

## K-means results

Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	1694.06881942	0.430270830228	8558	5022	2636	900	0	0	0	0	0
4	1264.80632528	0.413971067432	8558	4461	2667	795	635	0	0	0	0
5	1063.33872303	0.359372628689	8558	3536	2774	1155	641	452	0	0	0
6	934.575894672	0.331572849548	8558	2918	2456	1175	1092	481	436	0	0
7	836.115760634	0.319624961692	8558	2377	2355	1311	1155	585	525	250	0
8	745.867862414	0.321014318136	8558	2202	2126	1345	1296	619	572	262	136

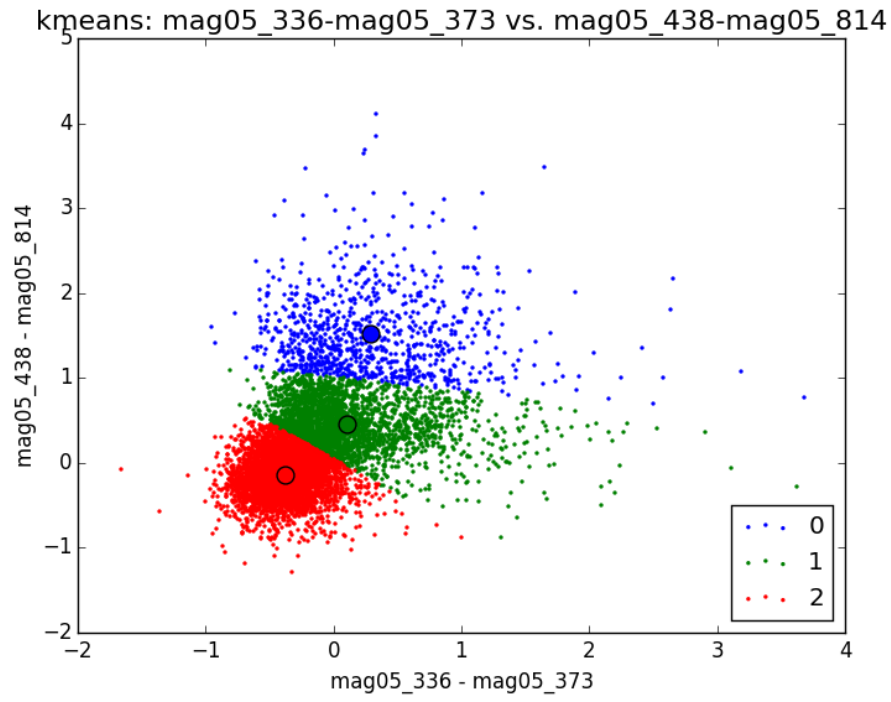


Figure 1: kmeans\_col\_3cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

### kmeans results, Ncl=3

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	900	0.430270830228	0.280912863111	1.2029	0.8775	4.7513	0.0010	0.7985	0.292061111111	1.
2	2636	0.430270830228	0.257540231666	0.4945	0.6064	4.6372	0.0010	0.406	0.112613050076	0.4
3	5022	0.430270830228	0.547702138116	0.3602	0.3871	2.7746	0.0000	0.2503	-0.37530784548	-0.

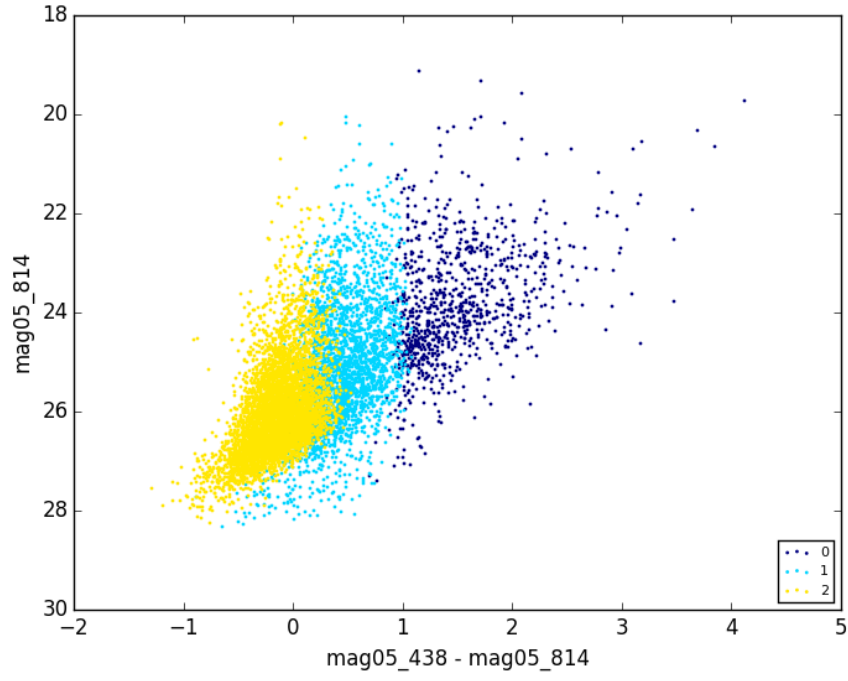


Figure 2: kmeans\_CMD\_3cl\_mag05\_438-mag05\_814vsmag05\_814.png

### kmeans results, Ncl=4

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	635	0.413971067432	0.302171519979	0.8383	0.7159	3.4651	0.0014	0.4739	0.877985826772	0
2	2667	0.413971067432	0.356077732711	0.3882	0.4236	1.7593	0.0000	0.3594	-0.122555305587	0
3	4461	0.413971067432	0.482013380196	0.3668	0.3657	2.3512	0.0000	0.2311	-0.380758574311	-0
4	795	0.413971067432	0.315678588301	1.2027	0.7770	3.2939	0.0010	0.8281	0.179628930818	1

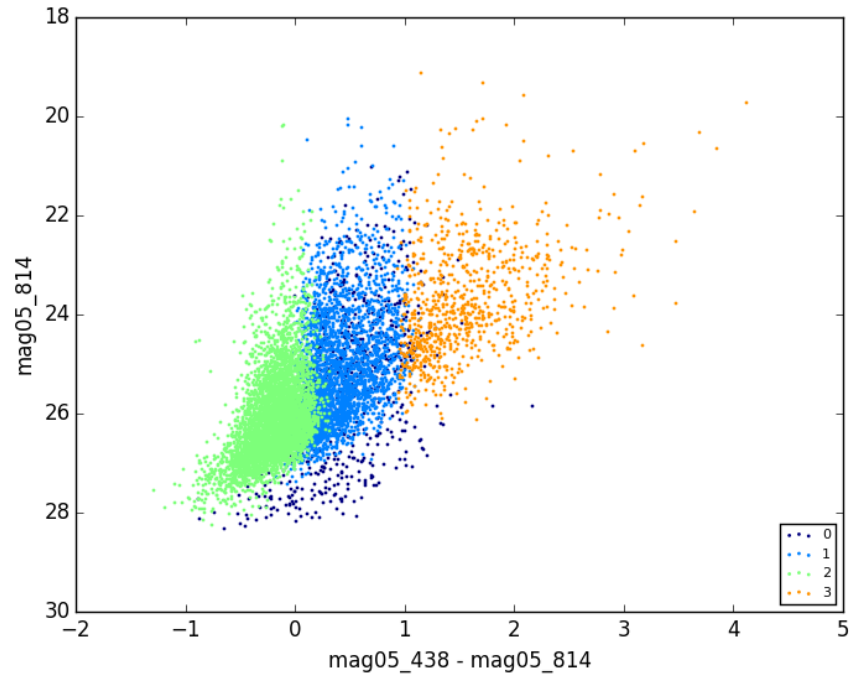


Figure 3: kmeans\_CMD\_4cl\_mag05\_438-mag05\_814vsmag05\_814.png

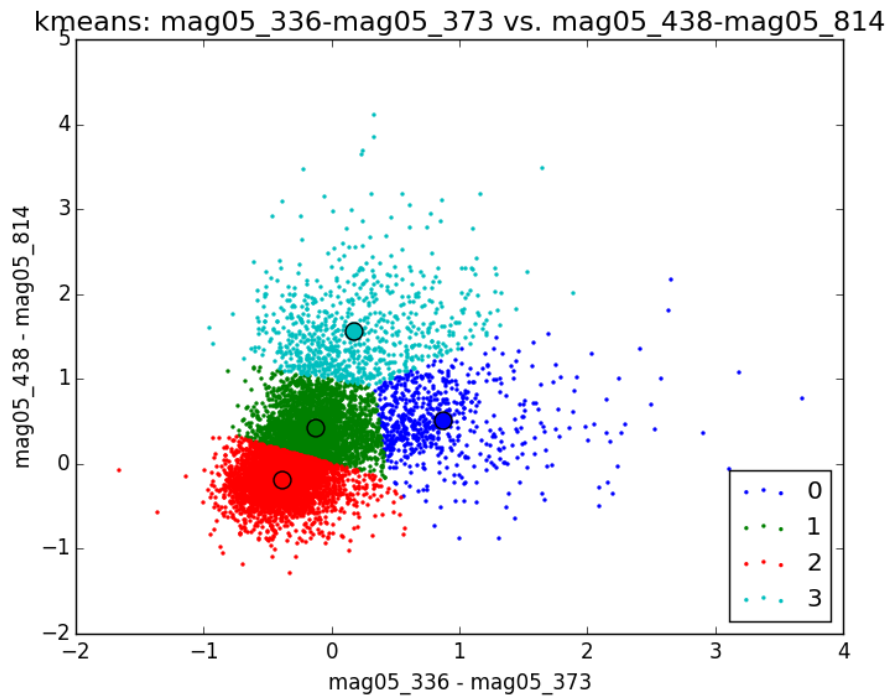


Figure 4: kmeans\_col\_4cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

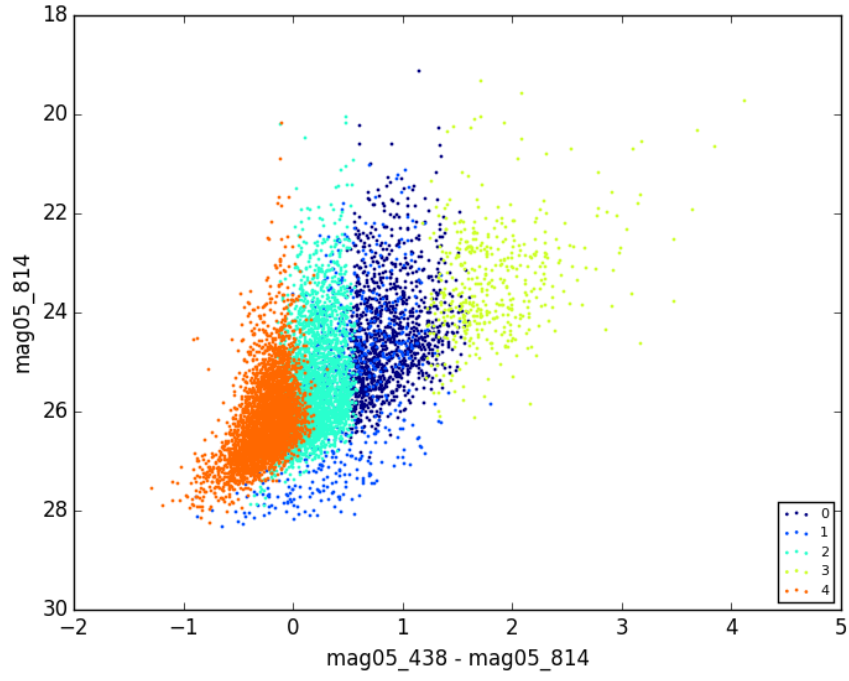


Figure 5: kmeans\_CMD\_5cl\_mag05\_438-mag05\_814vsmag05\_814.png

### kmeans results, Ncl=5

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	1155	0.359372628689	0.35346498934	0.6705	0.4410	1.6830	0.0010	0.535	-0.0692917748918
2	641	0.359372628689	0.286872668944	0.8223	0.7039	3.3803	0.0014	0.469	0.866979719189
3	2774	0.359372628689	0.324548520906	0.2730	0.3523	1.5359	0.0000	0.2727	-0.174763518385
4	452	0.359372628689	0.276989575265	1.4044	0.8028	3.4443	0.0020	0.8828	0.342265486726
5	3536	0.359372628689	0.412295426421	0.3935	0.3360	2.3512	0.0000	0.2124	-0.415923359729

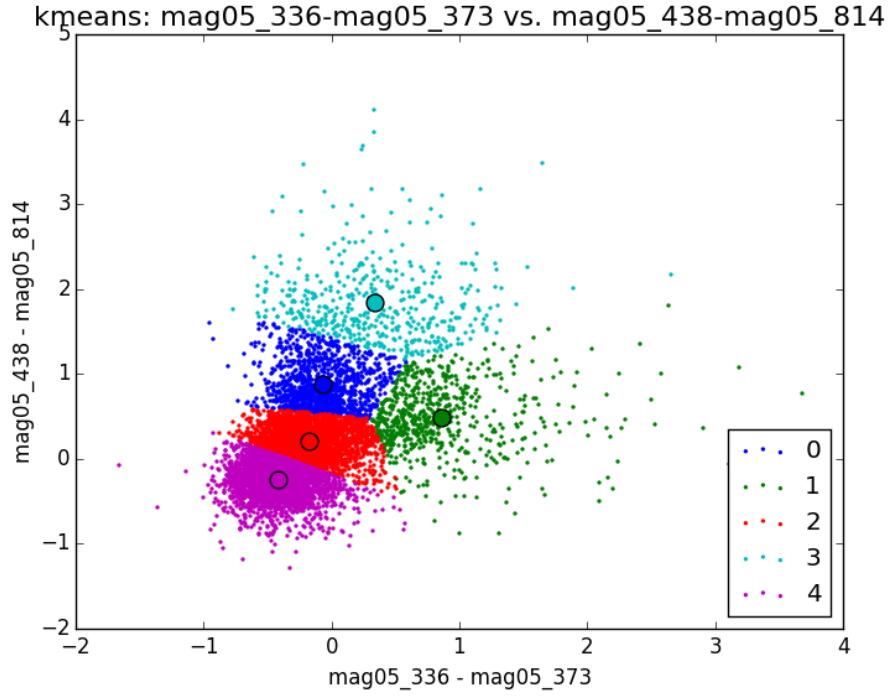


Figure 6: kmeans\_col\_5cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

### kmeans results, Ncl=6

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	436	0.331572849548	0.275729896356	1.4089	0.7869	2.9585	0.0020	0.894	0.319346330275
2	1092	0.331572849548	0.357158632205	0.6814	0.4297	1.6103	0.0010	0.5489	-0.0884249084249
3	481	0.331572849548	0.234852543175	0.9396	0.7296	3.3435	0.0014	0.4895	1.00911226611
4	2456	0.331572849548	0.348626165742	0.3055	0.2850	1.0606	0.0000	0.2899	-0.33798004886
5	2918	0.331572849548	0.350787649576	0.4039	0.3218	2.3512	0.0000	0.1954	-0.411324880055
6	1175	0.331572849548	0.284746116983	0.2858	0.3691	1.7825	0.0010	0.2154	0.150786382979

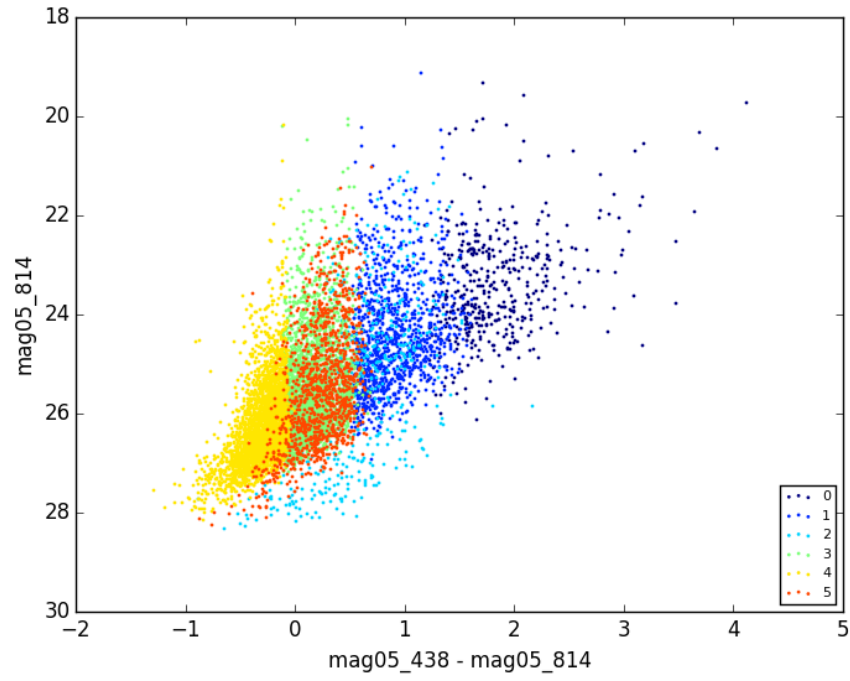


Figure 7: kmeans\_CMD\_6cl\_mag05\_438-mag05\_814vsmag05\_814.png

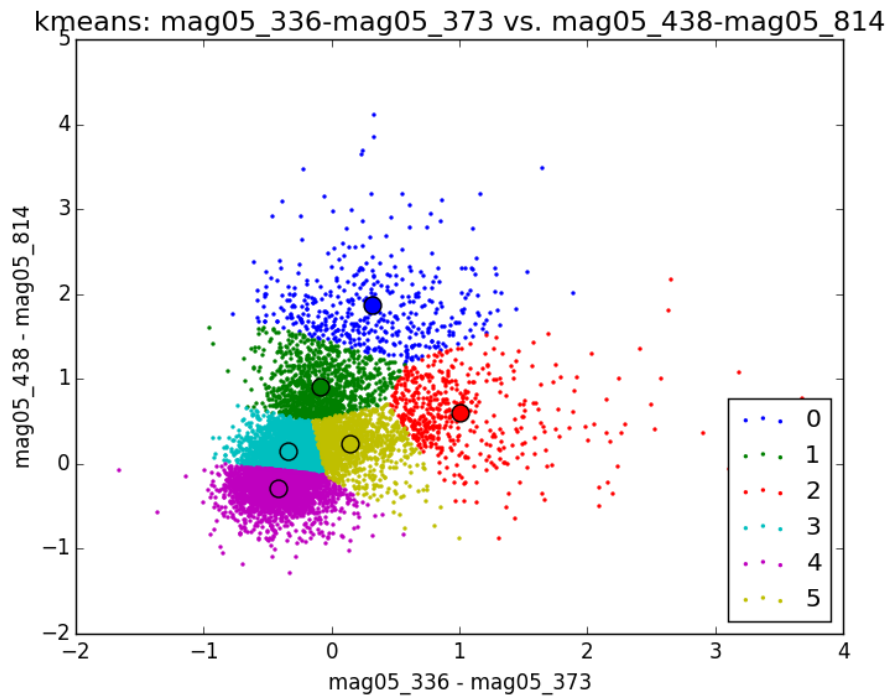


Figure 8: kmeans\_col\_6cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

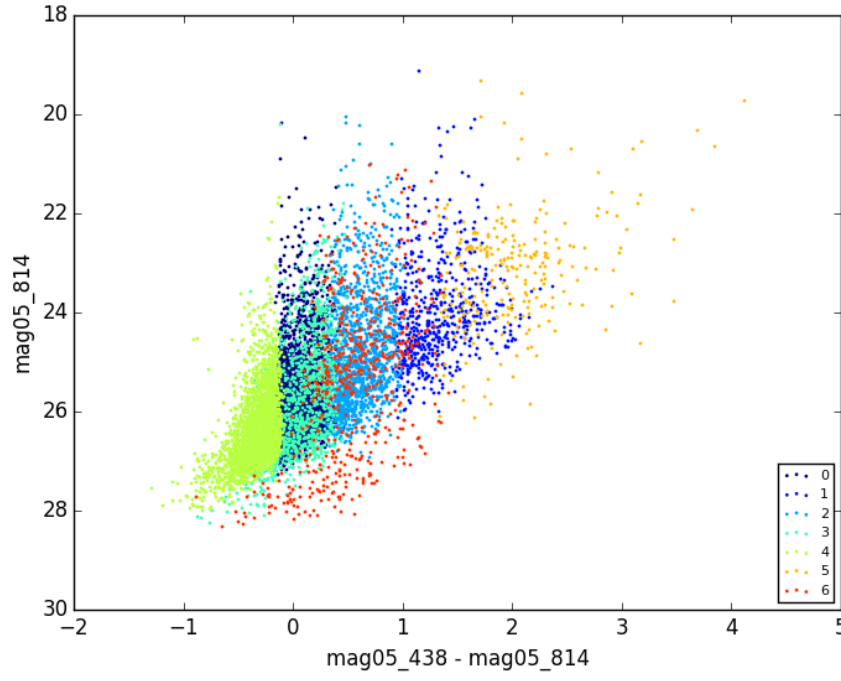


Figure 9: kmeans\_CMD\_7cl\_mag05\_438-mag05\_814vsmag05\_814.png

### kmeans results, Ncl=7

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	2377	0.319624961692	0.365478491136	0.3051	0.2538	0.9187	0.0000	0.2624	-0.37567690366
2	585	0.319624961692	0.309438952005	0.9815	0.5080	1.8002	0.0010	0.7305	-0.0157777777778
3	1311	0.319624961692	0.337223487347	0.4776	0.3424	1.1586	0.0010	0.4125	-0.12460259344
4	1155	0.319624961692	0.250423333285	0.2215	0.3508	1.6228	0.0010	0.2034	0.0957333333333
5	2355	0.319624961692	0.320168288462	0.4253	0.3060	2.1246	0.0000	0.1845	-0.432526539278
6	250	0.319624961692	0.241108103872	1.5680	0.8029	3.3080	0.0061	0.8633	0.586888
7	525	0.319624961692	0.266617094577	0.8914	0.6985	3.3591	0.0014	0.4679	0.955773333333



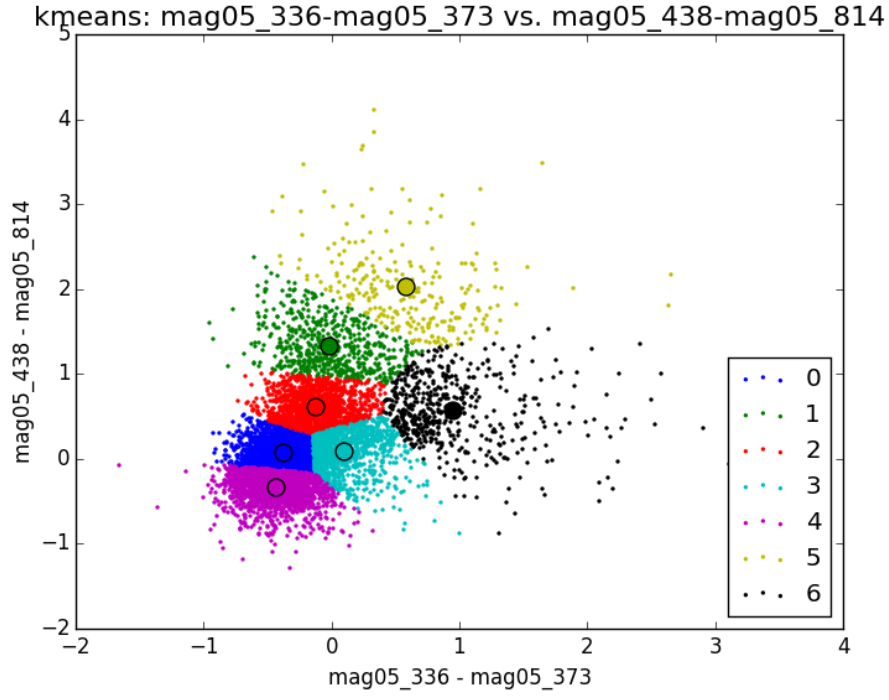


Figure 10: kmeans\_col\_7cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

### kmeans results, Ncl=8

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	2202	0.321014318136	0.356746238188	0.3241	0.2453	1.5039	0.0000	0.2671	-0.411408719346
2	262	0.321014318136	0.251031144046	1.5418	0.7811	2.9150	0.0061	0.8491	0.570969465649
3	619	0.321014318136	0.3218999867	0.6554	0.4723	1.5363	0.0010	0.2651	0.605906300485
4	1345	0.321014318136	0.349683045678	0.4515	0.3244	1.0811	0.0010	0.4034	-0.158009665428
5	1296	0.321014318136	0.253286215136	0.1873	0.3197	1.6238	0.0010	0.1868	0.0110925925926
6	572	0.321014318136	0.330935129581	0.9730	0.4844	1.6769	0.0010	0.7434	-0.0629825174825
7	136	0.321014318136	0.209161542482	1.2756	0.8862	3.3314	0.0081	0.7849	1.59361764706
8	2126	0.321014318136	0.320007324299	0.4316	0.2964	1.7024	0.0000	0.1774	-0.435738476011

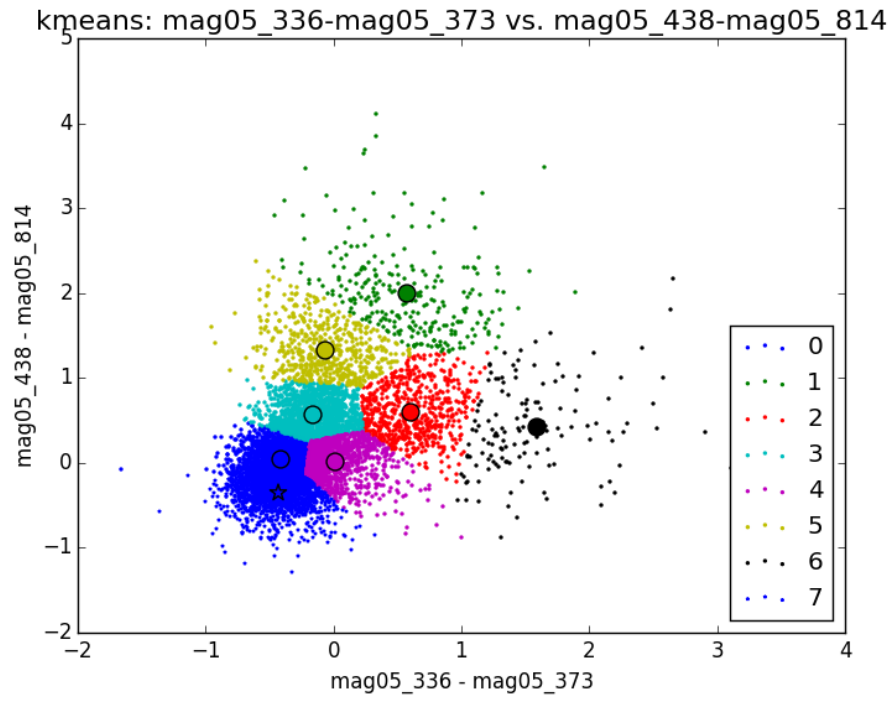


Figure 11: kmeans\_col\_8cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

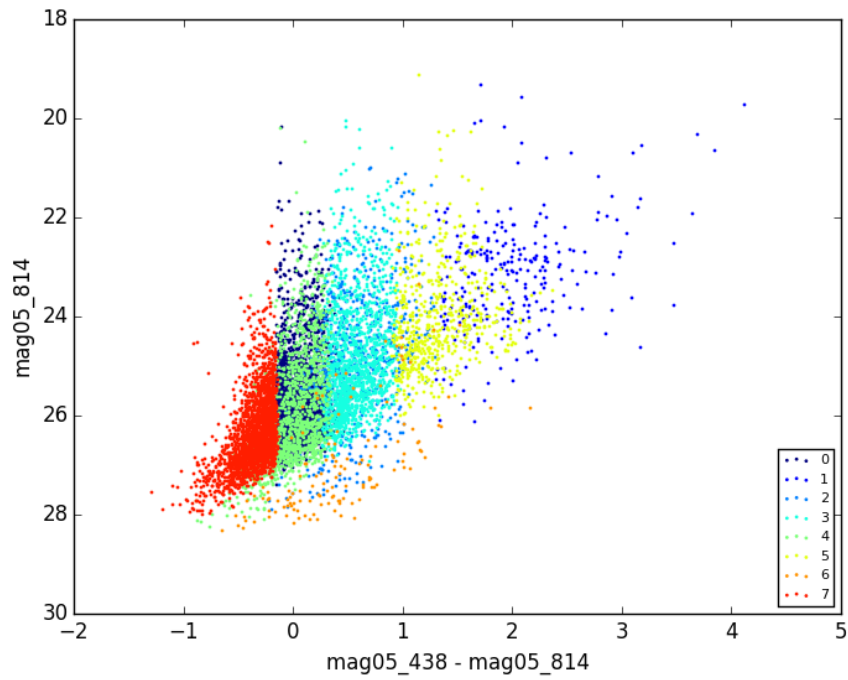


Figure 12: kmeans\_CMD\_8cl\_mag05\_438-mag05\_814vsmag05\_814.png

## Meanshift results

Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
0.5553	8	0.545235095172	8558	8180	163	121	72	18	2	1	1	0	0
0.5000	10	0.343895782347	8558	8120	171	149	79	23	8	3	3	1	1
0.5300	8	0.544885459908	8558	8175	166	122	73	18	2	1	1	0	0
0.5500	8	0.545214436674	8558	8179	163	122	72	18	2	1	1	0	0
0.6000	5	0.567337864836	8558	8224	153	144	34	3	0	0	0	0	0
0.7000	4	0.588209814229	8558	8311	210	34	3	0	0	0	0	0	0

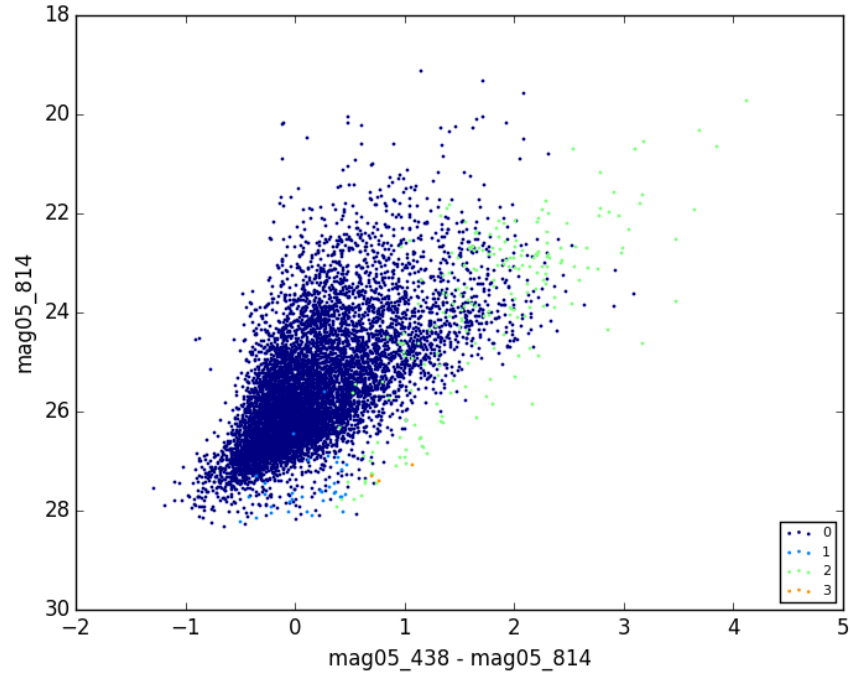


Figure 13: meanshift\_CMD\_4cl\_mag05\_438-mag05\_814vsmag05\_814.png

#### meanshift results, Ncl=4

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	8311	0.588209814229	0.594003066458	0.4896	0.7535	4.3854	0.0000	0.4895	-0.31010675139	-0.0
2	34	0.588209814229	0.493053344543	1.4551	0.6839	2.1938	0.0297	1.014	3.21133333333	
3	210	0.588209814229	0.377849861555	1.5702	1.0422	3.8972	0.0061	0.7366	2.568	1.
4	3	0.588209814229	0.342606732688	2.3163	0.8519	1.1877	0.5796	1.1952	3.4365	

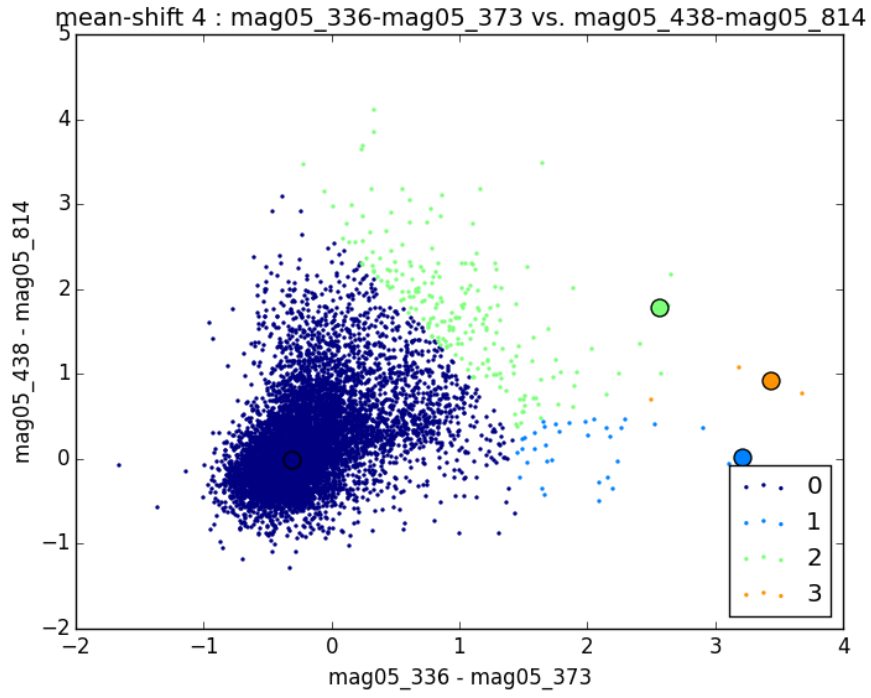


Figure 14: meanshift\_color\_4cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

### meanshift results, Ncl=5

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	8224	0.567337864836	0.57445346486	0.4679	0.7274	3.3781	0.0000	0.4675	-0.327870673325	-0
2	144	0.567337864836	0.497785554926	1.6995	0.7074	2.6494	0.0134	1.1333	0.28575	
3	34	0.567337864836	0.461528445338	1.4551	0.6839	2.1938	0.0297	1.014	3.21133333333	
4	153	0.567337864836	0.278243431421	1.3853	0.7537	2.1545	0.0061	0.4539	2.568	
5	3	0.567337864836	0.342606732688	2.3163	0.8519	1.1877	0.5796	1.1952	3.4365	

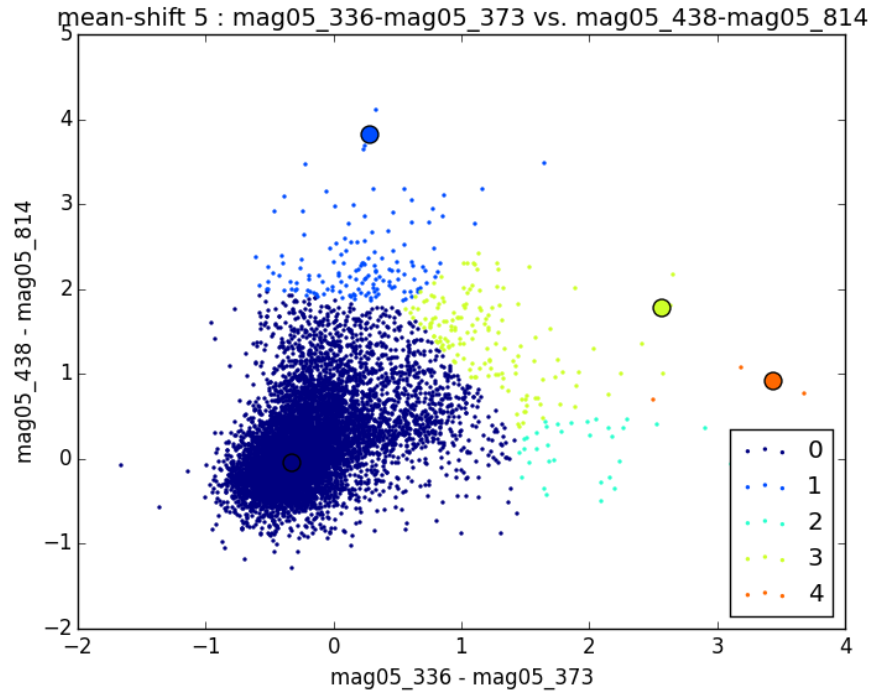


Figure 15: meanshift\_color\_5cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

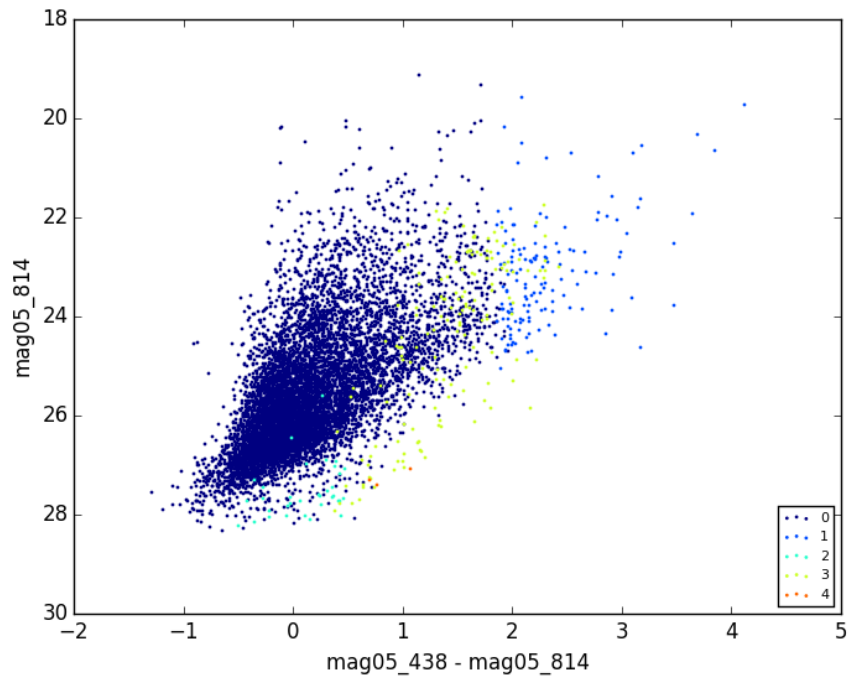


Figure 16: meanshift\_CMD\_5cl\_mag05\_438-mag05\_814vsmag05\_814.png

meanshift results, Ncl=8

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	8180	0.545235095172	0.554619718275	0.4614	0.7169	3.3607	0.0000	0.4607	-0.334700736483	-0
2	163	0.545235095172	0.31723845066	1.6274	0.6731	2.3942	0.0020	1.1081	0.2055	3
3	121	0.545235095172	0.294164052163	1.3633	0.6093	2.0963	0.0061	0.3927	2.568	1
4	72	0.545235095172	0.460186196484	1.2547	0.6364	1.9382	0.0081	0.8086	2.84633333333	0
5	2	0.545235095172	0.20205467486	2.1806	0.6120	0.6120	0.6120	0.9475	3.191	
6	1	0.545235095172	0.0	N/A	N/A	N/A	N/A	1.459	3.682	
7	18	0.545235095172	0.471745318058	1.8846	0.5214	1.7852	0.0175	0.7557	1.648	
8	1	0.545235095172	0.0	N/A	N/A	N/A	N/A	1.9485	3.621	
1	8175	0.544885459908	0.55427950638	0.4606	0.7157	3.3607	0.0000	0.4598	-0.339841869994	-0
2	166	0.544885459908	0.321056020717	1.6218	0.6714	2.3942	0.0020	1.1063	0.2055	3
3	122	0.544885459908	0.29415315352	1.3622	0.6093	2.0963	0.0061	0.3938	2.568	1
4	73	0.544885459908	0.463021165423	1.2505	0.6344	1.9382	0.0081	0.8057	2.84633333333	0
5	1	0.544885459908	0.0	N/A	N/A	N/A	N/A	1.9485	3.621	
6	2	0.544885459908	0.20205467486	2.1806	0.6120	0.6120	0.6120	0.9475	3.191	
7	18	0.544885459908	0.4726757023	1.8846	0.5214	1.7852	0.0175	0.7557	1.648	
8	1	0.544885459908	0.0	N/A	N/A	N/A	N/A	1.459	3.682	
1	8179	0.545214436674	0.554627549542	0.4612	0.7167	3.3607	0.0000	0.4605	-0.335717332369	-0
2	163	0.545214436674	0.316956051955	1.6274	0.6731	2.3942	0.0020	1.1081	0.2055	3
3	122	0.545214436674	0.294409318776	1.3622	0.6093	2.0963	0.0061	0.3938	2.568	1
4	72	0.545214436674	0.460763893267	1.2547	0.6364	1.9382	0.0081	0.8086	2.84633333333	0
5	1	0.545214436674	0.0	N/A	N/A	N/A	N/A	1.9485	3.621	
6	2	0.545214436674	0.20205467486	2.1806	0.6120	0.6120	0.6120	0.9475	3.191	
7	18	0.545214436674	0.471418796317	1.8846	0.5214	1.7852	0.0175	0.7557	1.648	
8	1	0.545214436674	0.0	N/A	N/A	N/A	N/A	1.459	3.682	

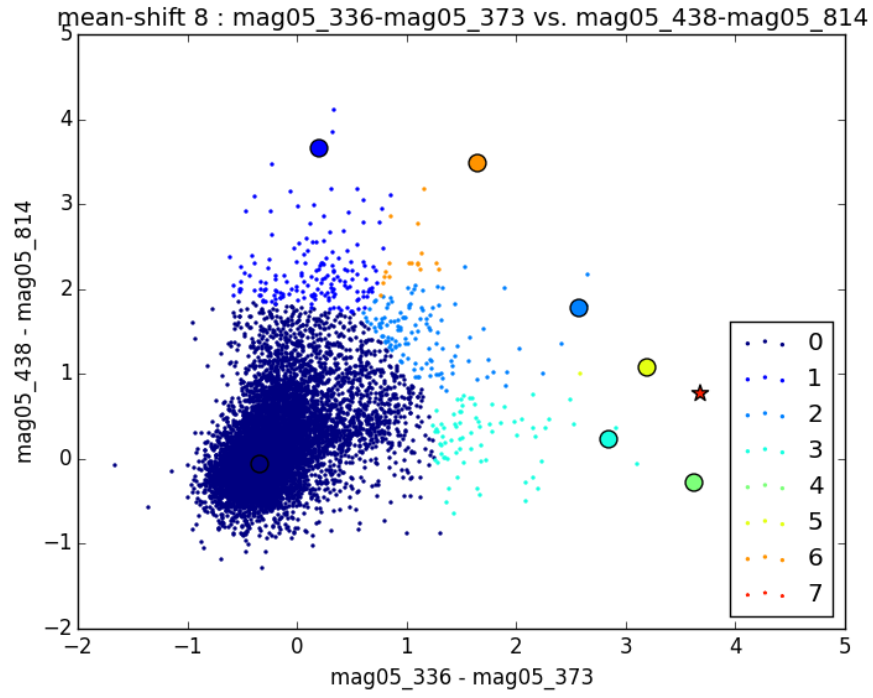


Figure 17: meanshift\_color\_8cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

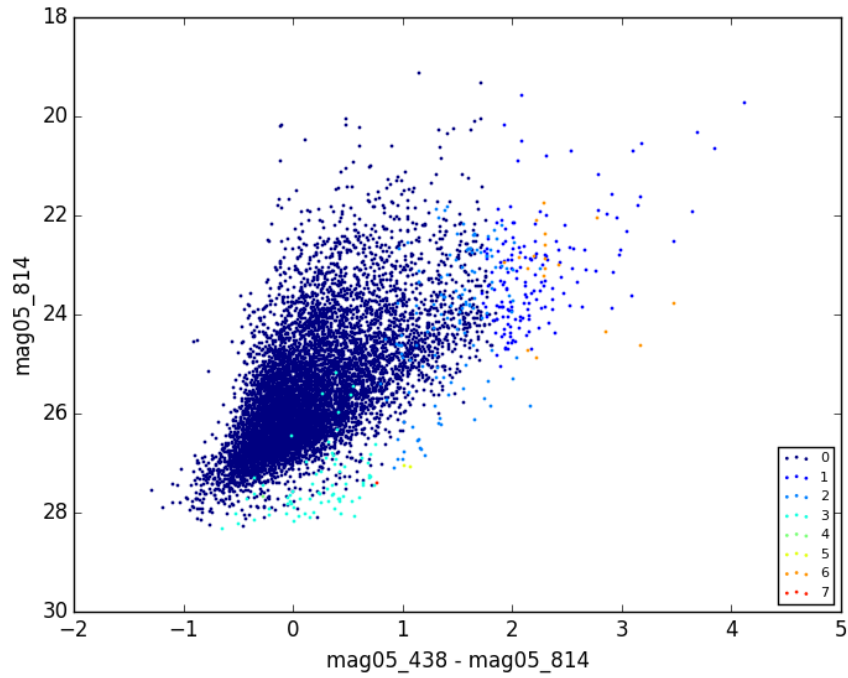


Figure 18: meanshift\_CMD\_8cl\_mag05\_438-mag05\_814vsmag05\_814.png



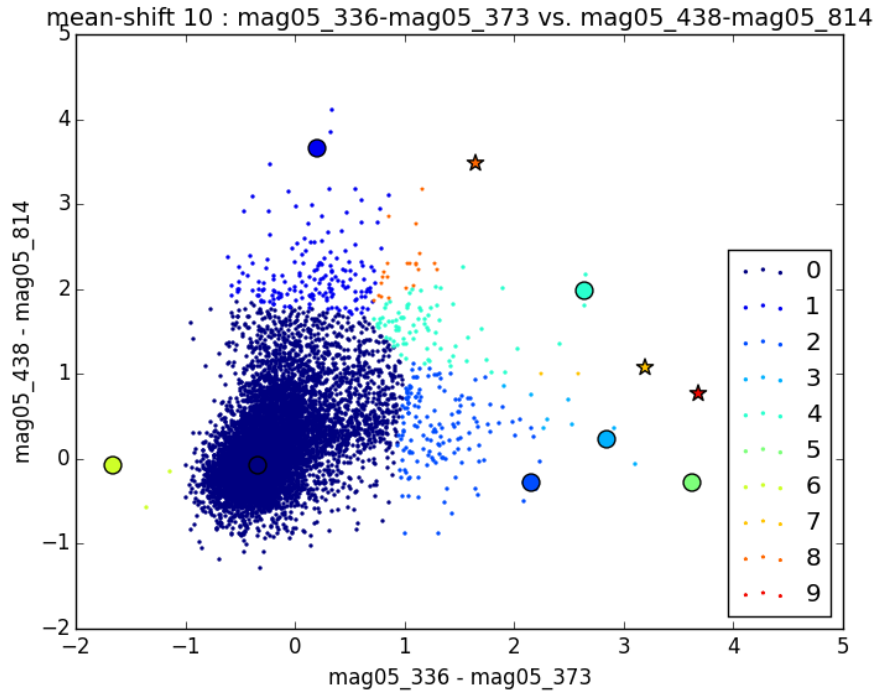


Figure 19: meanshift\_color\_10cl\_mag05\_336-mag05\_373vsmag05\_438-mag05\_814.png

### meanshift results, Ncl=10

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stddev	Cen1
1	8120	0.343895782347	0.345883244621	0.4579	0.7068	3.1438	0.0000	0.4569	-0.344305377597
2	171	0.343895782347	0.290603796375	1.6136	0.6745	2.4106	0.0020	1.0963	0.2055
3	149	0.343895782347	0.337117321453	1.0344	0.6597	2.0171	0.0050	0.6156	2.1556
4	8	0.343895782347	0.133495402636	1.8002	0.6075	1.5159	0.1054	1.0394	2.84633333333
5	79	0.343895782347	0.28574467965	1.4267	0.5601	2.0069	0.0061	0.3843	2.6455
6	1	0.343895782347	0.0	N/A	N/A	N/A	N/A	1.9485	3.621
7	3	0.343895782347	0.600869205014	1.0212	0.5227	0.5762	0.4705	0.6006	-1.659
8	3	0.343895782347	0.0167479021373	2.0449	0.6292	0.9435	0.3321	0.868	3.191
9	23	0.343895782347	0.394338464818	1.8112	0.5197	1.8601	0.0175	0.7248	1.648
10	1	0.343895782347	0.0	N/A	N/A	N/A	N/A	1.459	3.682

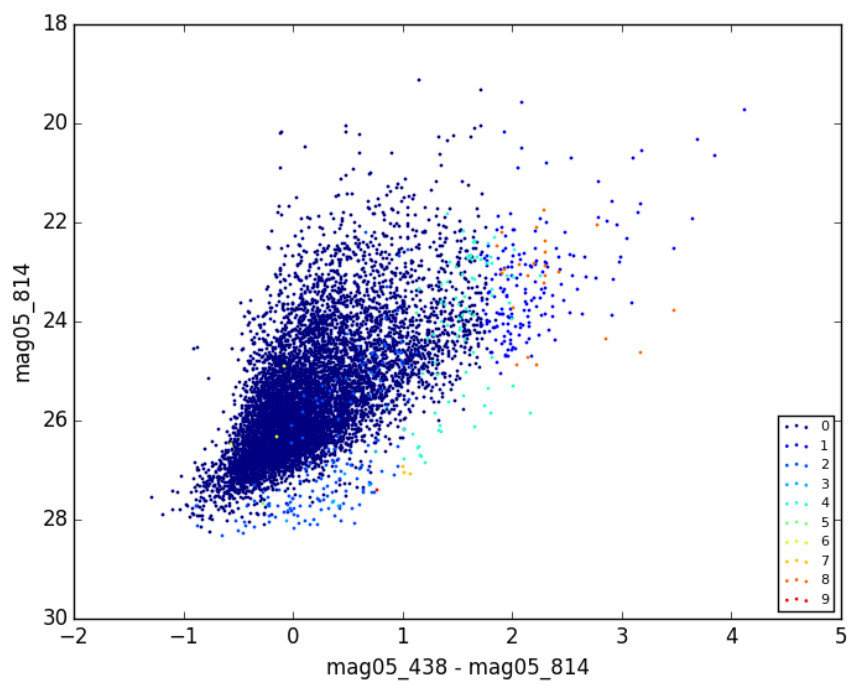


Figure 20: meanshift\_CMD\_10cl\_mag05\_438-mag05\_814vsmag05\_814.png