

clustering method	optimal number of clusters	penalization				
		0	0.25	0.5	1	2
complete	4	0.7602	0.7594	0.7586	0.7570	0.7539
	24	0.8036	0.7989	0.7941	0.7847	0.7657
average	8	0.7938	0.7922	0.7906	0.7875	0.7812
ward.D	7	0.7867	0.7853	0.7840	0.7812	0.7757
	32	0.8266	0.8203	0.8140	0.8013	0.7761
ward.D2	54	0.8409	0.8303	0.8196	0.7983	0.7557
	6	0.7945	0.7933	0.7921	0.7898	0.7850

Table 1: Optimal number of clusters and their purity values under the normalized entropy method for various used clustering methods. The complete linkage method and both implementations of ward D method seems to be the most succesful in separating clusters according to their residences.