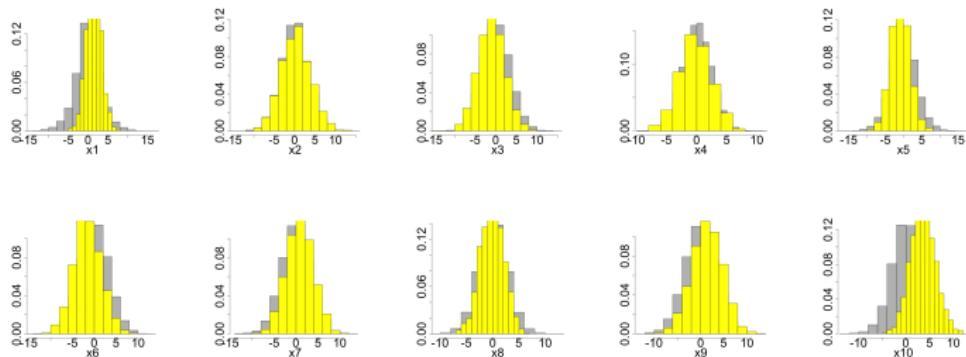
cluster size=2014;

Results for $K = 10$. Cluster 6.



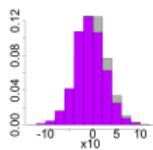
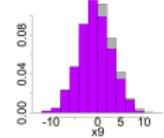
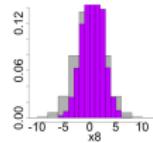
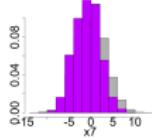
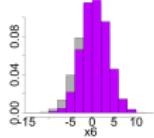
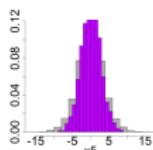
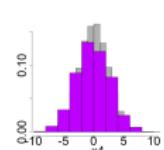
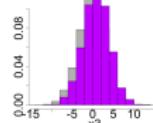
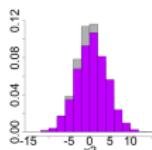
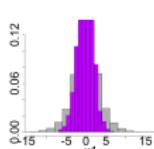
cluster size=1975;

Results for $K = 10$. Cluster 7.



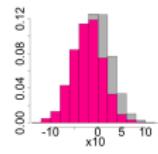
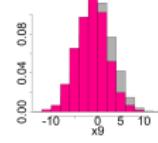
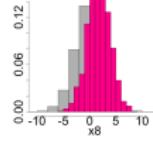
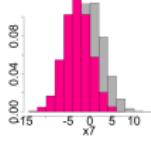
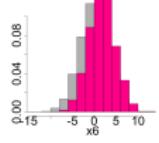
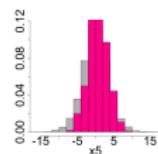
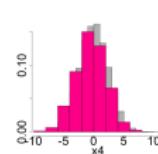
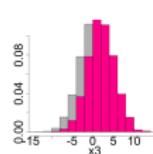
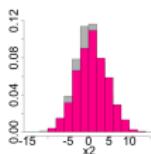
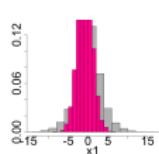
cluster size=1841;

Results for $K = 10$. Cluster 9.



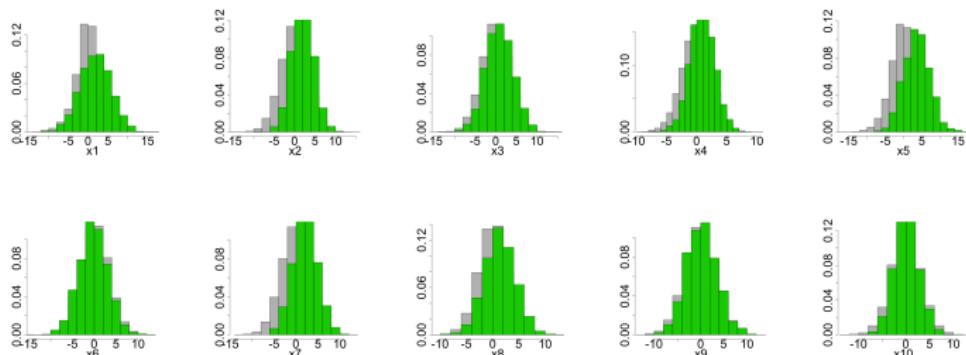
cluster size=2110;

Results for $K = 10$. Cluster 10.



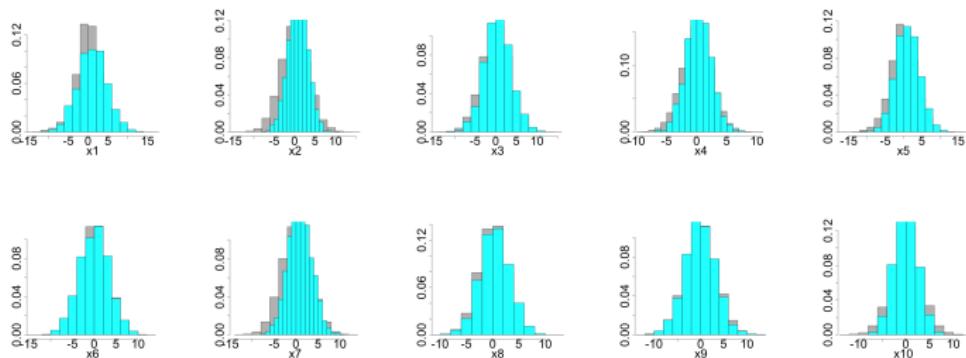
cluster size=2029;

Results for $K = 10$. Cluster 3.



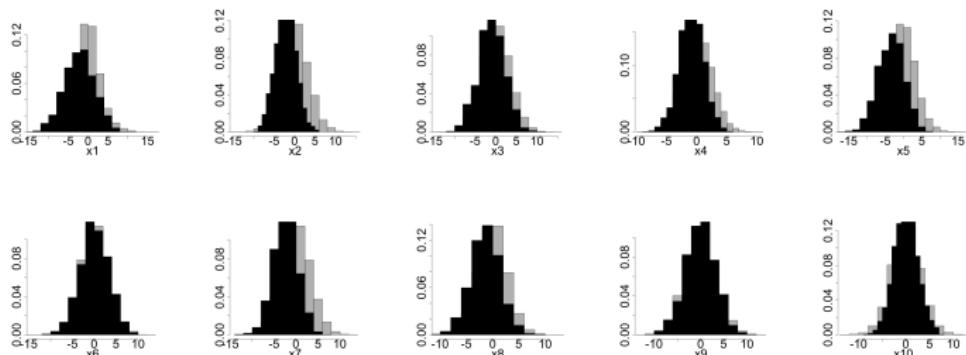
cluster size=1987;

Results for $K = 10$. Cluster 5.



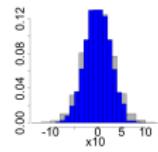
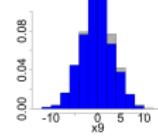
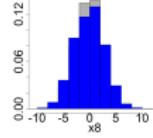
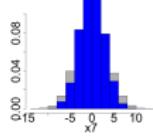
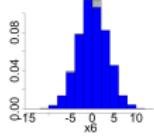
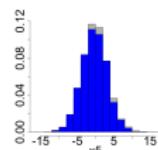
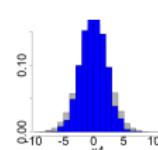
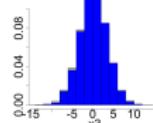
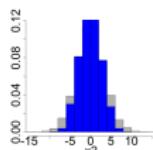
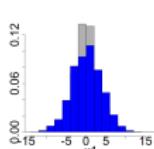
cluster size=2081;

Results for $K = 10$. Cluster 1.



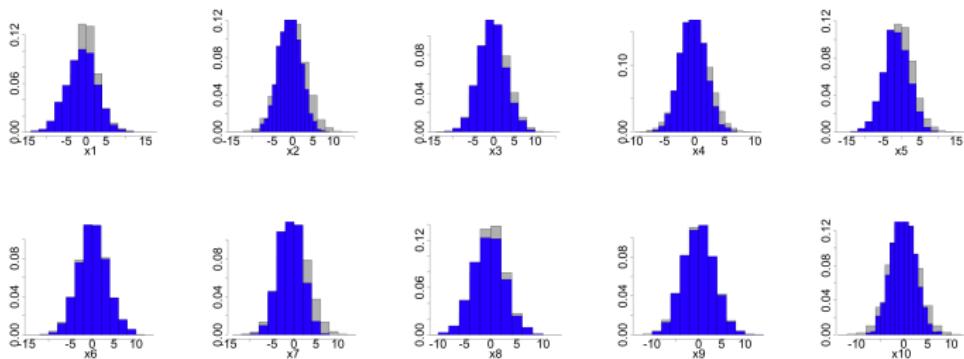
cluster size=1783;

Results for $K = 10$. Cluster 4.



cluster size=2108;

Results for $K = 10$. Cluster 8.



cluster size=2072;