Clustering output, found in/home/pauline/Research/m83_clustering/results/broad_narrow/HAlpha_I/clustering/mag05_6 mag05_814_mag05_336-mag05_438

K-means results

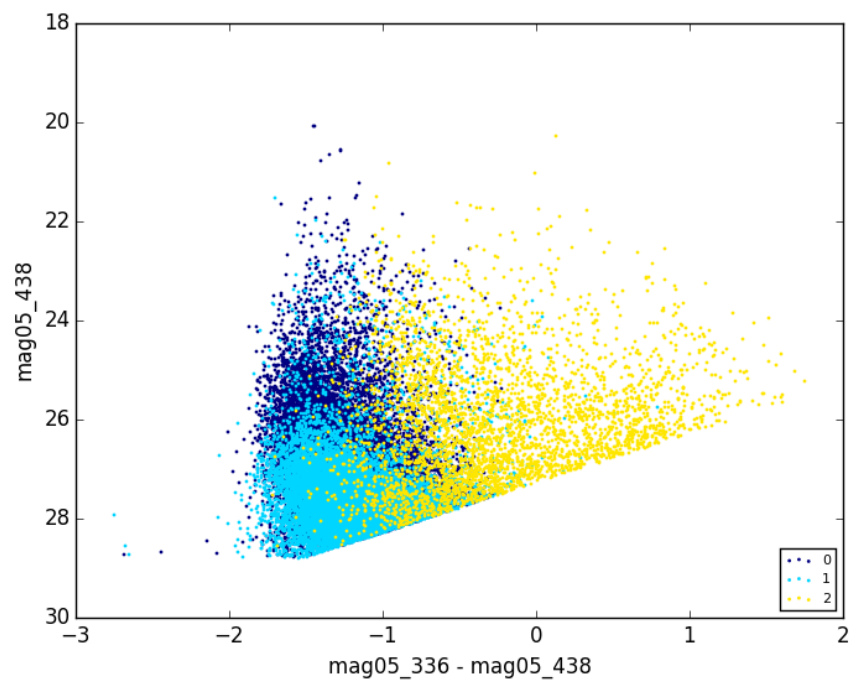| Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	6647.08273253	0.407501155496	28920	13361	12065	3494	0	0	0	0	0
4	5214.1503992	0.351783771756	28920	12230	7800	6607	2283	0	0	0	0
5	4328.68541786	0.334942065719	28920	10444	8524	5440	2872	1640	0	0	0
6	3617.53677022	0.348069364115	28920	8408	7091	4776	4606	2601	1438	0	0
7	3153.42691428	0.33297438665	28920	6716	6686	5551	4060	2333	2224	1350	0
8	2793.25114663	0.334039670763	28920	6715	4990	4674	3904	2940	2606	1813	1278

Figure 1: kmeans_CMD_3cl_mag05_336-mag05_438vsmag05_438.png

kmeans results, Ncl=3

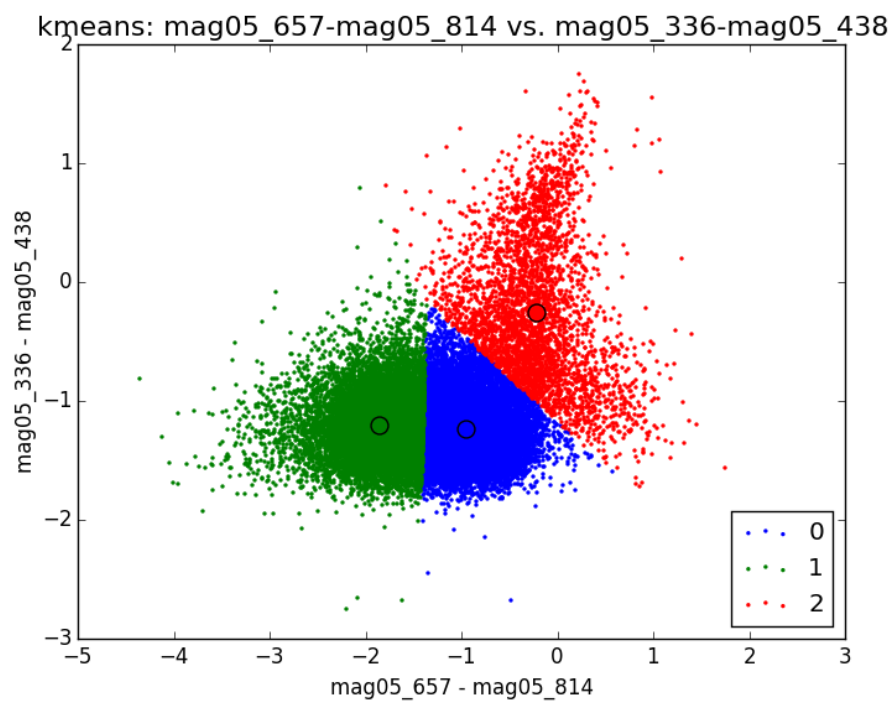| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	13361	0.407501155496	0.427916517595	1.1364	0.5106	2.5906	0.0	0.3224	-0.944296459846	
2	12065	0.407501155496	0.417548630376	1.5918	0.549	3.5417	0.0	0.4546	-1.84681268131	
3	3494	0.407501155496	0.294738580385	0.5784	0.9158	4.2651	0.001	0.5272	-0.217414424728	

Figure 2: kmeans_col_3cl_mag05_657-mag05_814vsmag05_336-mag05_438.png

kmeans results, Ncl=4

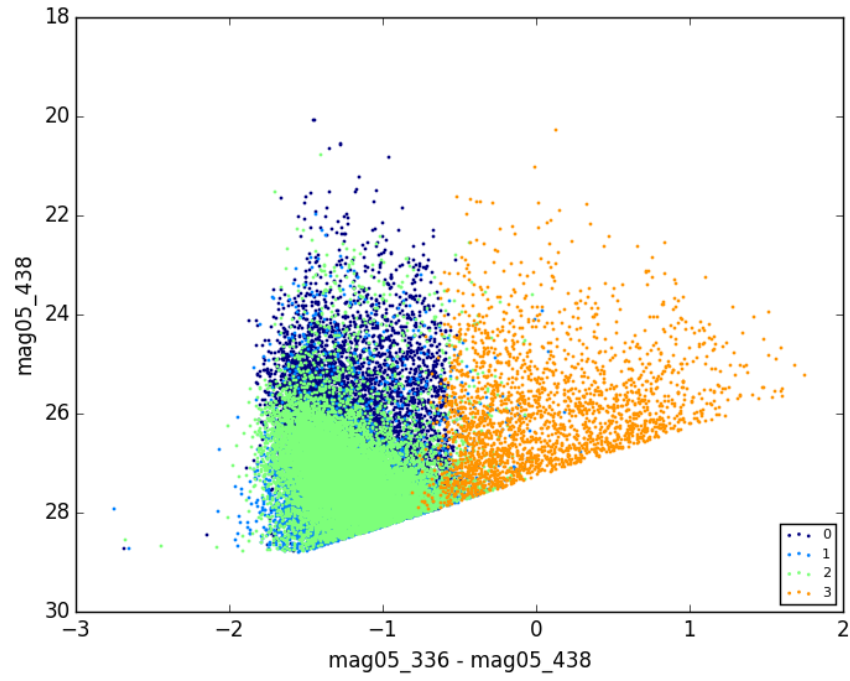| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	6607	0.351783771756	0.320554978322	0.9683	0.5413	2.8848	0.0	0.4561	-0.527114121386	-
2	7800	0.351783771756	0.366913936004	1.6942	0.5116	3.0401	0.0	0.5088	-2.02541294872	-
3	12230	0.351783771756	0.355331748157	1.2731	0.4378	2.6541	0.0	0.2494	-1.2822736713	-
4	2283	0.351783771756	0.371460340172	0.5087	0.8033	3.6782	0.001	0.4936	-0.304474375821	0

Figure 3: kmeans_CMD_4cl_mag05_336-mag05_438vsmag05_438.png
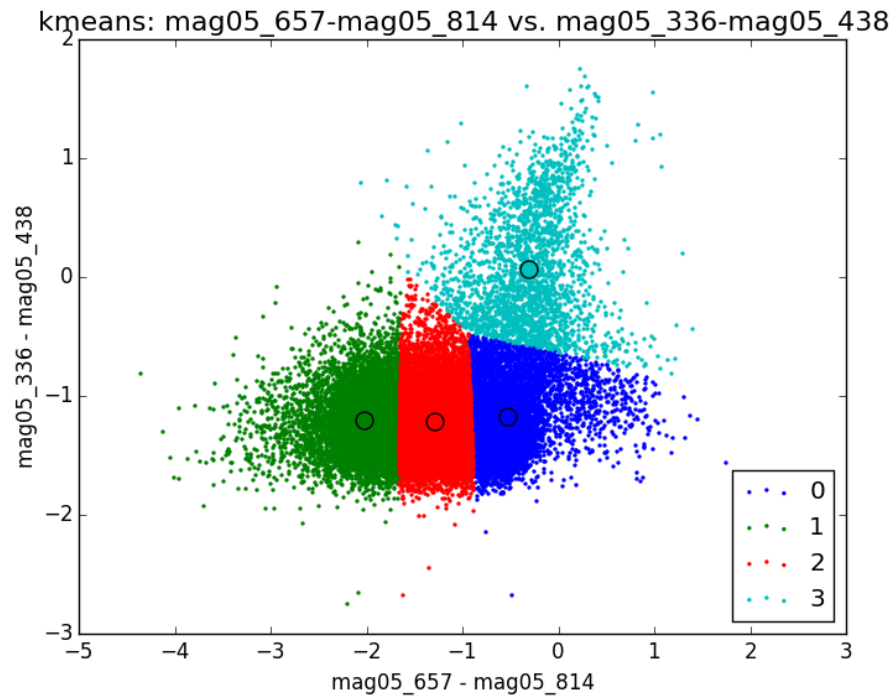

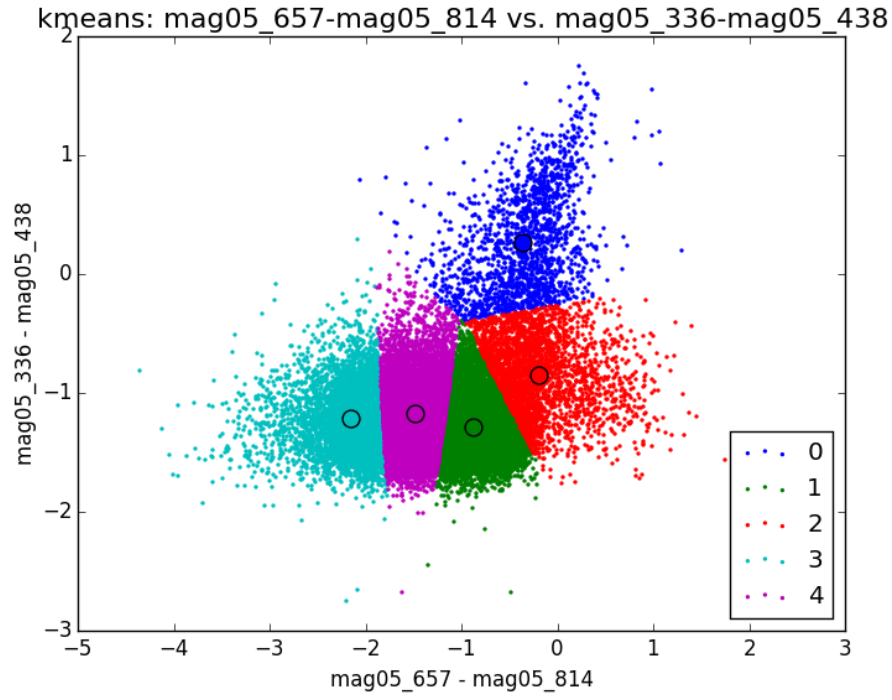Figure 4: kmeans_col_4cl_mag05_657-mag05_814vsmag05_336-mag05_438.png

Figure 5: kmeans_col_5cl_mag05_657-mag05_814vsmag05_336-mag05_438.png

kmeans results, Ncl=5

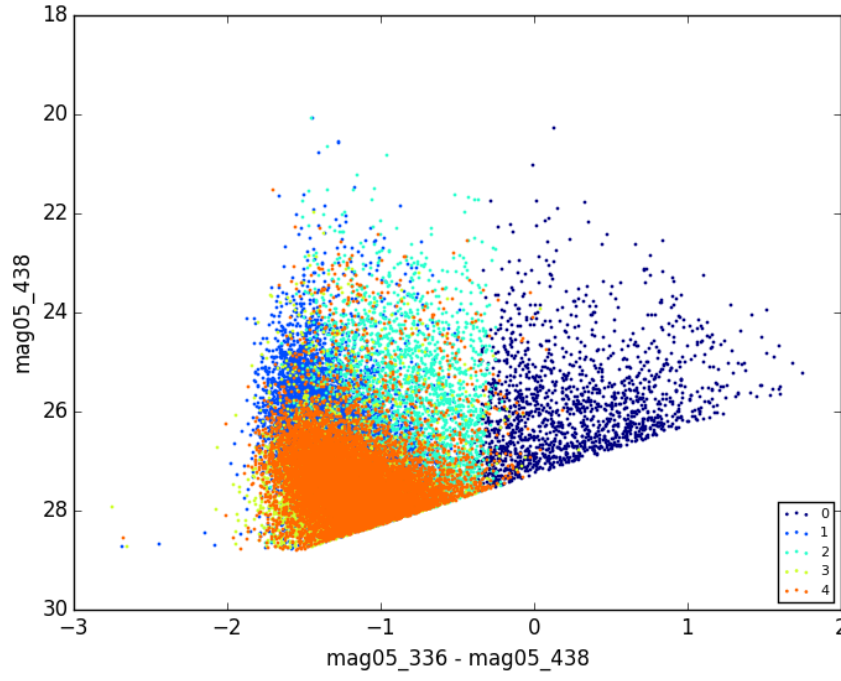| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	1640	0.334942065719	0.378570496015	0.5225	0.7335	3.4147	0.001	0.5204	-0.353872560976	
2	8524	0.334942065719	0.369063534924	1.1205	0.41	2.3464	0.0	0.3129	-0.864564875645	-
3	2872	0.334942065719	0.271880775331	0.7102	0.6079	2.9275	0.001	0.4819	-0.190592618384	-0
4	5440	0.334942065719	0.339170742053	1.7751	0.4963	3.0401	0.0	0.5498	-2.15232058824	-
5	10444	0.334942065719	0.315381169276	1.3578	0.4185	2.862	0.0	0.2832	-1.47953638453	-

Figure 6: kmeans_CMD_5cl_mag05_336-mag05_438vsmag05_438.png

kmeans results, Ncl=6

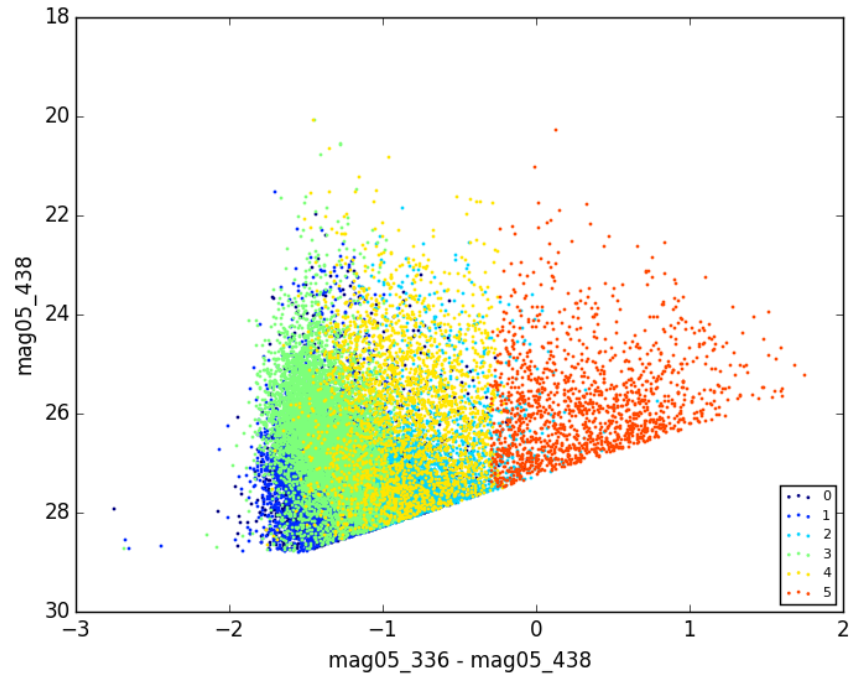| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	4776	0.348069364115	0.305133800289	1.7883	0.4935	2.8953	0.0	0.5811	-2.19344011725	-1
2	8408	0.348069364115	0.374409238745	1.4483	0.3439	1.8791	0.0	0.2245	-1.54636251189	-1
3	4606	0.348069364115	0.257671904787	1.0623	0.4269	2.1848	0.0	0.31	-1.20340838037	-0
4	7091	0.348069364115	0.408235897805	1.144	0.3638	1.8345	0.0	0.3351	-0.827835002115	-1
5	2601	0.348069364115	0.293356225505	0.697	0.5891	2.7049	0.001	0.4901	-0.14223644752	-0
6	1438	0.348069364115	0.428481928599	0.4897	0.6737	3.1514	0.001	0.4891	-0.276401947149	0.

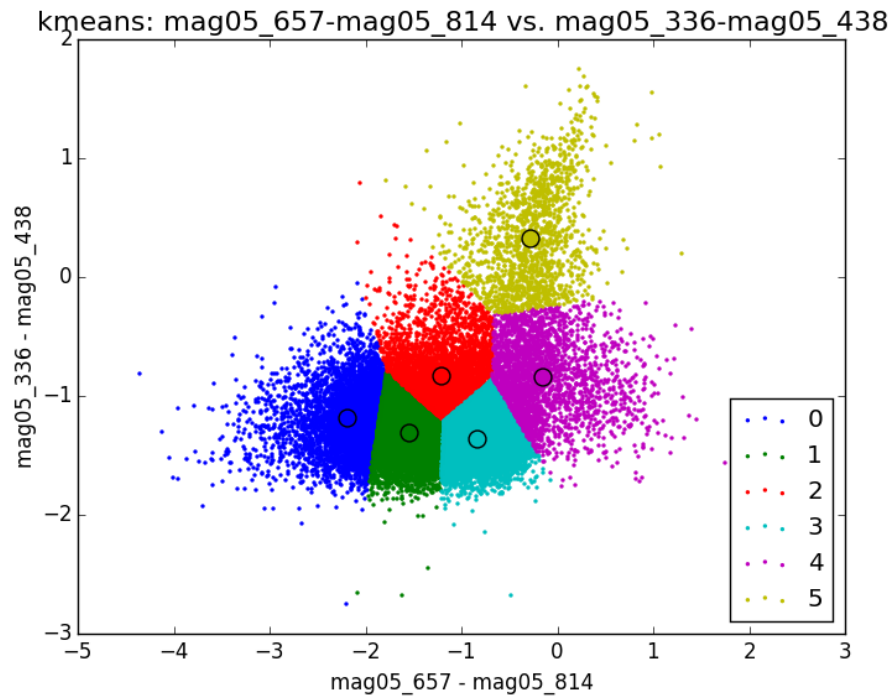Figure 7: kmeans_CMD_6cl_mag05_336-mag05_438vsmag05_438.png

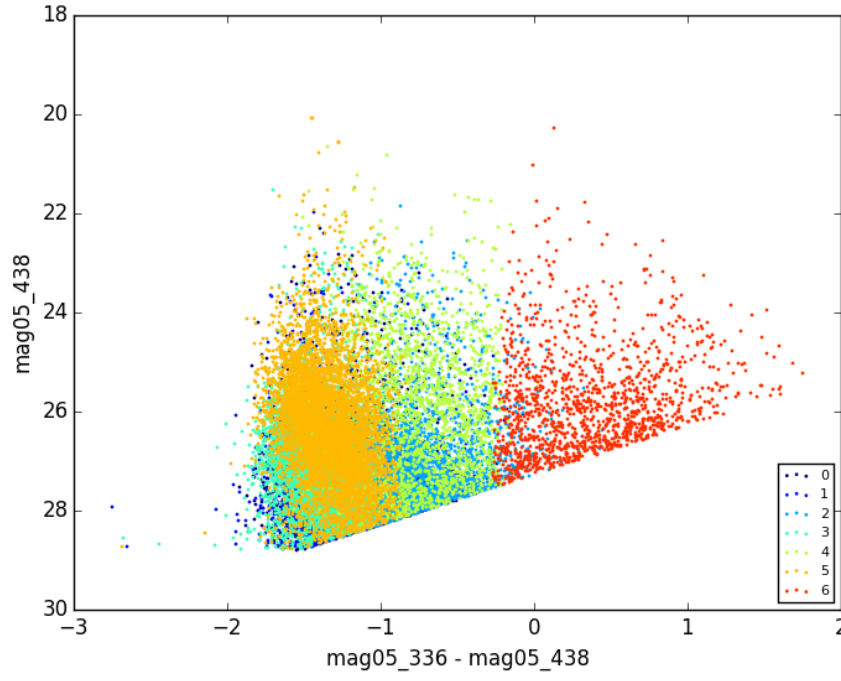Figure 8: kmeans_col_6cl_mag05_657-mag05_814vsmag05_336-mag05_438.png

Figure 9: kmeans_CMD_7cl_mag05_336-mag05_438vsmag05_438.png

kmeans results, Ncl=7

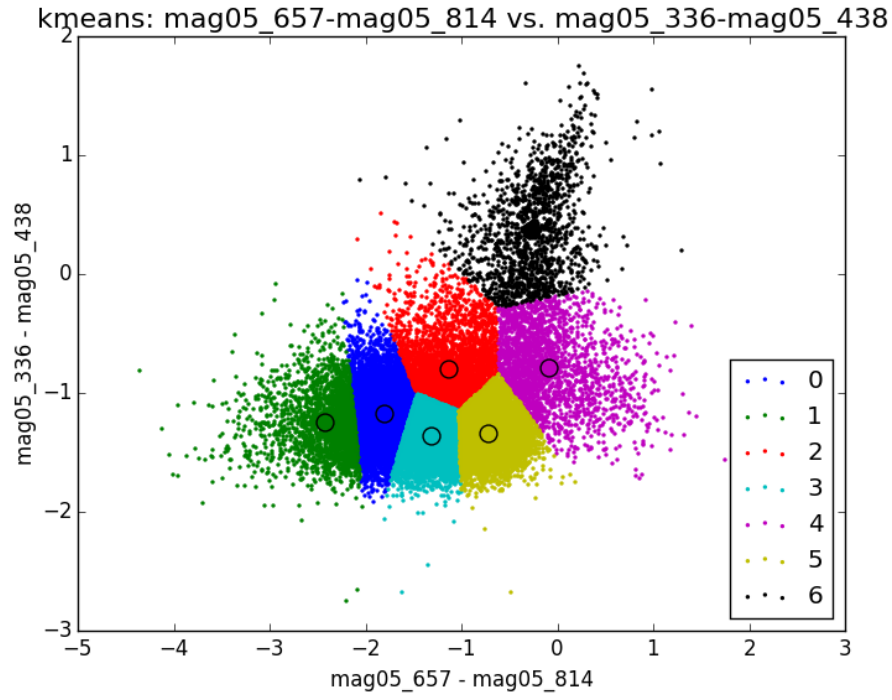| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	6716	0.33297438665	0.306799547858	1.5373	0.3625	1.8697	0.0	0.3763	-1.80539368672	-1
2	2333	0.33297438665	0.286327936974	1.9472	0.4911	2.9192	0.0	0.6526	-2.41869567081	-1
3	4060	0.33297438665	0.261671893337	1.0066	0.4204	1.8561	0.0	0.2922	-1.12591256158	-0
4	6686	0.33297438665	0.361658356952	1.3528	0.3058	1.672	0.0	0.1732	-1.31591758899	-1
5	2224	0.33297438665	0.289105277479	0.6552	0.5868	2.6796	0.001	0.4872	-0.0881686151079	-0
6	5551	0.33297438665	0.395835179547	1.0937	0.3453	1.8443	0.0	0.3703	-0.713421905963	-1
7	1350	0.33297438665	0.429972993516	0.4962	0.6623	3.4147	0.0022	0.4941	-0.270091111111	0.

Figure 10: kmeans_col_7cl_mag05_657-mag05_814vsmag05_336-mag05_438.png

kmeans results, Ncl=8

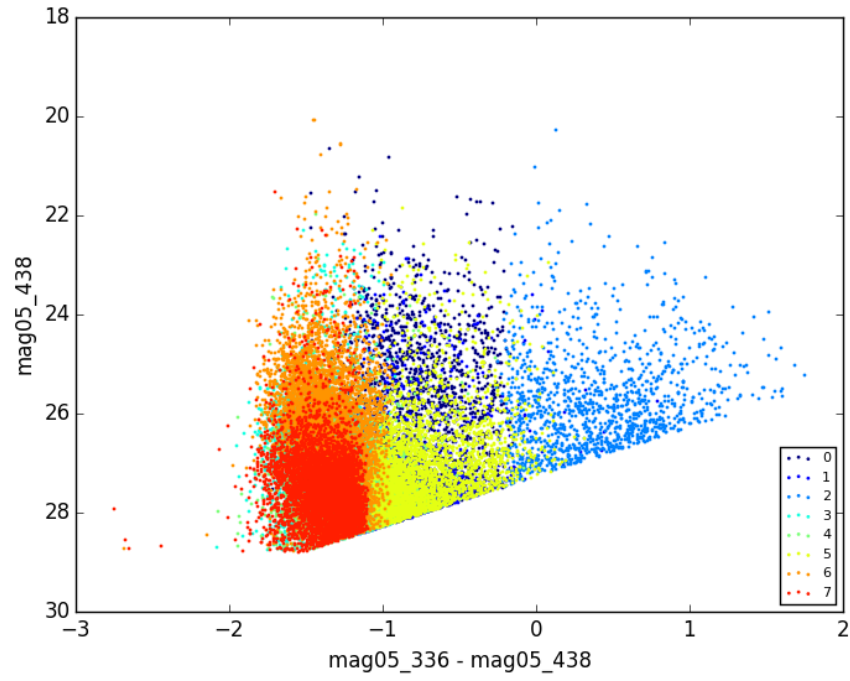| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	1813	0.334039670763	0.295743737448	0.6567	0.5729	2.512	0.001	0.52	0.000547710976282
2	3904	0.334039670763	0.287434779452	1.3549	0.3476	2.0548	0.0	0.4248	-1.66042699795
3	1278	0.334039670763	0.44538128028	0.4912	0.6437	3.1514	0.0022	0.4858	-0.243176838811
4	6715	0.334039670763	0.337024114784	1.2763	0.3001	1.1713	0.0	0.1751	-1.21214087863
5	2606	0.334039670763	0.286728107898	1.9128	0.4729	2.3564	0.0	0.6469	-2.38246546431
6	2940	0.334039670763	0.273149815601	0.8561	0.4216	1.6127	0.0	0.2575	-0.908309183673
7	4674	0.334039670763	0.390792463473	1.0851	0.3308	1.751	0.0	0.3943	-0.663081942662
8	4990	0.334039670763	0.359307898835	1.5895	0.2964	1.6985	0.0	0.2481	-1.75314368737

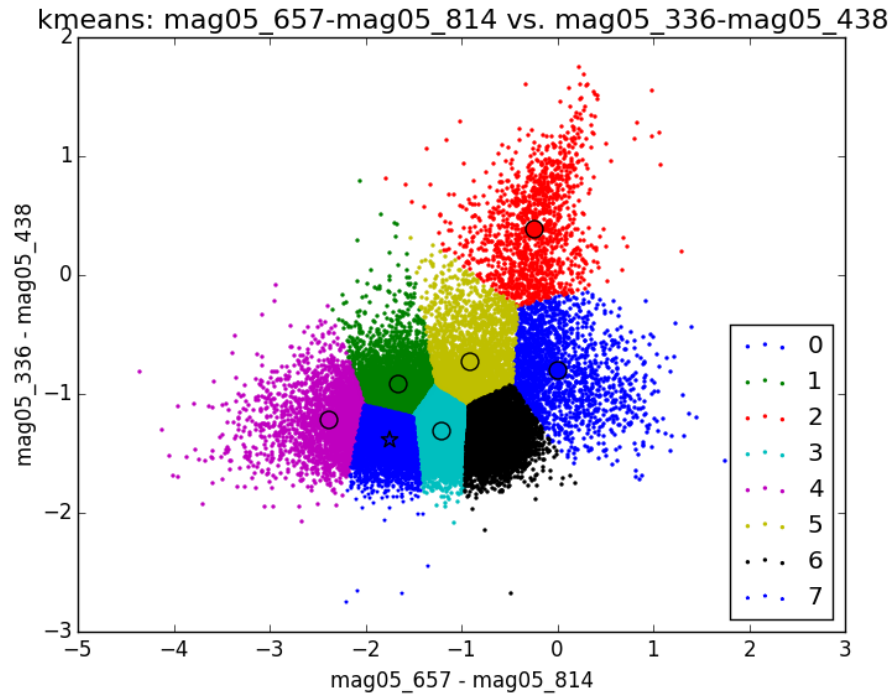Figure 11: kmeans_CMD_8cl_mag05_336-mag05_438vsmag05_438.png

Figure 12: kmeans_col_8cl_mag05_657-mag05_814vsmag05_336-mag05_438.png

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Meanshift results

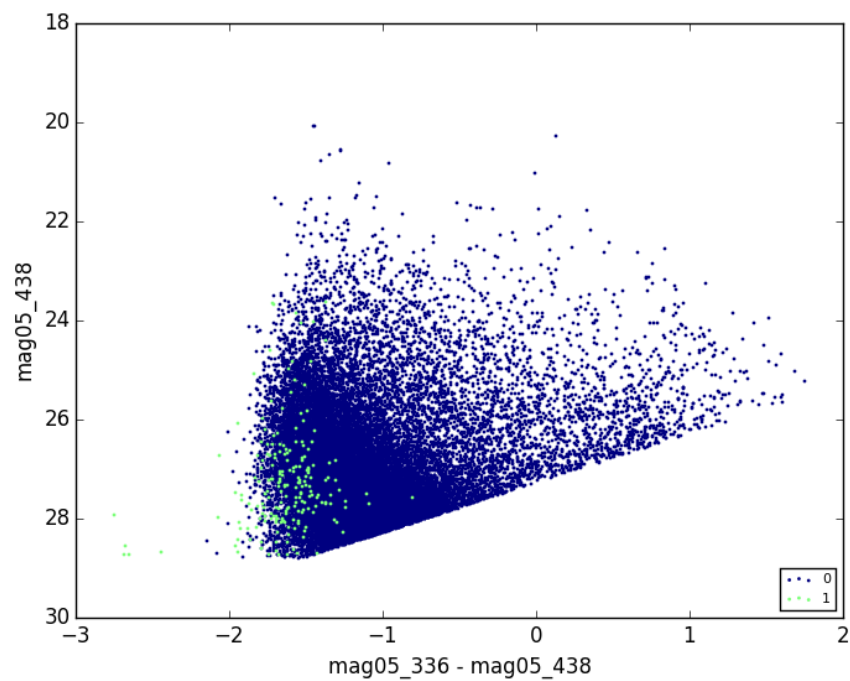| Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
0.6490	2	0.433664997692	28920	28718	202	0	0	0	0	0	0	0	0
0.4000	10	0.104070103667	28920	25434	2608	206	180	146	98	96	72	67	13
0.4500	8	0.0703066221673	28920	26883	771	607	223	184	155	84	13	0	0
0.5000	4	0.25743987455	28920	27135	1480	191	114	0	0	0	0	0	0
0.5500	4	0.224404098749	28920	27035	1473	297	115	0	0	0	0	0	0

Figure 13: meanshift_CMD_2cl_mag05_336-mag05_438vsmag05_438.png

meanshift results, Ncl=2

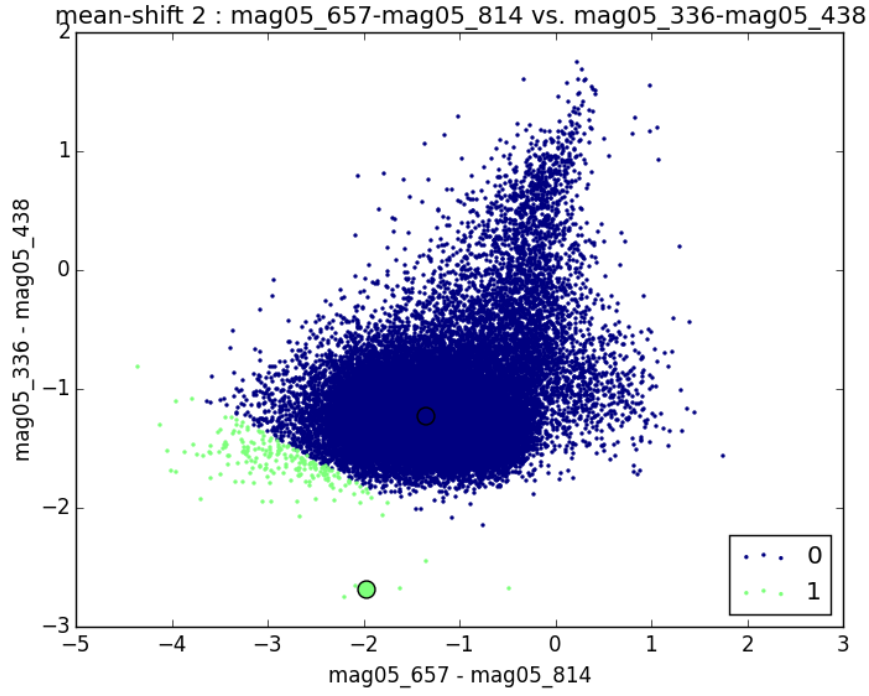| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	28718	0.433664997692	0.432323019607	1.2911	0.9433	5.3972	0.0	0.5646	-1.344523175	-1
2	202	0.433664997692	0.624451763332	2.36	0.6584	4.299	0.0058	0.7347	-1.96933333333	-2

Figure 14: meanshift_color_2cl_mag05_657-mag05_814vsmag05_336-mag05_438.png

meanshift results, Ncl=4

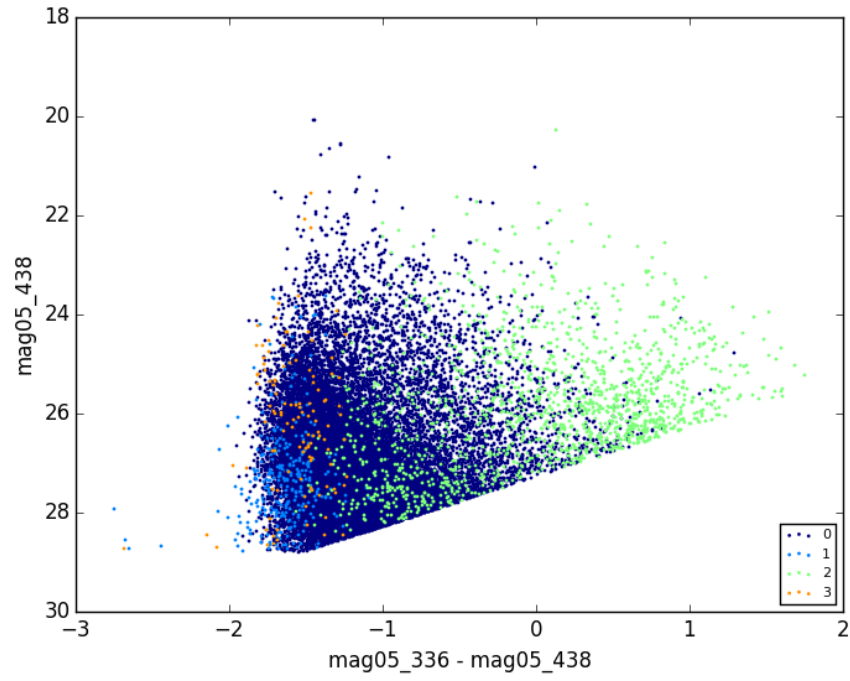| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	27135	0.25743987455	0.248063204045	1.3204	0.8227	4.6944	0.0	0.4812	-1.35079616711	-1
2	191	0.25743987455	0.612510763783	2.3639	0.636	3.0019	0.0058	0.7241	-1.96933333333	-2
3	114	0.25743987455	0.607778700789	1.1555	0.5359	2.0018	0.0032	0.8601	-0.482	
4	1480	0.25743987455	0.356547163813	0.56	0.943	3.7851	0.0014	0.5569	1.3	
1	27035	0.224404098749	0.211906857826	1.3168	0.8199	4.6944	0.0	0.4794	-1.35010285597	-1
2	297	0.224404098749	0.558830356802	2.2462	0.6522	3.0019	0.001	0.6451	-1.8104	
3	1473	0.224404098749	0.356615795333	0.5608	0.944	3.7851	0.0014	0.5576	1.3	
4	115	0.224404098749	0.605190886903	1.1566	0.5377	2.0018	0.0032	0.8588	-0.482	

Figure 15: meanshift_CMD_4cl_mag05_336-mag05_438vsmag05_438.png
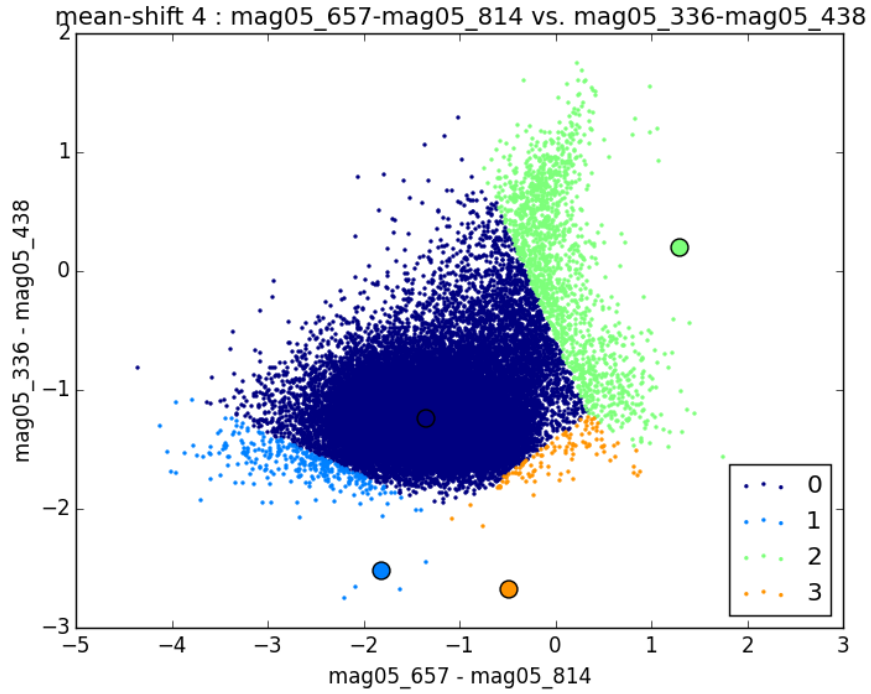

Figure 16: meanshift_color_4cl_mag05_657-mag05_814vsmag05_336-mag05_438.png
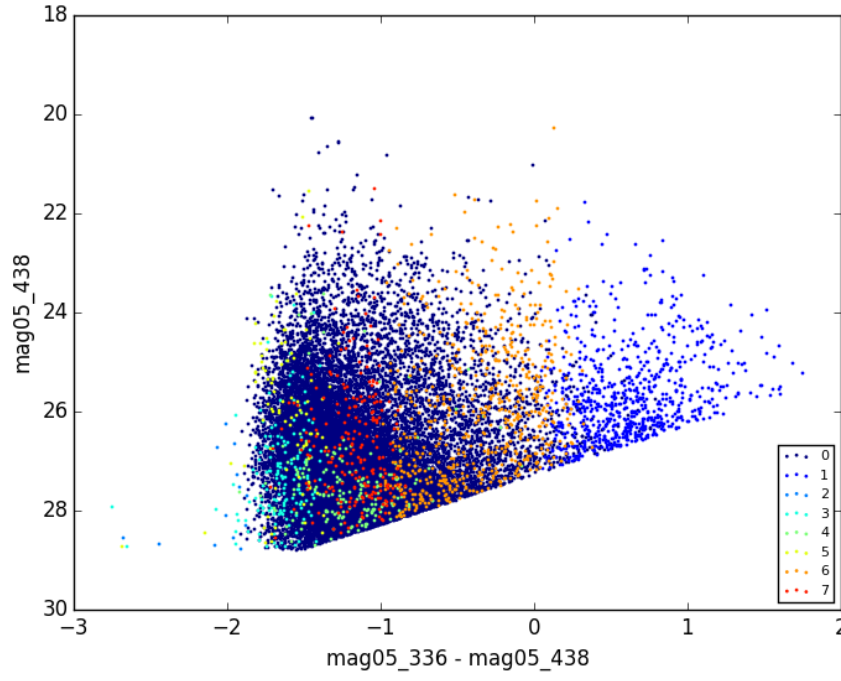
Figure 17: meanshift_CMD_8cl_mag05_336-mag05_438vsmag05_438.png

meanshift results, Ncl=8

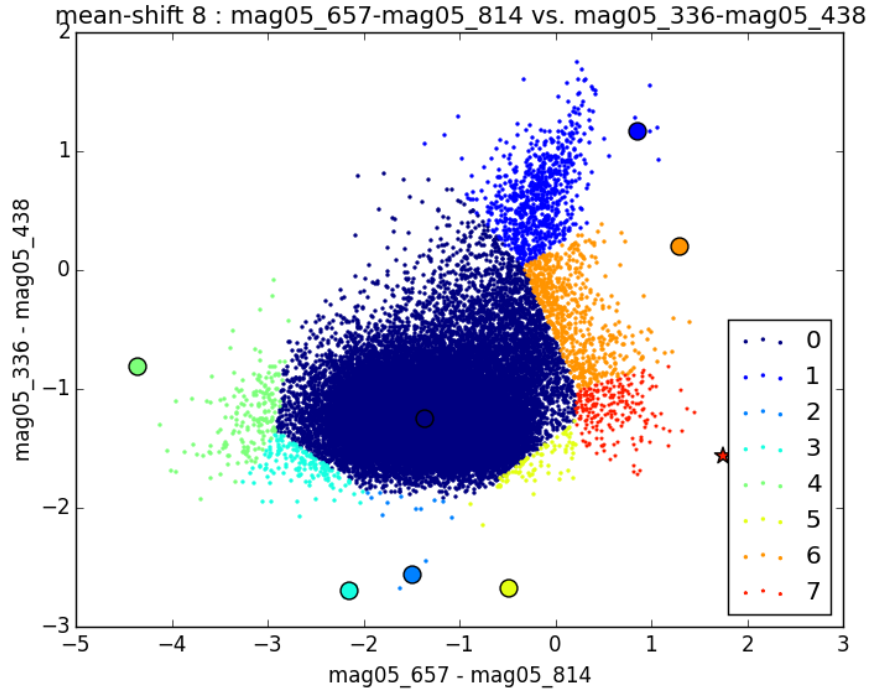| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	26883	0.0703066221673	0.0440828606056	1.3144	0.8057	3.1248	0.0	0.4685	-1.36372271882
2	771	0.0703066221673	0.522864393443	0.5468	0.5155	2.442	0.0022	0.4989	0.854375
3	13	0.0703066221673	0.524897498834	1.8382	0.4722	0.9086	0.057	0.3582	-1.4845
4	155	0.0703066221673	0.460429816269	2.2171	0.3699	1.5421	0.0054	0.5448	-2.144
5	184	0.0703066221673	0.39047516935	2.4308	0.4735	1.9924	0.002	1.0338	-4.351
6	84	0.0703066221673	0.509948492169	1.1799	0.3918	1.5698	0.0032	0.7584	-0.482
7	607	0.0703066221673	0.220177901608	0.423	0.5437	1.7771	0.0014	0.4127	1.3
8	223	0.0703066221673	0.531561185147	0.9564	0.3952	1.597	0.0028	0.9133	1.751

Figure 18: meanshift_color_8cl_mag05_657-mag05_814vsmag05_336-mag05_438.png

meanshift results, Ncl=10

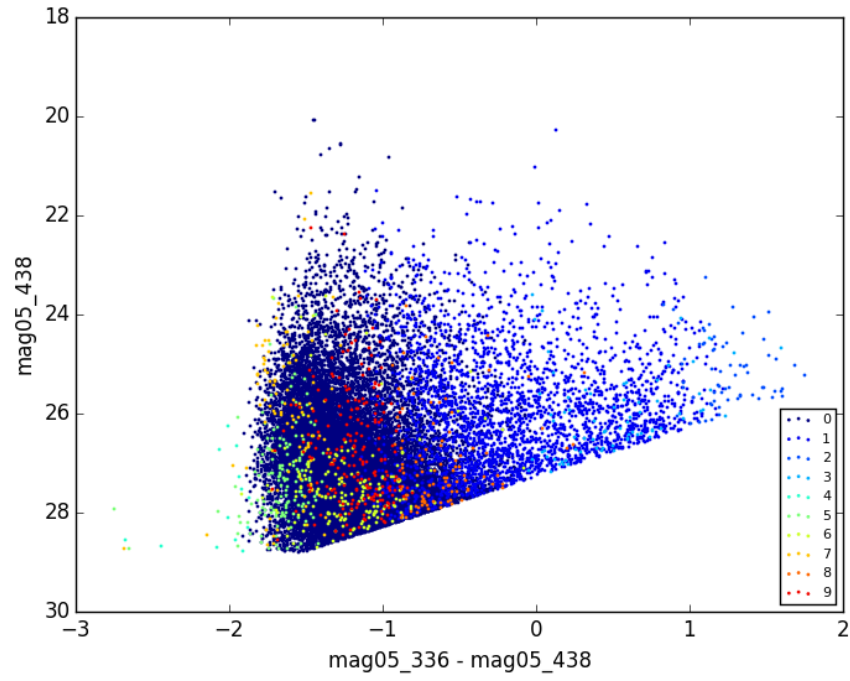| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	25434	0.104070103667	0.0922454394111	1.3456	0.7437	3.1136	0.0	0.4319	-1.37744595163
2	2608	0.104070103667	0.106194616808	0.4822	0.7613	2.4032	0.001	0.4366	-0.236905017921
3	67	0.104070103667	0.763454738068	0.9331	0.3705	1.1788	0.0094	0.5177	0.896571428571
4	72	0.104070103667	0.446413223511	0.9986	0.667	2.2397	0.0092	0.935	-1.127
5	13	0.104070103667	0.515172527067	1.8382	0.4722	0.9086	0.057	0.3582	-1.4845
6	146	0.104070103667	0.462028714539	2.2225	0.3699	1.5421	0.0054	0.5441	-2.144
7	180	0.104070103667	0.393746388468	2.437	0.4719	1.9924	0.002	1.0349	-4.351
8	96	0.104070103667	0.505586061673	1.1777	0.399	1.5698	0.0032	0.7497	-0.482
9	98	0.104070103667	0.383554257197	0.681	0.381	1.4251	0.0014	0.6806	1.3
10	206	0.104070103667	0.350173532346	0.9701	0.3929	1.5823	0.0032	0.9301	1.751

Figure 19: meanshift_CMD_10cl_mag05_336-mag05_438vsmag05_438.png
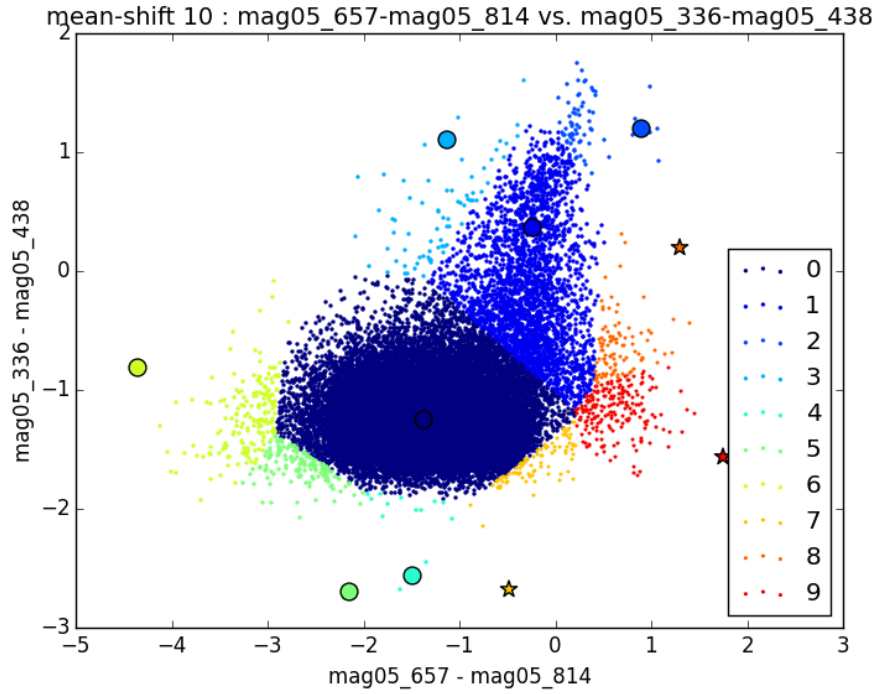

Figure 20: meanshift_color_10cl_mag05_657-mag05_814vsmag05_336-mag05_438.png