

## K-means results

Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	5278.37349778	0.441323720185	28931	18824	7892	2215	0	0	0	0	0
4	3949.49469428	0.374088150685	28931	12924	11383	2590	2034	0	0	0	0
5	3316.43154072	0.357716332445	28931	12107	7541	5472	2298	1513	0	0	0
6	2797.6460808	0.327134798029	28931	8373	8149	5237	4568	1618	986	0	0
7	2426.38991041	0.325437634037	28931	7283	6862	5857	4512	2371	1047	999	0
8	2161.9633617	0.318627146405	28931	6705	5737	5091	4437	2733	2455	1089	684

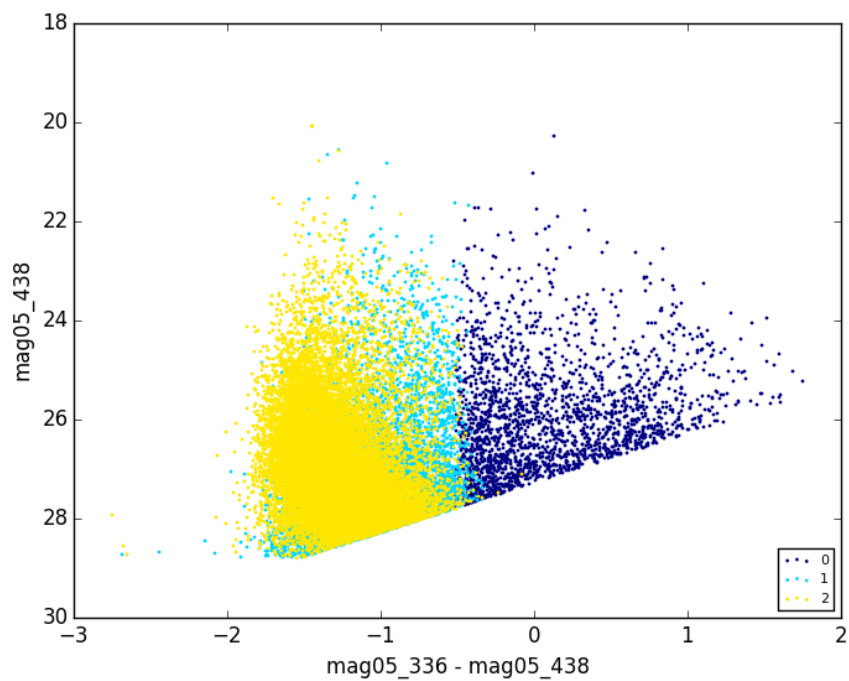


Figure 1: kmeans\_CMD\_3cl\_mag05\_336-mag05\_438vsmag05\_438.png

### kmeans results, Ncl=3

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	2215	0.441323720185	0.364276995903	0.6312	0.7676	3.5211	0.0010	0.5163	0.629640180587
2	7892	0.441323720185	0.298533167135	0.9867	0.6003	3.6706	0.0000	0.9777	0.772655093766
3	18824	0.441323720185	0.510254953662	0.9334	0.4331	3.6181	0.0000	0.6675	-0.0315463238419

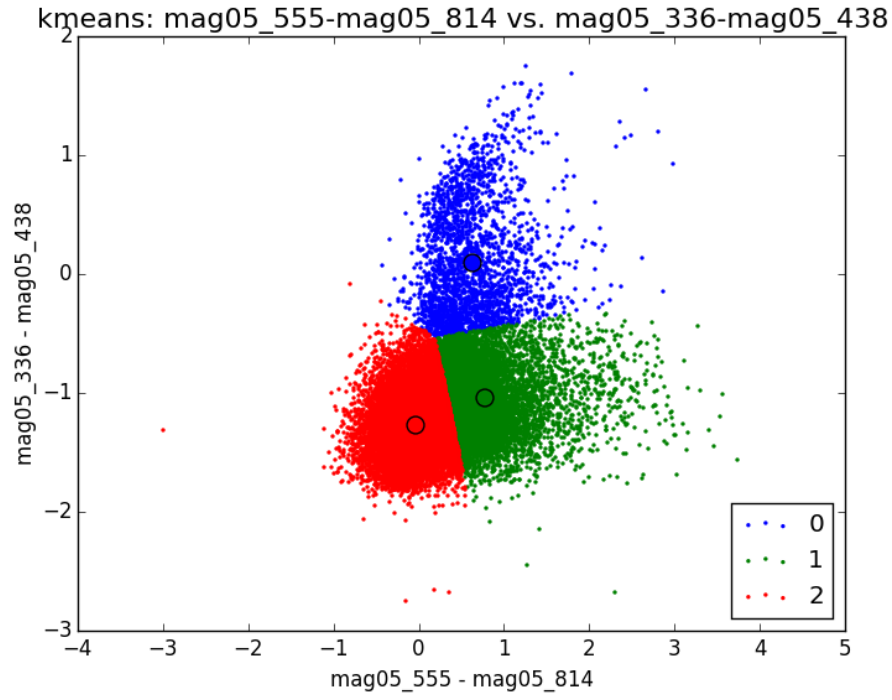


Figure 2: kmeans\_col\_3cl\_mag05\_555-mag05\_814vsmag05\_336-mag05\_438.png

### kmeans results, Ncl=4

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	2590	0.374088150685	0.283108725377	1.2251	0.6715	3.0960	0.0000	1.2191	1.27235868726
2	12924	0.374088150685	0.436395434886	0.9835	0.3667	3.6181	0.0000	0.6419	-0.13857629217
3	2034	0.374088150685	0.370246539763	0.6205	0.7377	3.6126	0.0010	0.4885	0.625460176991
4	11383	0.374088150685	0.324733077959	0.8274	0.4143	2.0780	0.0000	0.7497	0.362117543706

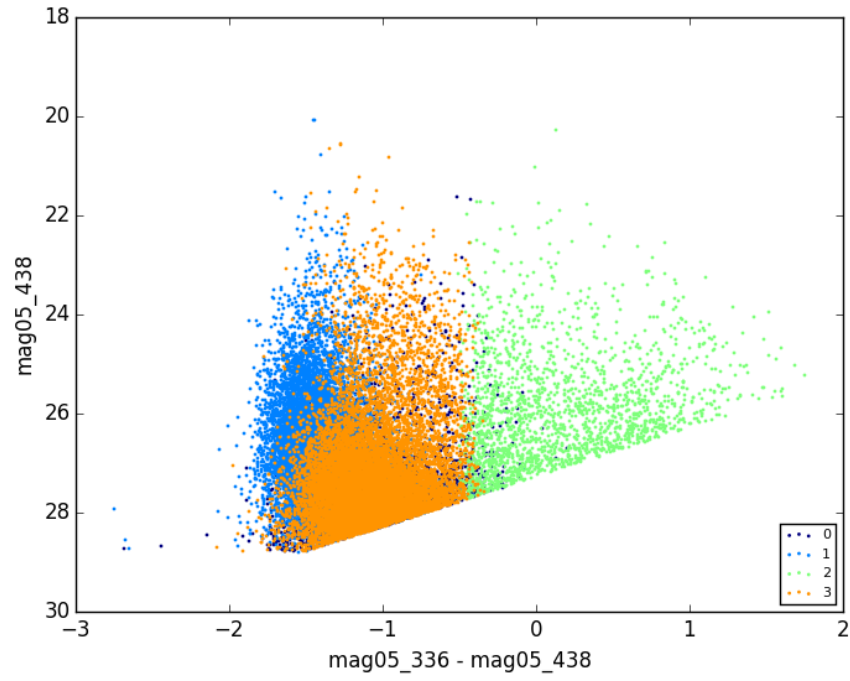


Figure 3: kmeans\_CMD\_4cl\_mag05\_336-mag05\_438vsmag05\_438.png

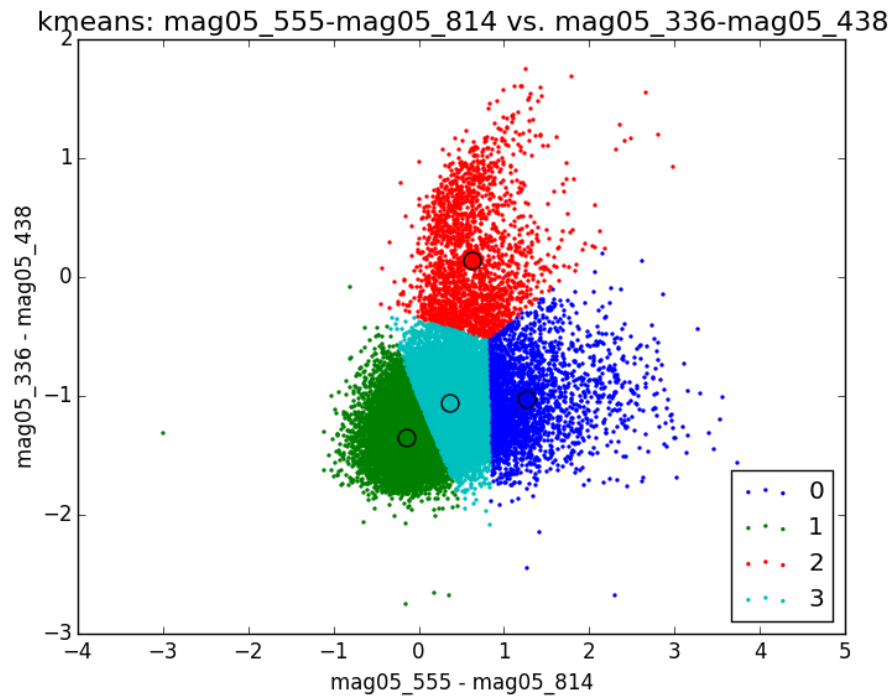


Figure 4: kmeans\_col\_4cl\_mag05\_555-mag05\_814vsmag05\_336-mag05\_438.png

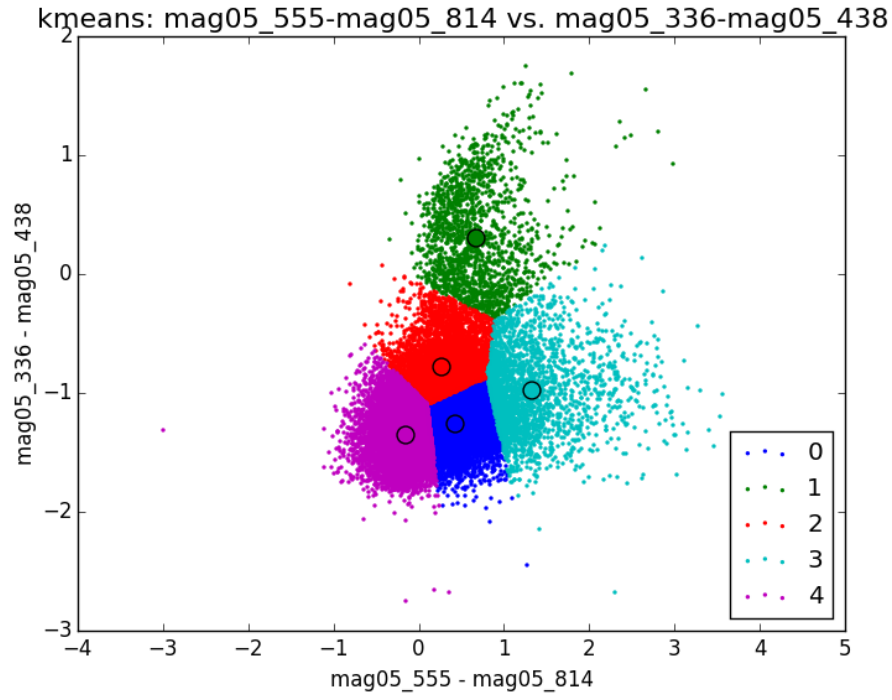


Figure 5: kmeans\_col\_5cl\_mag05\_555-mag05\_814vsmag05\_336-mag05\_438.png

### kmeans results, Ncl=5

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	7541	0.357716332445	0.340744664004	0.9575	0.3377	1.7807	0.0000	0.8619	0.423386288291
2	1513	0.357716332445	0.382460917741	0.6623	0.7025	3.3842	0.0010	0.4447	0.678442167878
3	5472	0.357716332445	0.270764284125	0.6280	0.4004	1.7801	0.0000	0.5743	0.273004203216
4	2298	0.357716332445	0.265798136289	1.2341	0.6793	3.0759	0.0000	1.2217	1.32765013055
5	12107	0.357716332445	0.421941525914	0.9843	0.3469	3.6181	0.0000	0.6322	-0.154079375568

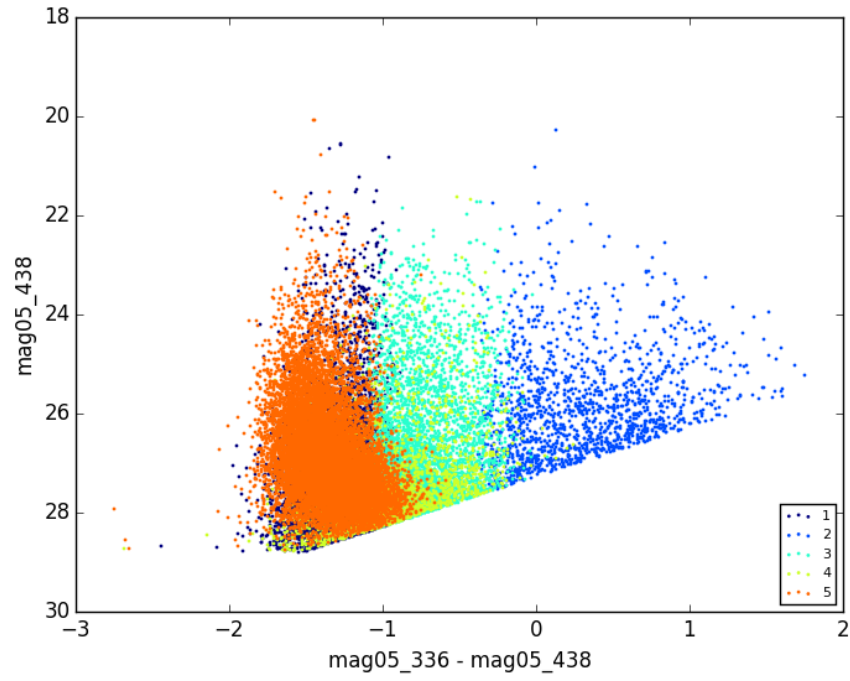


Figure 6: kmeans\_CMD\_5cl\_mag05\_336-mag05\_438vsmag05\_438.png

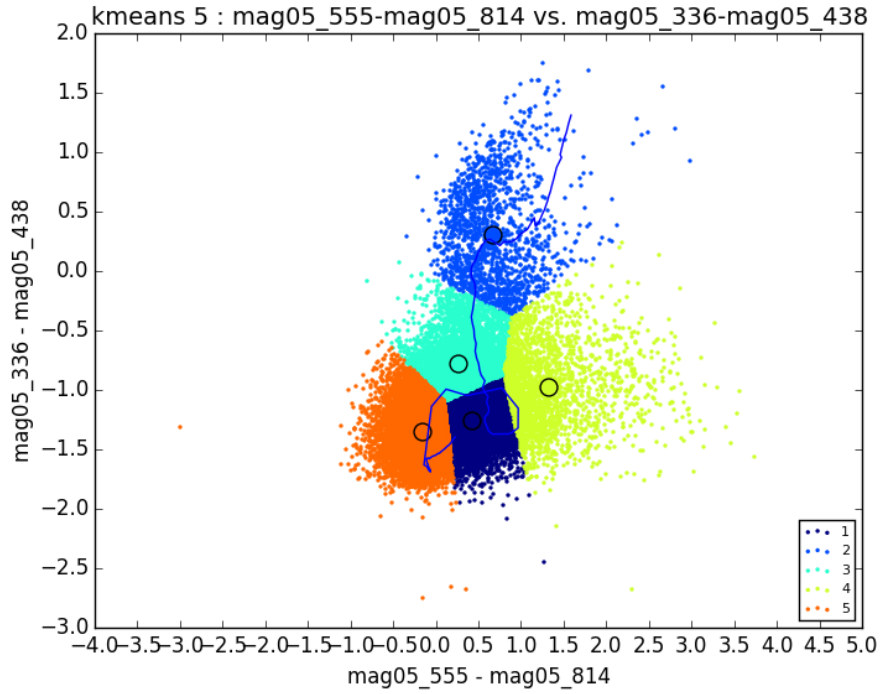


Figure 7: kmeans\_color\_5cl\_mag05\_555-mag05\_814vsmag05\_336-mag05\_438.png

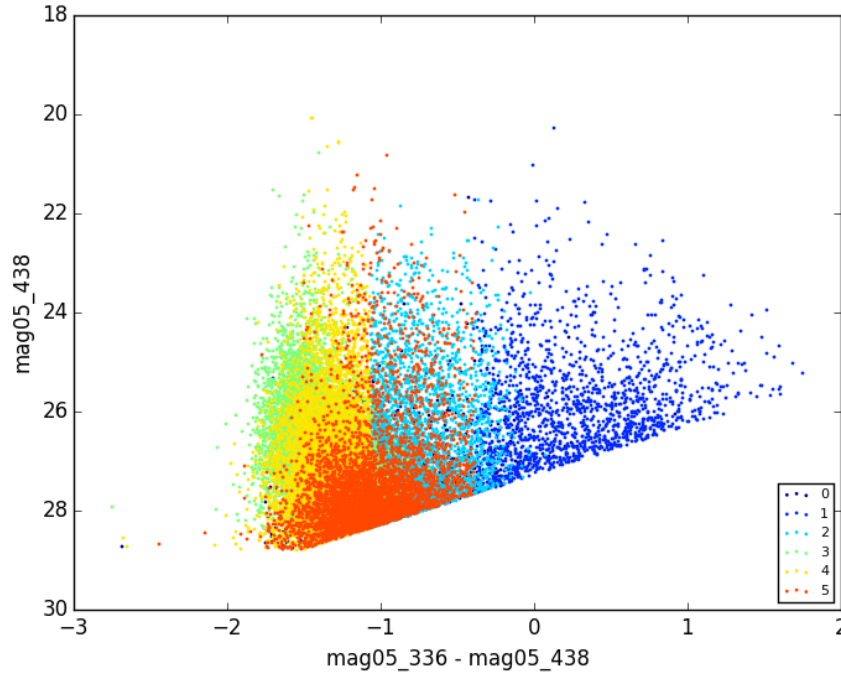


Figure 8: kmeans\_CMD\_6cl\_mag05\_336-mag05\_438vsmag05\_438.png

### kmeans results, Ncl=6

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	986	0.327134798029	0.289221413894	1.4537	0.7197	3.6657	0.0014	1.3965	1.73643509128	-0
2	1618	0.327134798029	0.380294081849	0.6496	0.7025	3.2833	0.0010	0.4516	0.673167490729	0
3	5237	0.327134798029	0.274068646473	0.6282	0.3656	1.5610	0.0000	0.5417	0.181646362421	-0
4	8373	0.327134798029	0.342845038813	1.0074	0.3223	3.1864	0.0000	0.5999	-0.238799116207	-1
5	8149	0.327134798029	0.356649965864	0.9559	0.2773	1.6420	0.0000	0.7762	0.202414652105	-1
6	4568	0.327134798029	0.295877653211	0.9577	0.4109	2.1009	0.0000	0.9457	0.765327276708	-1

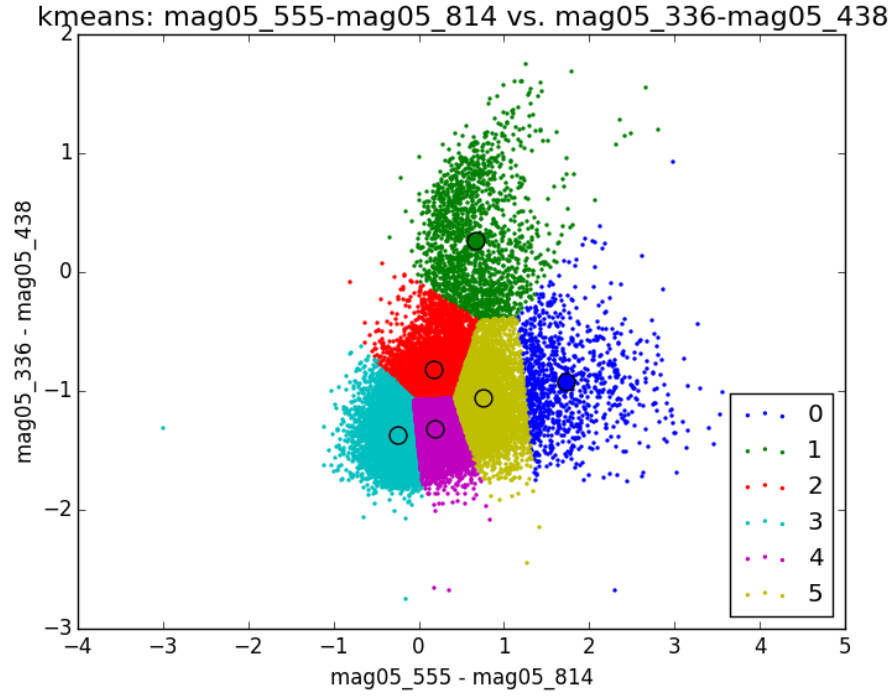


Figure 9: kmeans\_col\_6cl\_mag05\_555-mag05\_814vsmag05\_336-mag05\_438.png

### kmeans results, Ncl=7

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	4512	0.325437634037	0.318520816701	0.9775	0.3678	1.7844	0.0000	0.9537	0.71592287234	-
2	2371	0.325437634037	0.272354728739	0.5769	0.4496	1.8190	0.0000	0.5749	0.563392239561	-0
3	999	0.325437634037	0.393800822187	0.7102	0.6387	3.2833	0.0010	0.3787	0.677422422422	0
4	6862	0.325437634037	0.34860129239	0.9866	0.2569	1.5662	0.0000	0.7882	0.181273389682	-
5	7283	0.325437634037	0.339025223266	1.0233	0.3065	3.1864	0.0000	0.5982	-0.258846079912	-
6	1047	0.325437634037	0.292099179995	1.4375	0.7133	3.6657	0.0010	1.3845	1.707747851	-0
7	5857	0.325437634037	0.302519988266	0.7025	0.3010	1.5655	0.0000	0.5506	0.0869204370838	-0



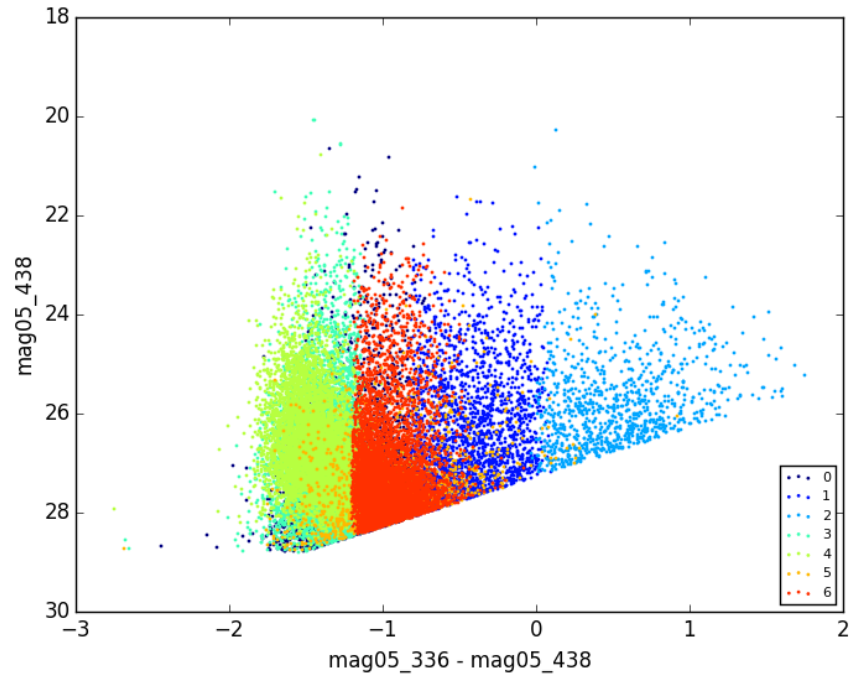


Figure 10: kmeans\_CMD\_7cl\_mag05\_336-mag05\_438vsmag05\_438.png

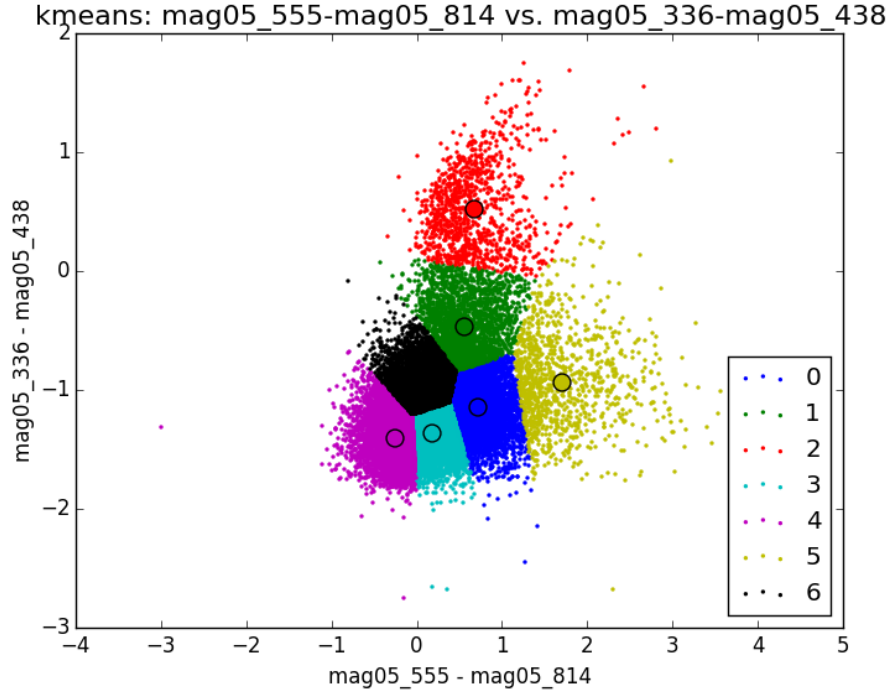


Figure 11: kmeans\_col\_7cl\_mag05\_555-mag05\_814vsmag05\_336-mag05\_438.png

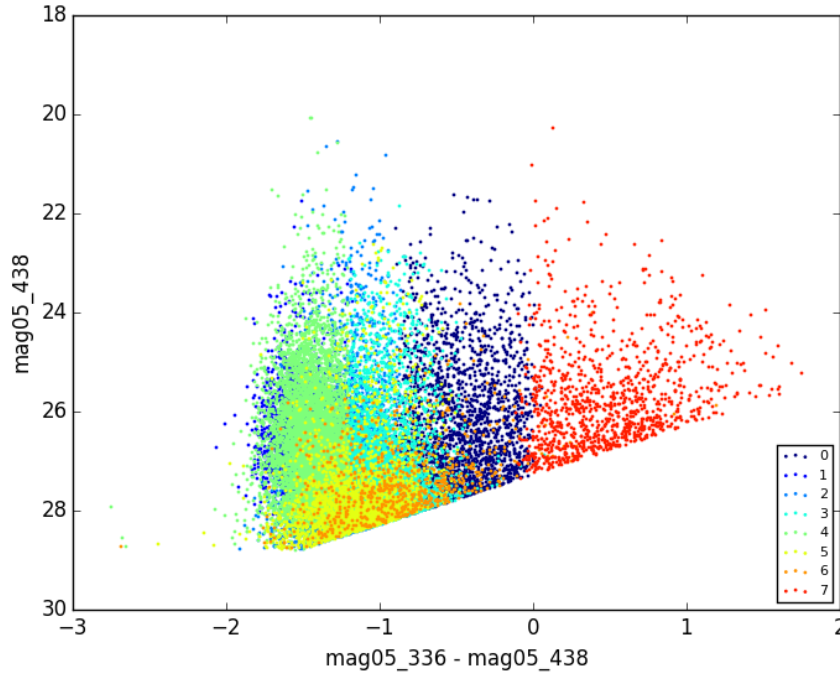


Figure 12: kmeans\_CMD\_8cl\_mag05\_336-mag05\_438vsmag05\_438.png

### kmeans results, Ncl=8

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	2733	0.318627146405	0.267865824732	0.5894	0.4299	1.6155	0.0000	0.5894	0.534501280644	-0
2	4437	0.318627146405	0.284168873182	1.0268	0.2947	2.8561	0.0000	0.5452	-0.352311471715	-
3	5737	0.318627146405	0.318514011716	0.9122	0.2763	1.1009	0.0000	0.823	0.414662890012	-
4	5091	0.318627146405	0.311235084966	0.7087	0.2828	1.4647	0.0000	0.5188	0.010273816539	-0
5	6705	0.318627146405	0.366814441017	1.0209	0.2316	1.5692	0.0000	0.7385	0.0216935123042	-
6	2455	0.318627146405	0.300363414427	1.0811	0.3989	1.9563	0.0000	1.0779	0.971064358452	-
7	684	0.318627146405	0.282575379406	1.5415	0.7323	3.9084	0.0014	1.4493	1.91125	-0
8	1089	0.318627146405	0.388696153905	0.6939	0.6498	3.2592	0.0010	0.3865	0.673181818182	0

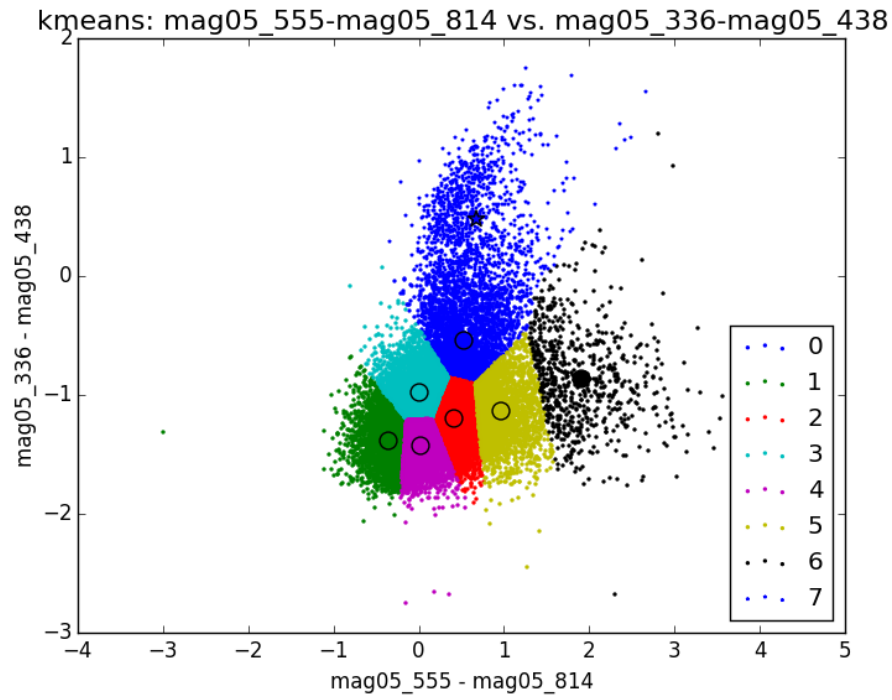


Figure 13: kmeans\_col\_8cl\_mag05\_555-mag05\_814vsmag05\_336-mag05\_438.png

## Meanshift results

Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
0.4000	8	0.423655037956	28931	25308	2518	917	76	57	48	6	1	0	0
0.4500	5	0.398192793433	28931	28074	533	314	9	1	0	0	0	0	0
0.5500	5	0.396201830892	28931	28129	487	305	9	1	0	0	0	0	0
0.6000	5	0.403710381544	28931	27927	706	288	9	1	0	0	0	0	0

# meanshift results, Ncl=5

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	28074	0.398192793433	0.395193940332	0.9112	0.6945	3.1576	0.0000	0.7822	0.0374415470992
2	533	0.398192793433	0.402914916275	1.1013	0.9747	3.3483	0.0010	0.6842	2.507
3	9	0.398192793433	0.389414636131	1.6441	0.7661	1.4671	0.1126	1.2532	0.129333333333
4	1	0.398192793433	0.0	N/A	N/A	N/A	N/A	0.841	-2.999
5	314	0.398192793433	0.65981733707	1.7661	0.6264	2.7002	0.0022	1.7031	2.306
1	28129	0.396201830892	0.393592138721	0.9111	0.6988	3.1576	0.0000	0.7833	0.059537371334
2	487	0.396201830892	0.381530128126	1.1372	1.0031	3.3483	0.0010	0.7126	2.574
3	9	0.396201830892	0.390850753176	1.6441	0.7661	1.4671	0.1126	1.2532	0.129333333333
4	305	0.396201830892	0.661767443525	1.7702	0.6211	2.7002	0.0022	1.7071	2.306
5	1	0.396201830892	0.0	N/A	N/A	N/A	N/A	0.841	-2.999
1	27927	0.403710381544	0.40165002817	0.9121	0.6834	3.1042	0.0000	0.7799	0.0699693501455
2	706	0.403710381544	0.380539856297	1.0570	0.9839	3.3483	0.0010	0.6938	2.29722222222
3	9	0.403710381544	0.385445453157	1.6441	0.7661	1.4671	0.1126	1.2532	0.129333333333
4	1	0.403710381544	0.0	N/A	N/A	N/A	N/A	0.841	-2.999
5	288	0.403710381544	0.662272792068	1.7795	0.6238	2.7002	0.0022	1.7192	2.306

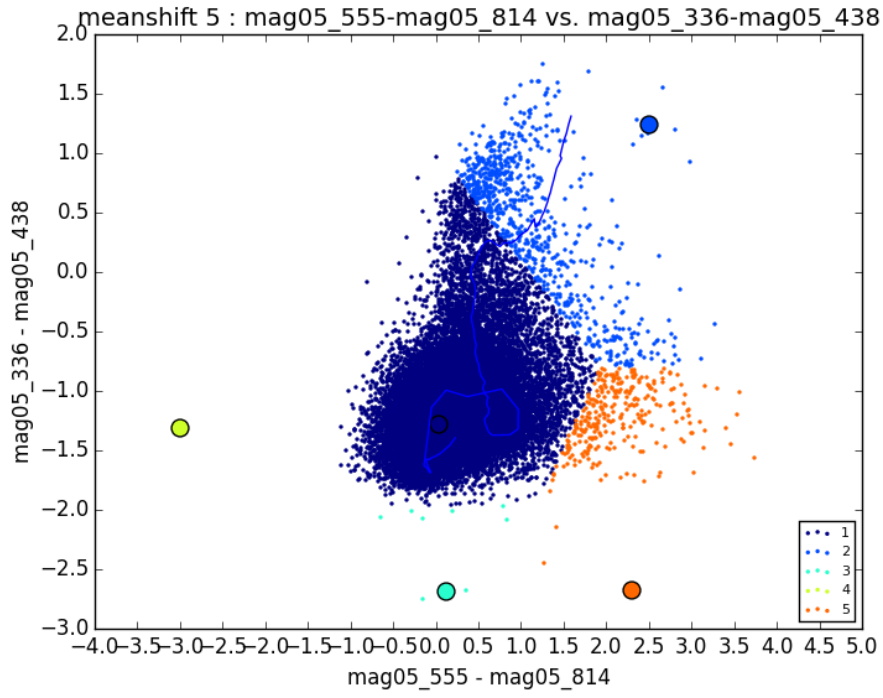


Figure 14: meanshift\_color\_5cl\_mag05\_555-mag05\_814vsmag05\_336-mag05\_438.png

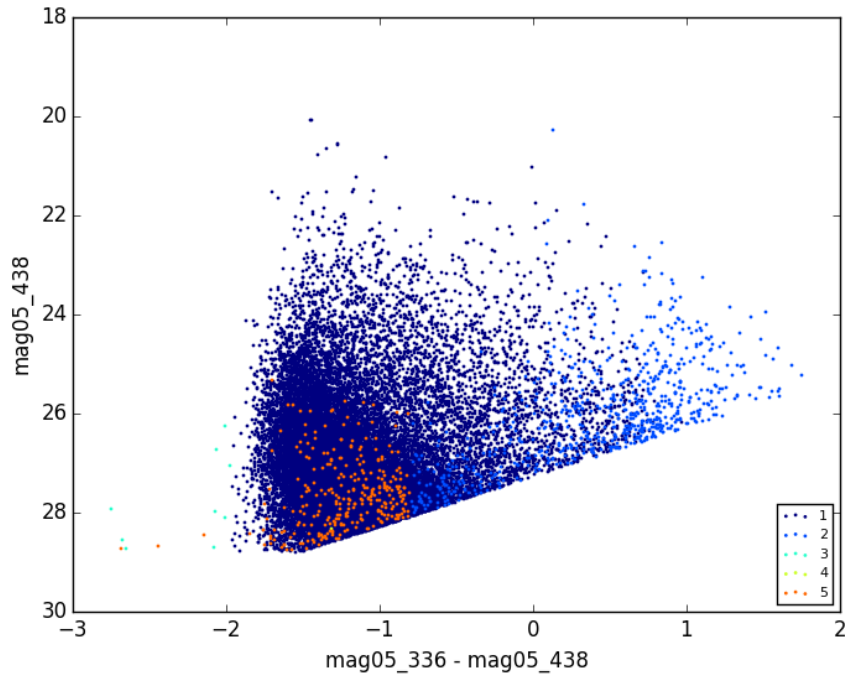


Figure 15: meanshift\_CMD\_5cl\_mag05\_336-mag05\_438vsmag05\_438.png

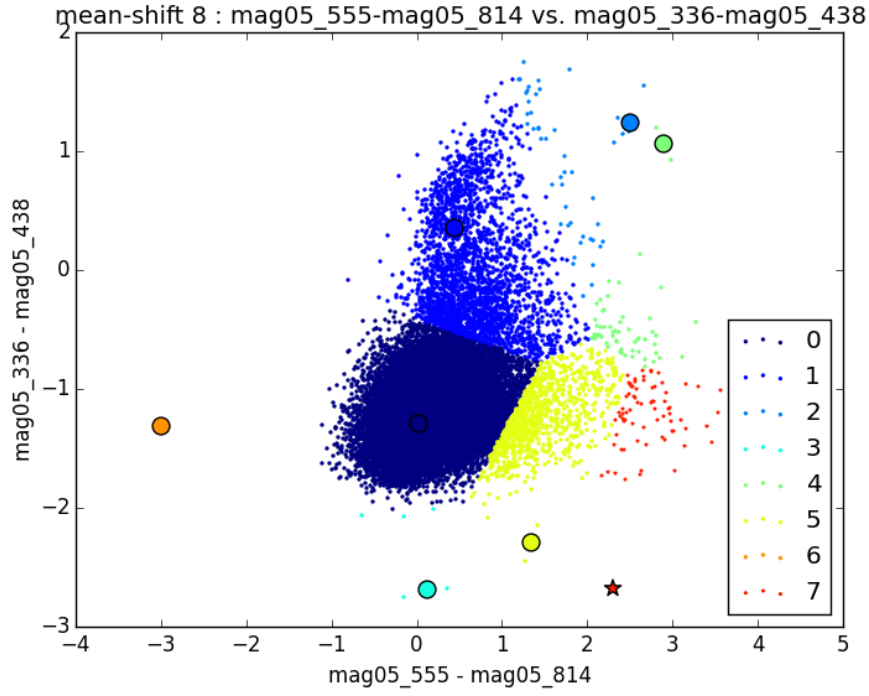


Figure 16: meanshift\_color\_8cl\_mag05\_555-mag05\_814vsmag05\_336-mag05\_438.png

### meanshift results, Ncl=8

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	25308	0.423655037956	0.437078061593	0.9208	0.5636	2.6570	0.0000	0.7468	0.0269134952956
2	2518	0.423655037956	0.293889818625	0.6526	0.7763	2.8517	0.0010	0.5605	0.443727272727
3	48	0.423655037956	0.346289657874	1.4629	0.8321	2.0867	0.0114	0.6342	2.507
4	6	0.423655037956	0.446958795254	1.7076	0.6665	1.1671	0.1724	1.2125	0.129333333333
5	57	0.423655037956	0.424221939843	1.7871	0.5005	2.0083	0.0142	1.488	2.892
6	917	0.423655037956	0.416504502352	1.3936	0.5566	2.0465	0.0010	1.3893	1.3395
7	1	0.423655037956	0.0	N/A	N/A	N/A	N/A	0.841	-2.999
8	76	0.423655037956	0.391563439702	2.1323	0.5320	2.0884	0.0036	1.9984	2.306

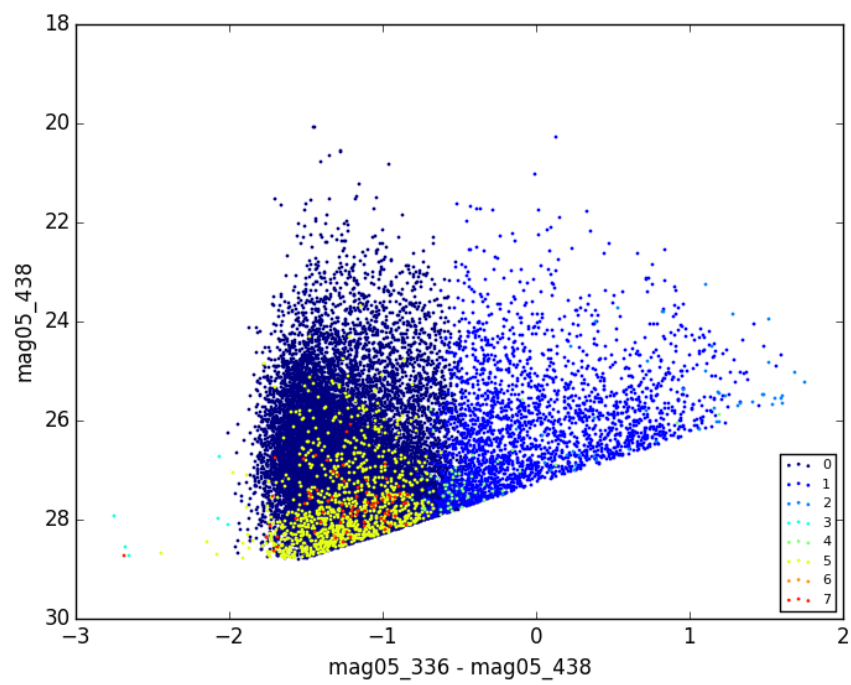


Figure 17: meanshift\_CMD\_8cl\_mag05\_336-mag05\_438vsmag05\_438.png