Clustering output, found in/home/pauline/Research/m83_clustering/results/broad_narrow/OIII_V/clustering/mag05_502 mag05_555_mag05_336-mag05_438

K-means results

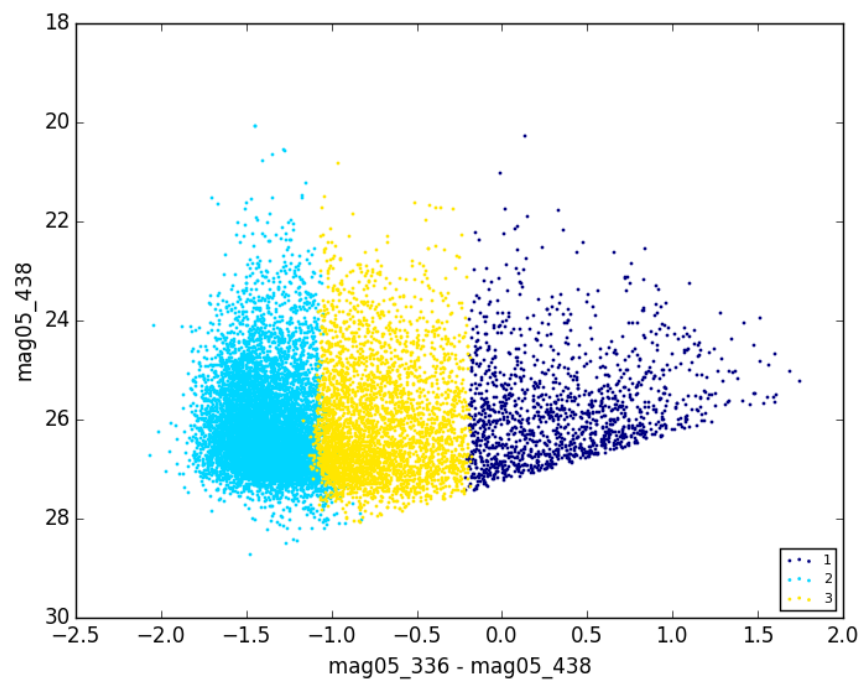| Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	1289.52044941	0.48742277669	13390	8584	3413	1393	0	0	0	0	0
4	1008.18198012	0.385176424935	13390	6262	4215	1940	973	0	0	0	0
5	820.214021753	0.391781873189	13390	5720	3579	1786	1382	923	0	0	0
6	687.829281165	0.363967125283	13390	4462	3899	2071	1198	1005	755	0	0
7	599.313809324	0.357328920901	13390	3821	3496	2156	1814	1257	763	83	0
8	526.177539814	0.338685012934	13390	3346	3042	2329	1748	1419	872	549	85

Figure 1: kmeans_CMD_3cl_mag05_336-mag05_438vsmag05_438.png

kmeans results, Ncl=3

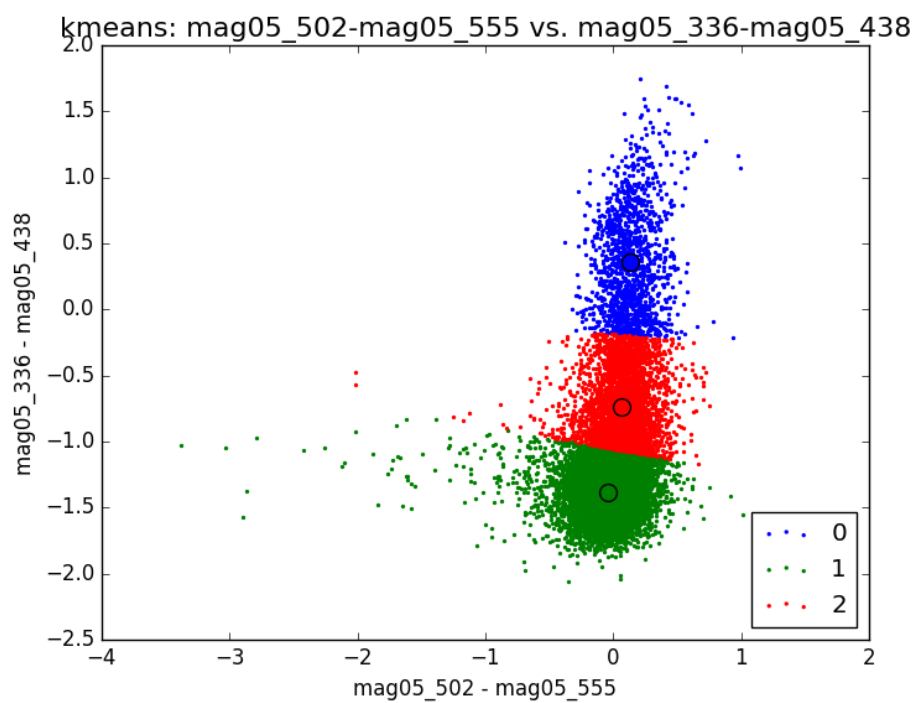| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	1393	0.48742277669	0.492365991884	0.4081	0.5212	2.0917	0.0010	0.3256	0.136788944724	0.
2	8584	0.48742277669	0.522968869742	0.9993	0.3306	4.4253	0.0000	0.7012	-0.0408018669778	-1
3	3413	0.48742277669	0.396003625933	0.5639	0.3778	2.7801	0.0010	0.4559	0.0685386635541	-0

Figure 2: kmeans_col_3cl_mag05_502-mag05_555vsmag05_336-mag05_438.png
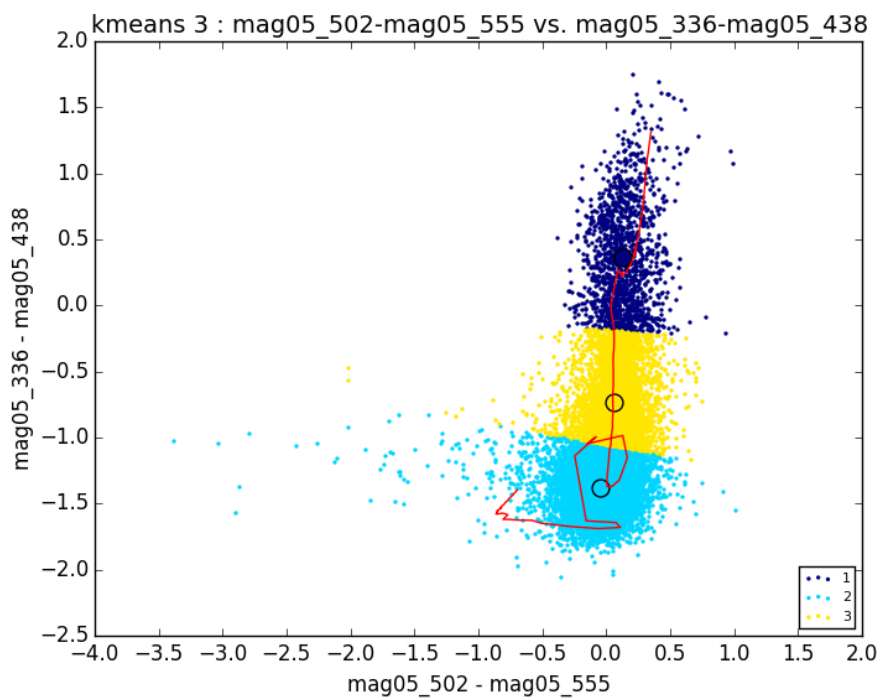

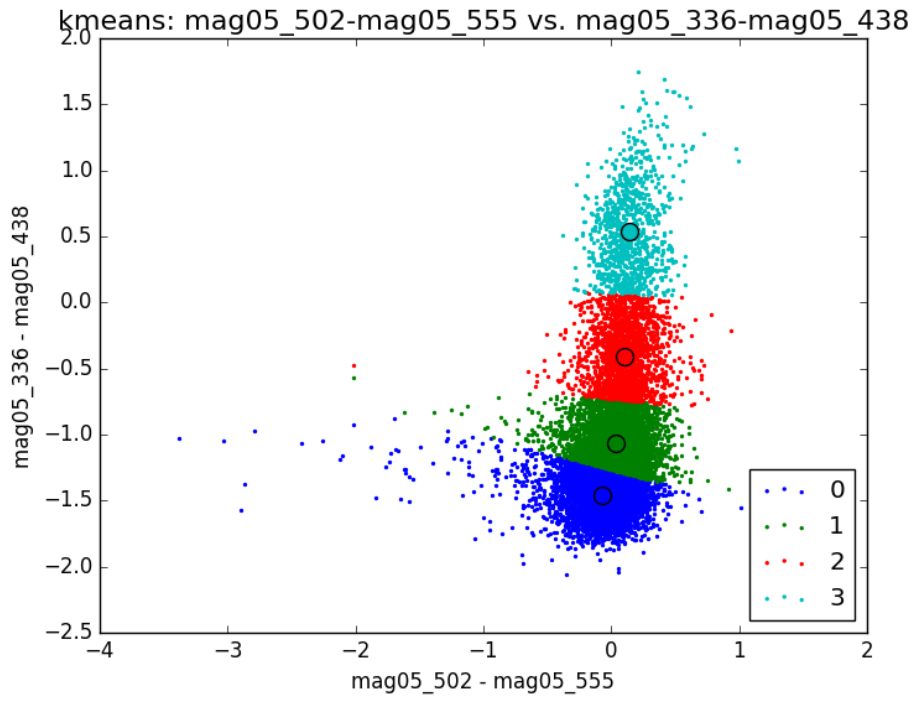Figure 3: kmeans_color_3cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

Figure 4: kmeans_col_4cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

kmeans results, Ncl=4

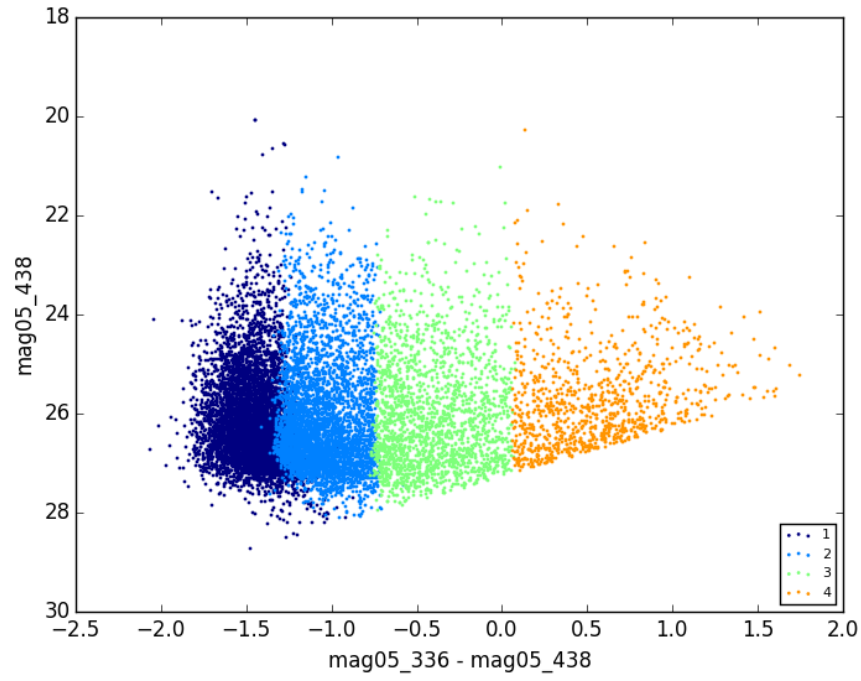| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	6262	0.385176424935	0.397564463427	1.0512	0.2943	4.4253	0.0000	0.7229	-0.0664522395248
2	4215	0.385176424935	0.331949747973	0.7697	0.2968	3.0526	0.0000	0.5753	0.0372794152323
3	1940	0.385176424935	0.401759703142	0.3609	0.3574	2.9623	0.0010	0.3261	0.0998869475848
4	973	0.385176424935	0.50296161161	0.4760	0.4527	1.7276	0.0010	0.3321	0.140868583162

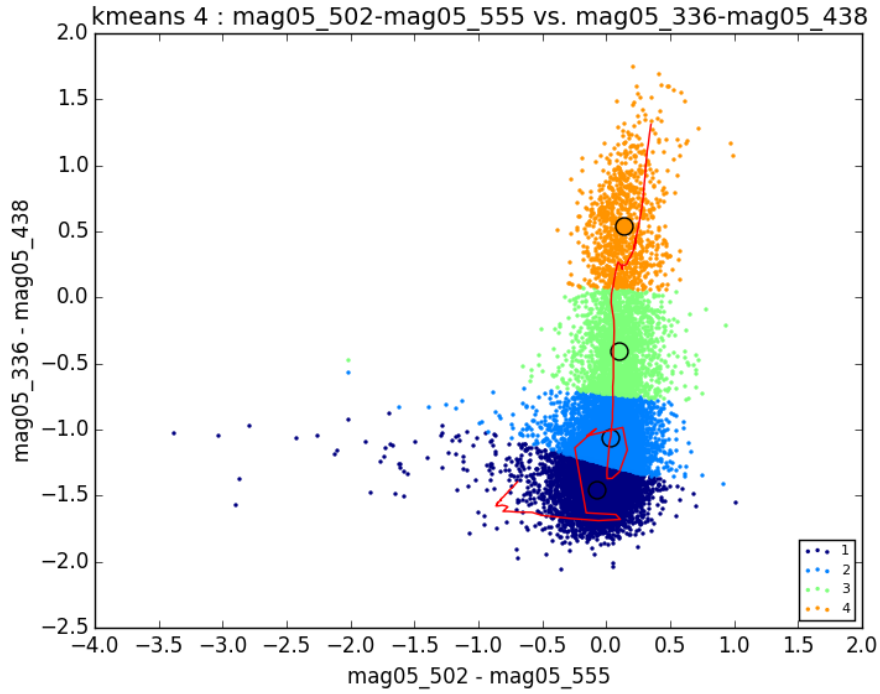Figure 5: kmeans__CMD__4cl__mag05__336-mag05__438vsmag05__438.png

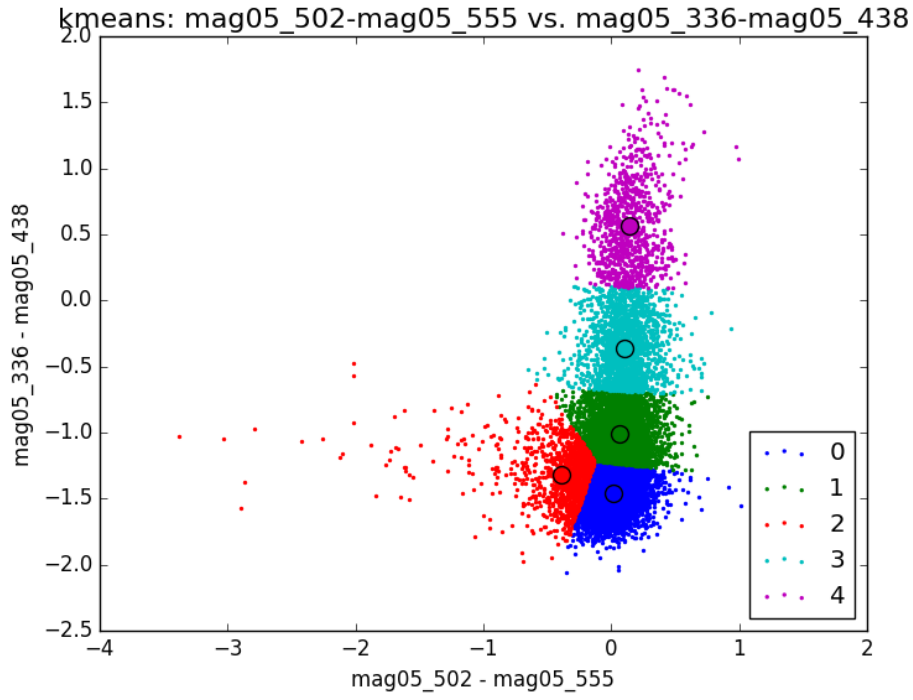Figure 6: kmeans__color__4cl__mag05__502-mag05__555vsmag05__336-mag05__438.png

Figure 7: kmeans_col_5cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

kmeans results, Ncl=5

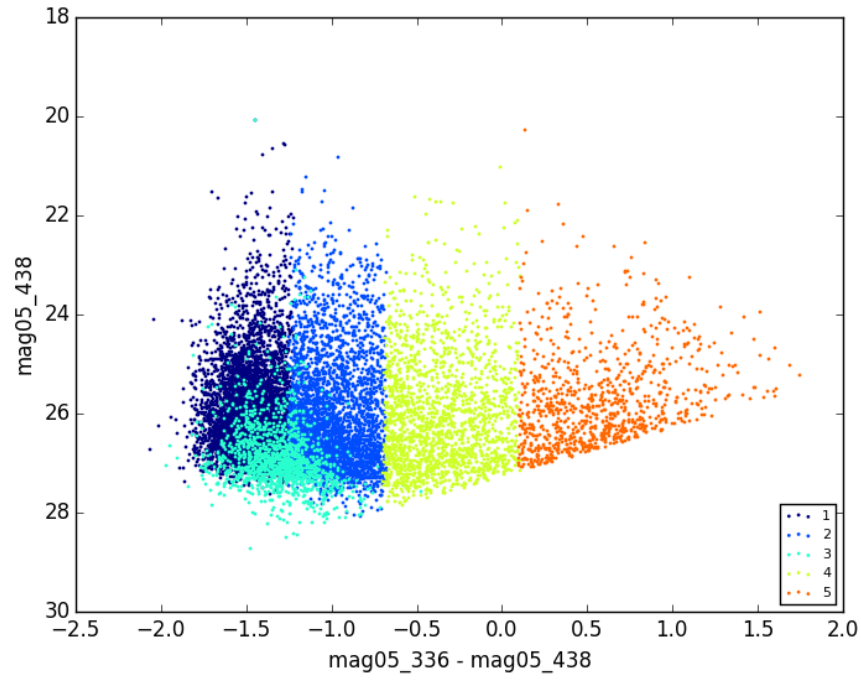| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	5720	0.391781873189	0.443945564276	1.0384	0.2329	1.4597	0.0000	0.7467	0.0138125987015	-
2	3579	0.391781873189	0.358007840298	0.7303	0.2714	1.2021	0.0000	0.5574	0.0636761585706	-
3	1382	0.391781873189	0.184356882117	1.0054	0.3736	3.2464	0.0000	0.5299	-0.390794982079	-
4	1786	0.391781873189	0.395446691921	0.3313	0.3518	1.6115	0.0010	0.305	0.101282036933	-0
5	923	0.391781873189	0.502959470268	0.4873	0.4423	1.6718	0.0010	0.3344	0.143601941748	0

6

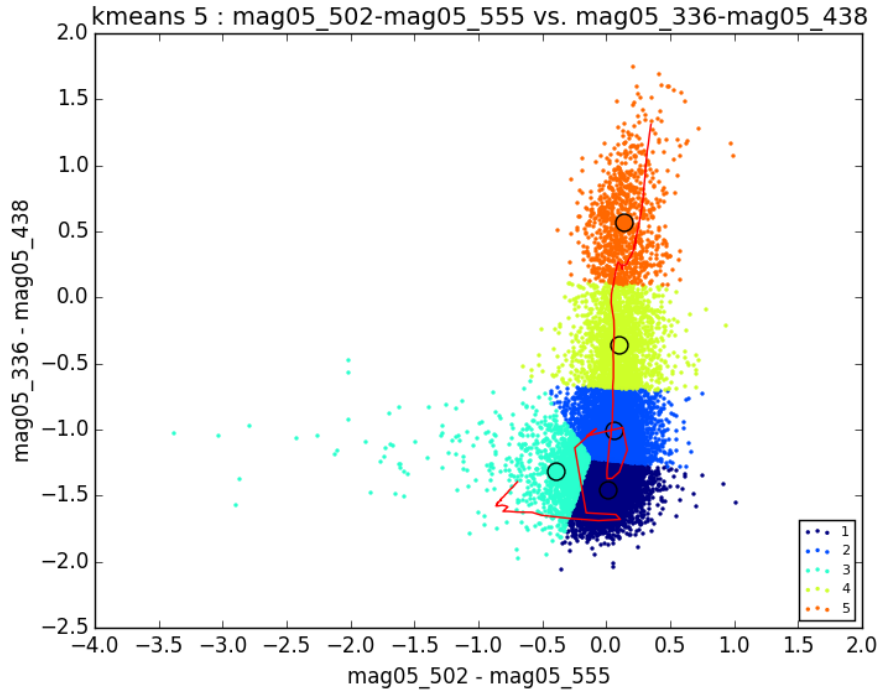Figure 8: kmeans_CMD_5cl_mag05_336-mag05_438vsmag05_438.png

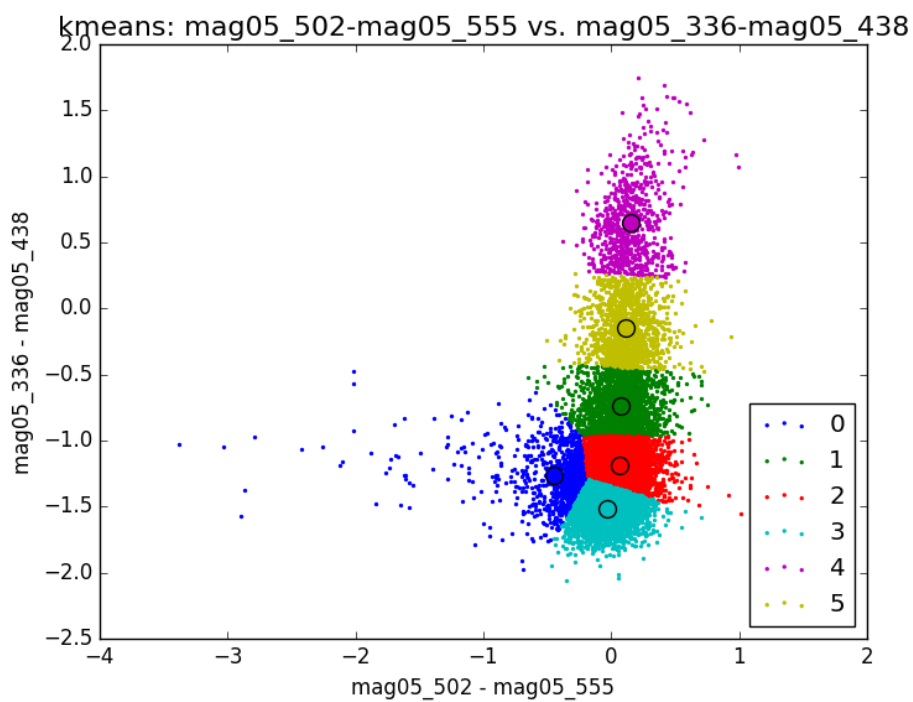Figure 9: kmeans_color_5cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

Figure 10: kmeans_col_6cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

kmeans results, Ncl=6

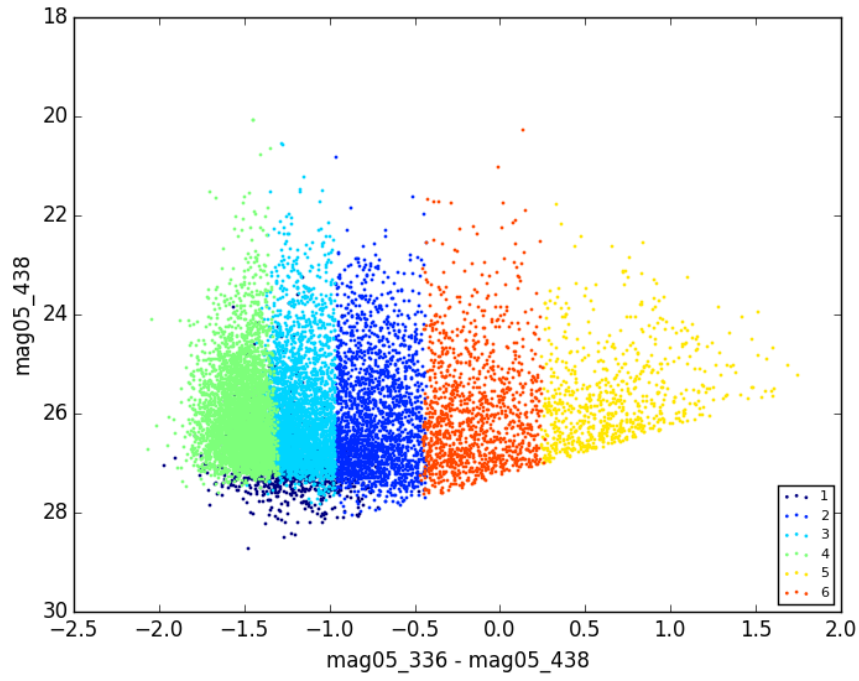| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	1005	0.363967125283	0.173805826508	0.9883	0.4014	3.1992	0.0010	0.4922	-0.451035573123	
2	2071	0.363967125283	0.351180965871	0.5478	0.2782	1.4147	0.0010	0.4347	0.0719120772947	-
3	3899	0.363967125283	0.332920670326	0.8535	0.2252	1.3582	0.0000	0.6418	0.066358704037	
4	4462	0.363967125283	0.40958844134	1.0766	0.2155	1.2263	0.0000	0.7523	-0.0274994403403	
5	755	0.363967125283	0.475627027419	0.5318	0.4113	1.5206	0.0010	0.3493	0.14799469496	
6	1198	0.363967125283	0.406351792171	0.2244	0.3197	1.4412	0.0010	0.2236	0.113964941569	-

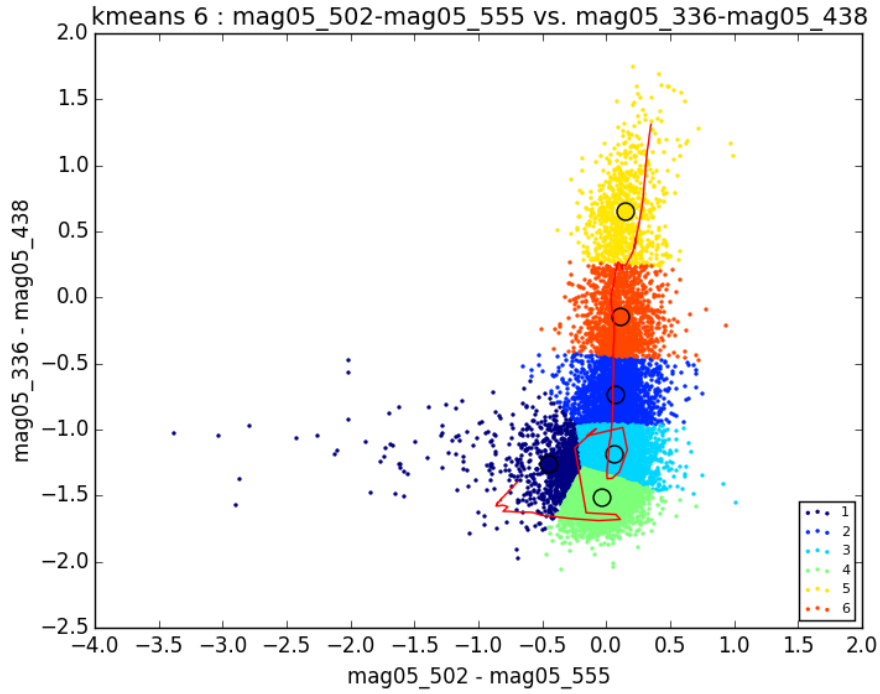Figure 11: kmeans_CMD_6cl_mag05_336-mag05_438vsmag05_438.png

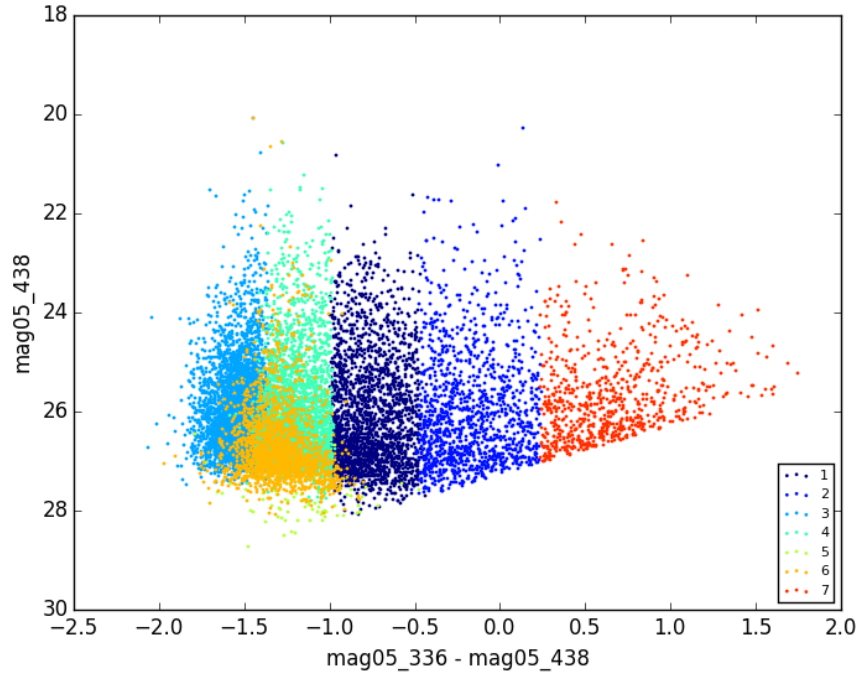Figure 12: kmeans_color_6cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

Figure 13: kmeans_CMD_7cl_mag05_336-mag05_438vsmag05_438.png

kmeans results, Ncl=7

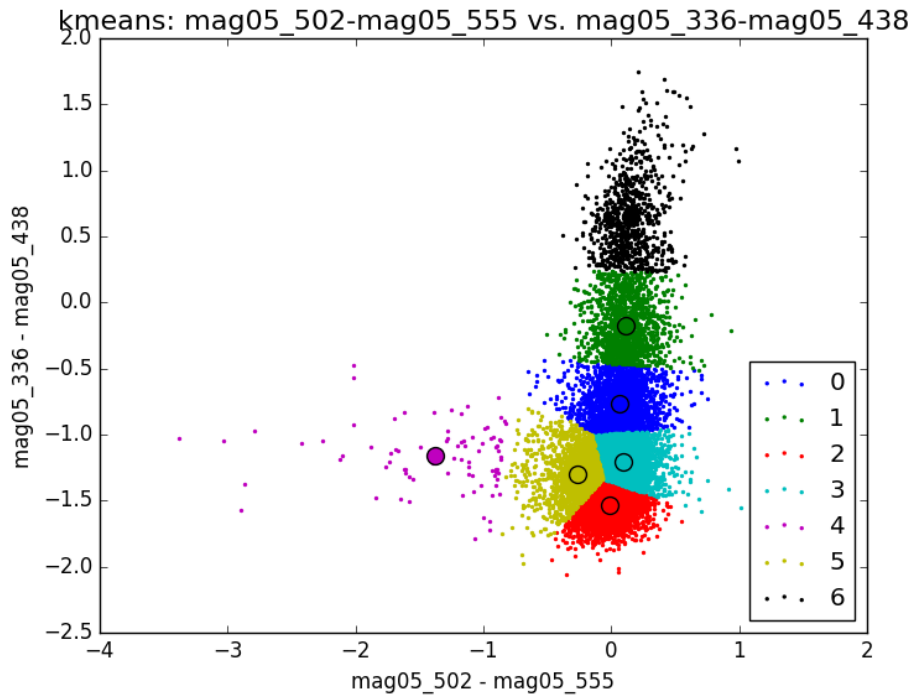| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	2156	0.357328920901	0.340023956048	0.5638	0.2776	1.4147	0.0010	0.4425	0.0640438191882	-
2	1257	0.357328920901	0.400594656212	0.2332	0.3251	1.4412	0.0010	0.2314	0.112245043616	
3	3821	0.357328920901	0.399378327919	1.0882	0.2010	1.0621	0.0000	0.7679	-0.0120290652003	
4	3496	0.357328920901	0.336601338183	0.8645	0.2127	1.2834	0.0000	0.6618	0.0948267739155	
5	83	0.357328920901	0.336652178544	1.3438	0.7086	2.5583	0.0072	0.449	-1.37337349398	
6	1814	0.357328920901	0.247322203608	0.9491	0.2595	1.1694	0.0000	0.536	-0.268708539945	-
7	763	0.357328920901	0.483129280923	0.5296	0.4130	1.5810	0.0010	0.3486	0.147984272608	(

10

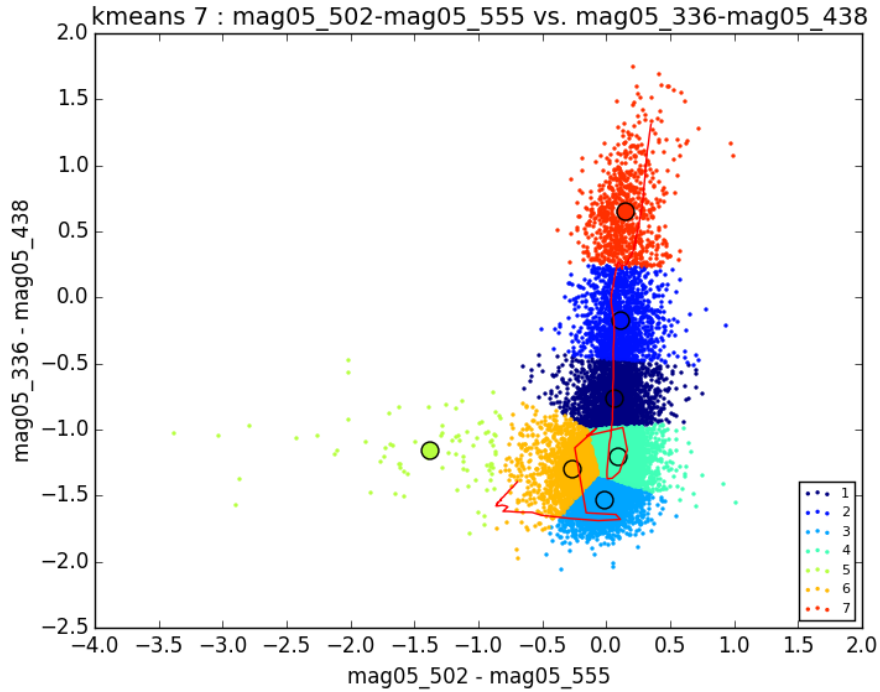Figure 14: kmeans_col_7cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

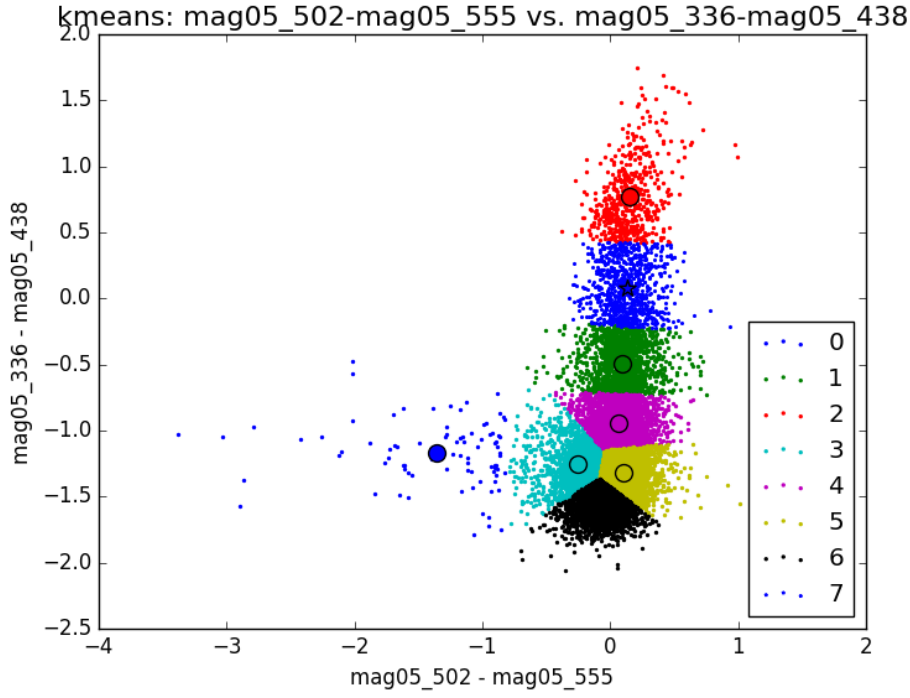Figure 15: kmeans_color_7cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

Figure 16: kmeans_col_8cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

kmeans results, Ncl=8

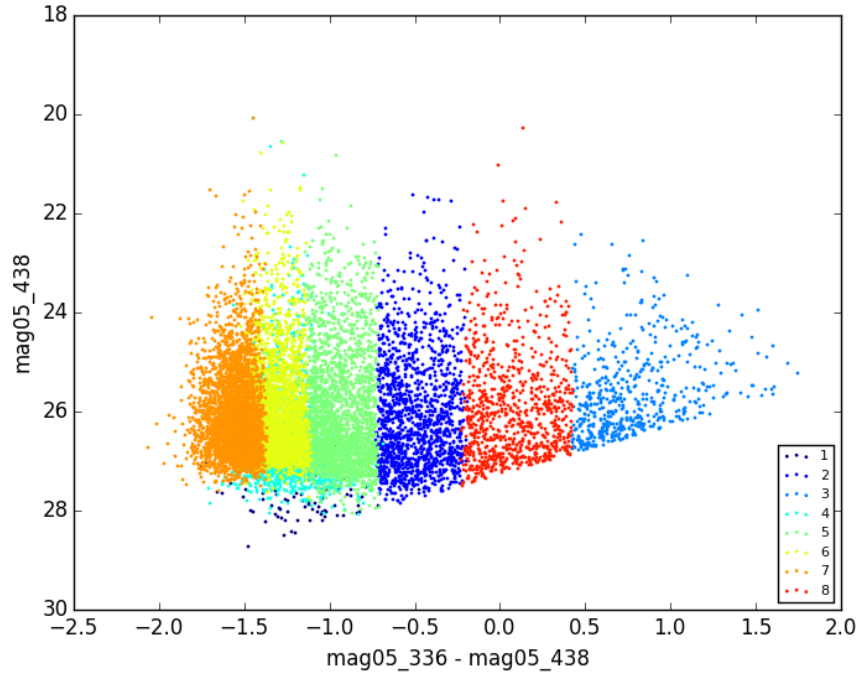| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	85	0.338685012934	0.333501188411	1.3416	0.7110	2.6284	0.0072	0.4476	-1.36075294118	
2	1419	0.338685012934	0.338770663453	0.3907	0.2832	1.4147	0.0010	0.334	0.0899655414909	-
3	549	0.338685012934	0.470752906023	0.5985	0.3711	1.5069	0.0010	0.3817	0.148610200364	
4	1748	0.338685012934	0.250812809853	0.9178	0.2491	1.0223	0.0000	0.5227	-0.251364367816	
5	2329	0.338685012934	0.327272672799	0.6838	0.2322	1.0817	0.0000	0.5227	0.0653689403689	-
6	3346	0.338685012934	0.337939289825	0.9435	0.1911	1.1326	0.0000	0.7221	0.106930663479	
7	3042	0.338685012934	0.36319154403	1.1098	0.1965	1.0924	0.0000	0.7563	-0.0663897637795	
8	872	0.338685012934	0.379900708785	0.2044	0.3125	1.3110	0.0010	0.1776	0.128271576525	(

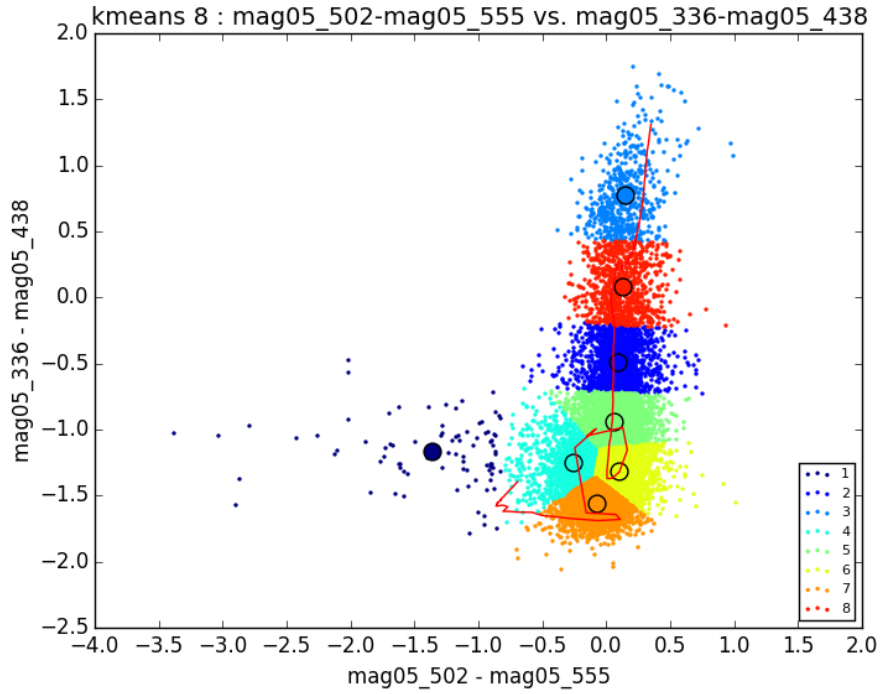Figure 17: kmeans_CMD_8cl_mag05_336-mag05_438vsmag05_438.png

Figure 18: kmeans_color_8cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

Meanshift results

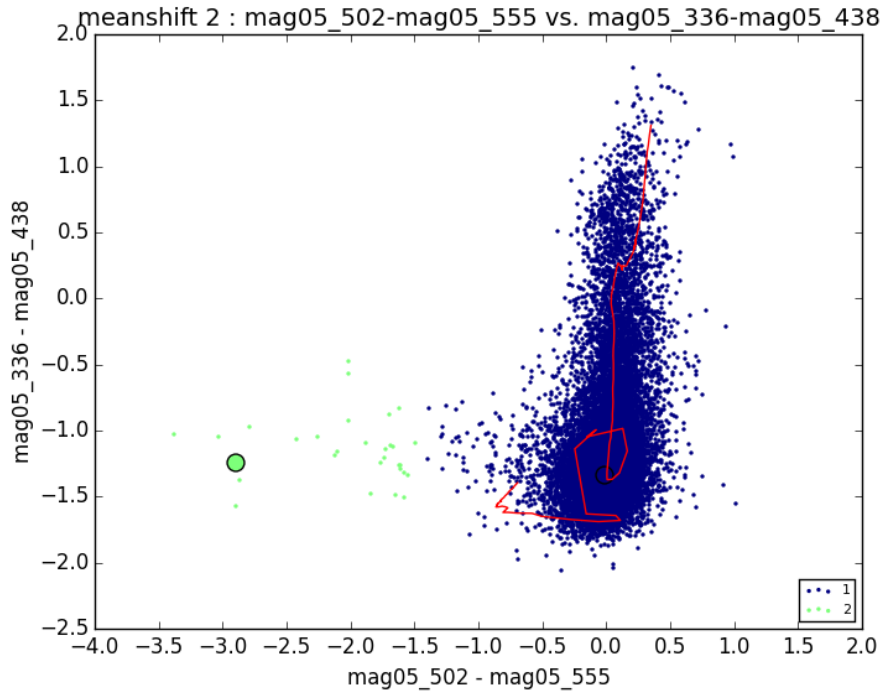| Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
0.4541	2	0.677193397648	13390	13361	29	0	0	0	0	0	0	0	0
0.4000	3	0.587459179975	13390	13340	45	5	0	0	0	0	0	0	0
0.3900	6	0.463824656038	13390	13303	72	6	4	3	2	0	0	0	0
0.3800	6	0.486556495003	13390	13305	72	6	3	2	2	0	0	0	0
0.3400	7	0.4540769809	13390	13298	77	6	4	2	2	1	0	0	0
0.2800	8	0.546477476421	13390	12267	1038	73	5	2	2	2	1	0	0

Figure 19: meanshift_color_2cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

meanshift results, Ncl=2

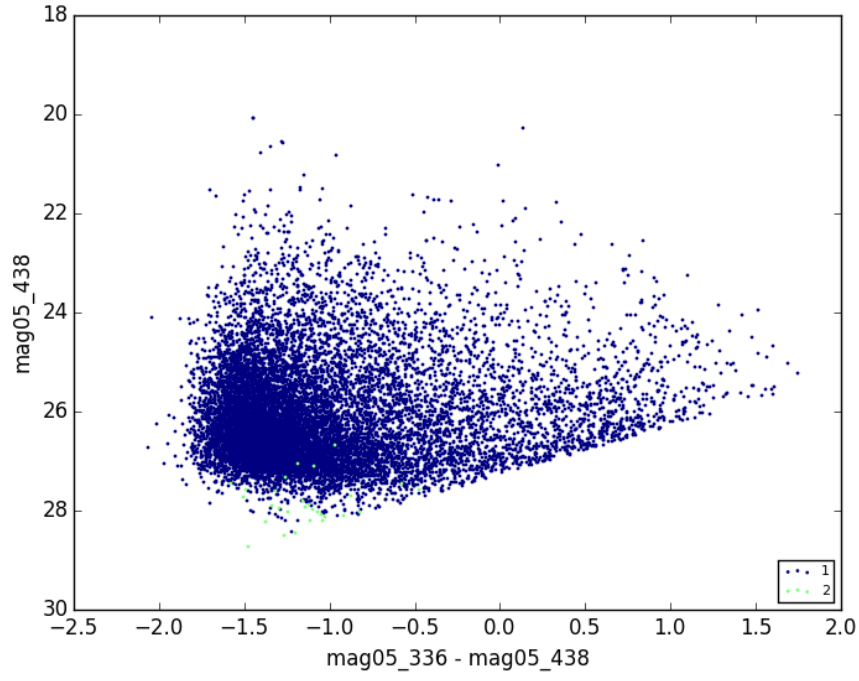| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	13361	0.677193397648	0.677183042985	0.8568	0.6910	3.8528	0.0000	0.6861	-0.00853233830846
2	29	0.677193397648	0.681964041189	1.6815	0.6794	1.8901	0.0072	0.5908	-2.8995

Figure 20: meanshift_CMD_2cl_mag05_336-mag05_438vsmag05_438.png

meanshift results, Ncl=3

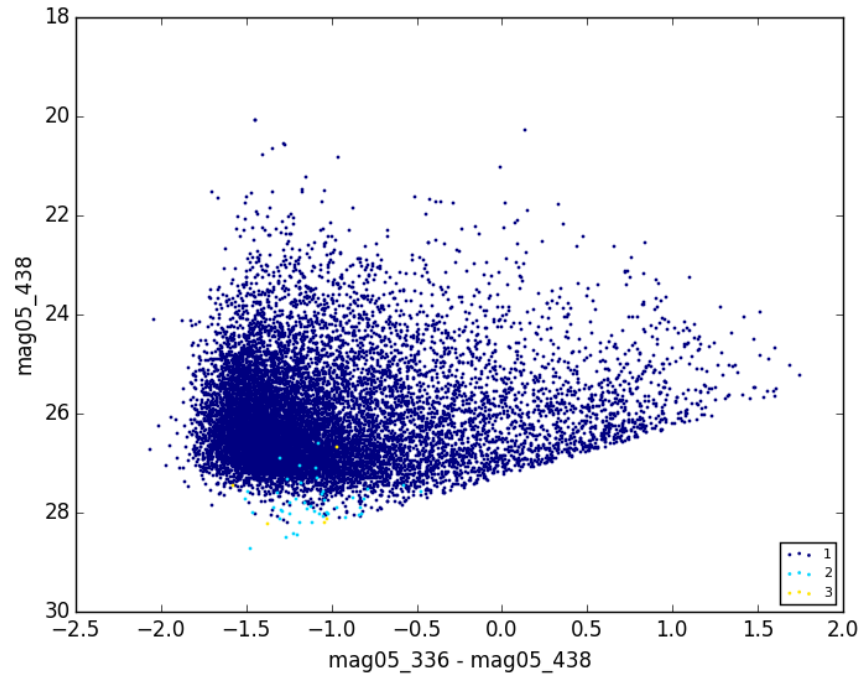| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	13340	0.587459179975	0.587473966211	0.8562	0.6890	3.8528	0.0000	0.6861	-0.00793700225841
2	45	0.587459179975	0.571827440361	1.3653	0.5212	1.3639	0.0072	0.3589	-2.13483333333
3	5	0.587459179975	0.688695159832	2.2919	0.4692	0.7279	0.2010	0.9257	-2.8995

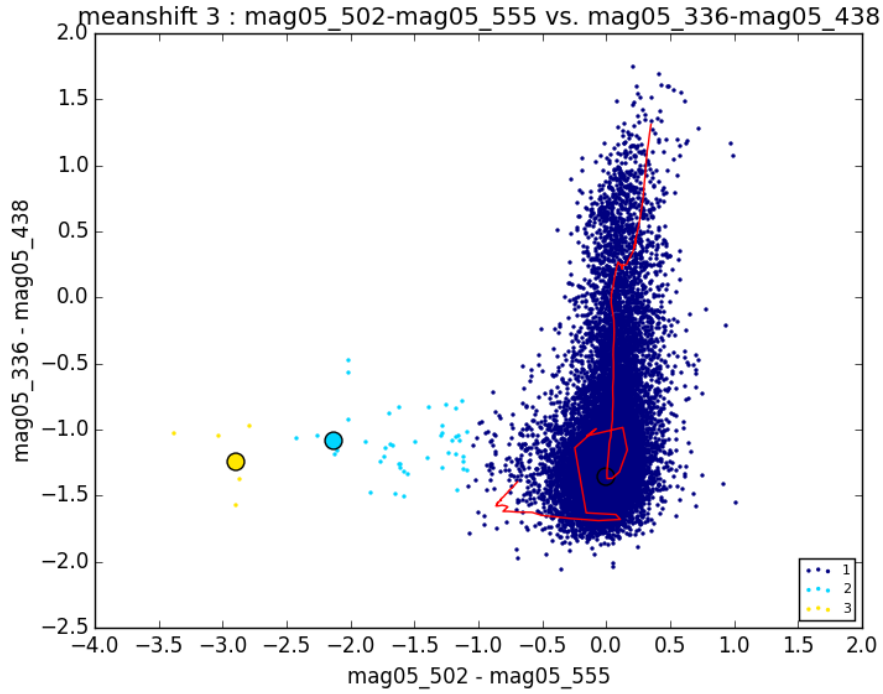Figure 21: meanshift_CMD_3cl_mag05_336-mag05_438vsmag05_438.png

Figure 22: meanshift_color_3cl_mag05_502-mag05_555vsmag05_336-mag05_438.png
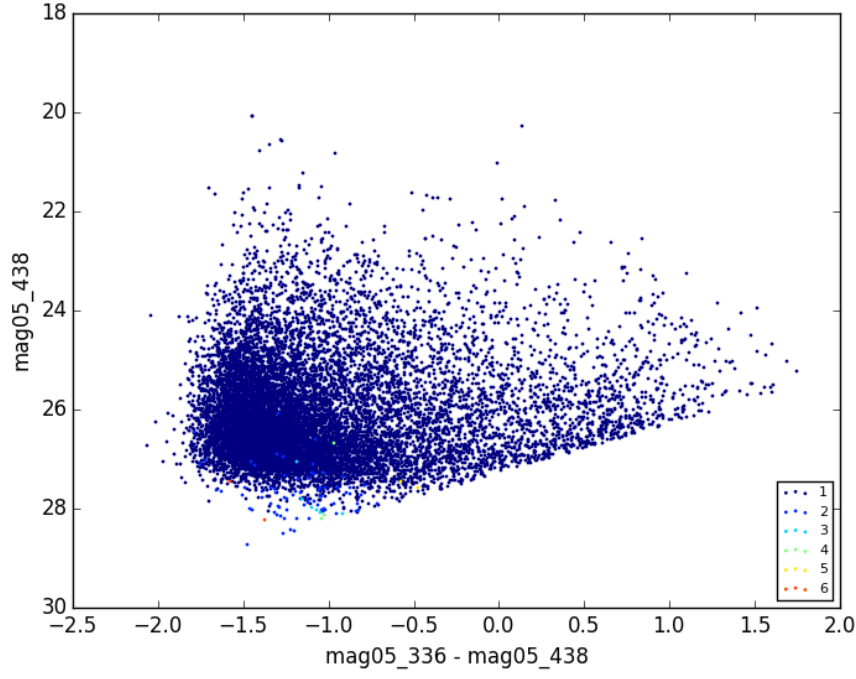
Figure 23: meanshift_CMD_6cl_mag05_336-mag05_438vsmag05_438.png

meanshift results, Ncl=6

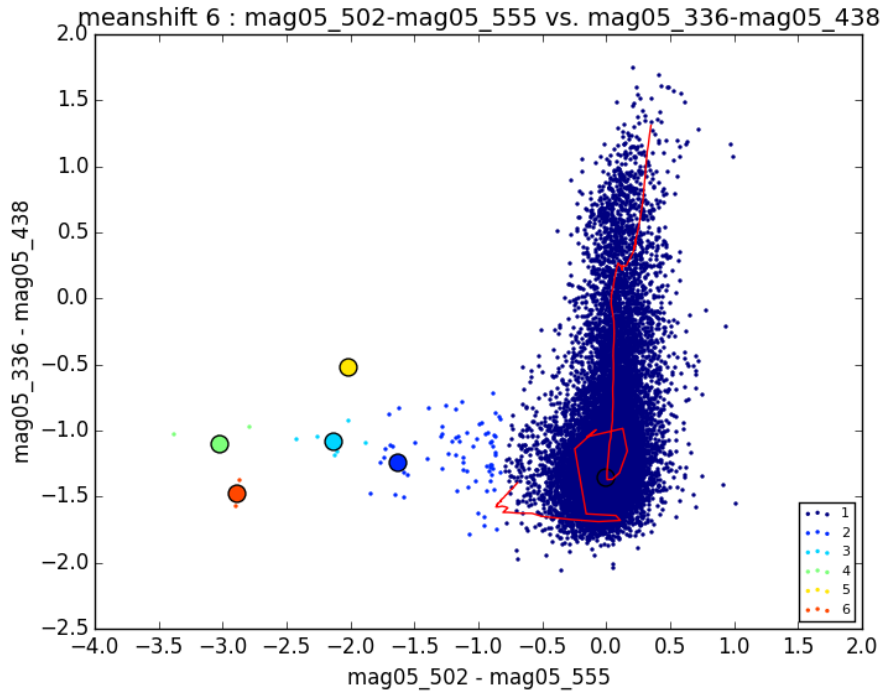| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	13303	0.463824656038	0.464134696729	0.8555	0.6863	3.8528	0.0000	0.6862	-0.00732061345248
2	72	0.463824656038	0.432574434192	1.2081	0.4753	1.2247	0.0072	0.2672	-1.63027777778
3	6	0.463824656038	0.636463204546	1.6974	0.2778	0.5489	0.0362	0.5449	-2.13483333333
4	3	0.463824656038	0.278513466874	2.2910	0.3968	0.5910	0.2572	1.042	-3.019
5	4	0.463824656038	-0.206038898896	1.1572	1.6000	2.4450	0.1010	1.0663	-2.0175
6	2	0.463824656038	0.626375234403	2.2934	0.2010	0.2010	0.2010	0.7083	-2.886
1	13305	0.486556495003	0.486847826137	0.8554	0.6868	3.8528	0.0000	0.6863	-0.0070434247755
2	72	0.486556495003	0.426419412065	1.2081	0.4753	1.2247	0.0072	0.2672	-1.5724
3	6	0.486556495003	0.505394866331	1.6974	0.2778	0.5489	0.0362	0.5449	-2.13483333333
4	3	0.486556495003	0.278513466874	2.2910	0.3968	0.5910	0.2572	1.042	-3.019
5	2	0.486556495003	0.82914179775	1.4741	0.1010	0.1010	0.1010	0.7484	-2.016
6	2	0.486556495003	0.626375234403	2.2934	0.2010	0.2010	0.2010	0.7083	-2.886

Figure 24: meanshift_color_6cl_mag05_502-mag05_555vsmag05_336-mag05_438.png

meanshift results, Ncl=7

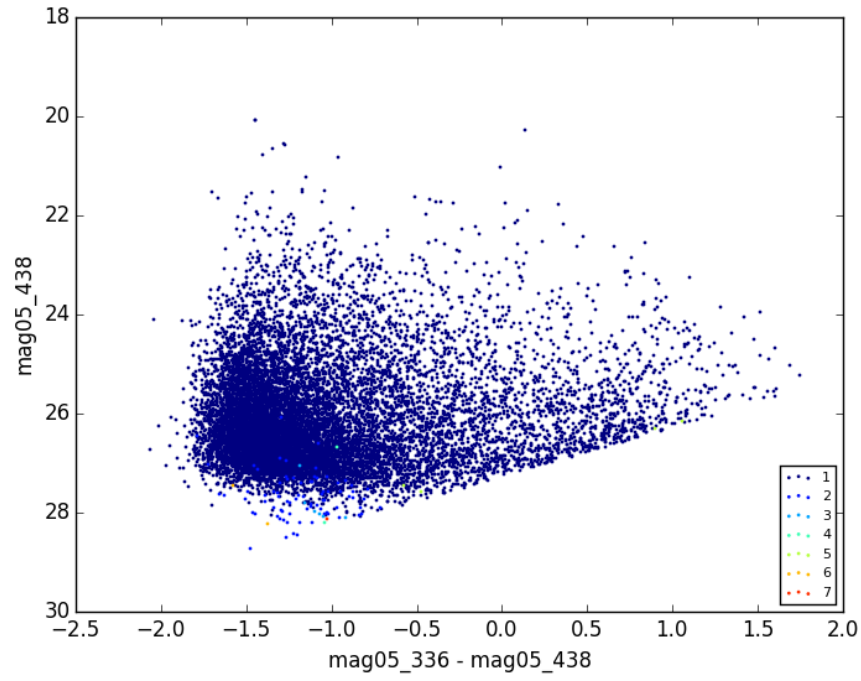| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	13298	0.4540769809	0.454266295925	0.8555	0.6862	3.8528	0.0000	0.6863	-0.00558051529791	-
2	77	0.4540769809	0.435978551258	1.1888	0.4725	1.2661	0.0072	0.2671	-1.54104761905	-
3	6	0.4540769809	0.602146707238	1.6974	0.2778	0.5489	0.0362	0.5449	-2.13483333333	-
4	2	0.4540769809	0.375938463883	2.1810	0.2572	0.2572	0.2572	0.9581	-2.913	
5	4	0.4540769809	-0.20603830411	1.1572	1.6000	2.4450	0.1010	1.0663	-2.0175	
6	2	0.4540769809	0.573309319498	2.2934	0.2010	0.2010	0.2010	0.7083	-2.886	
7	1	0.4540769809	1.0	N/A	N/A	N/A	N/A	1.1755	-3.378	

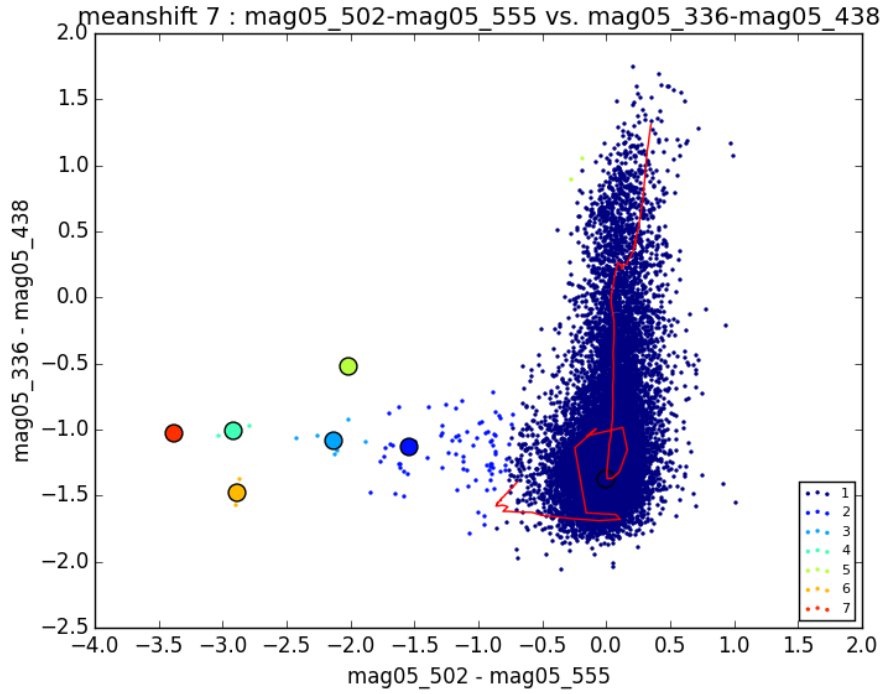Figure 25: meanshift__CMD__7cl__mag05__336-mag05__438vsmag05__438.png

Figure 26: meanshift__color__7cl__mag05__502-mag05__555vsmag05__336-mag05__438.png
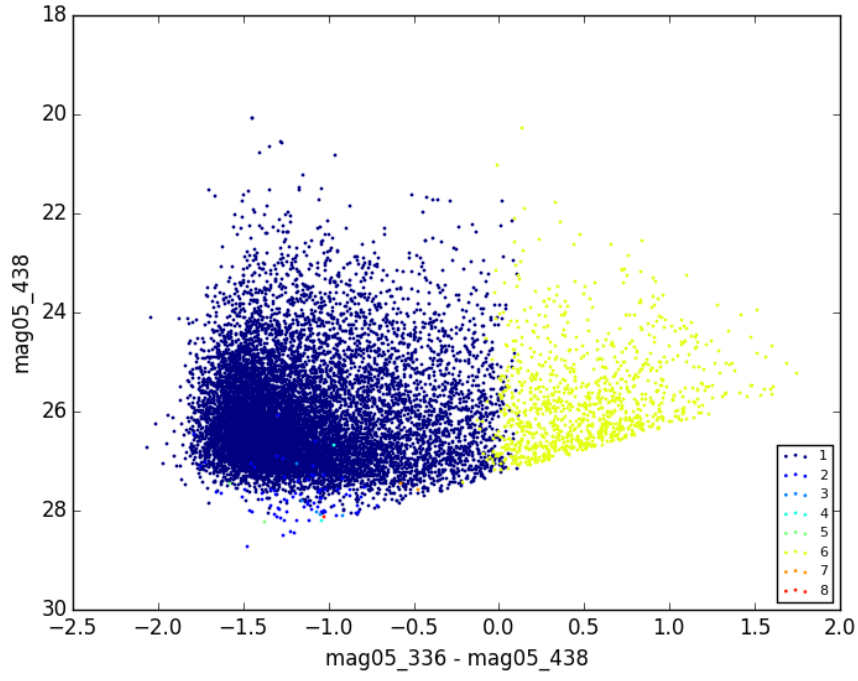
Figure 27: meanshift_CMD_8cl_mag05_336-mag05_438vsmag05_438.png

meanshift results, Ncl=8

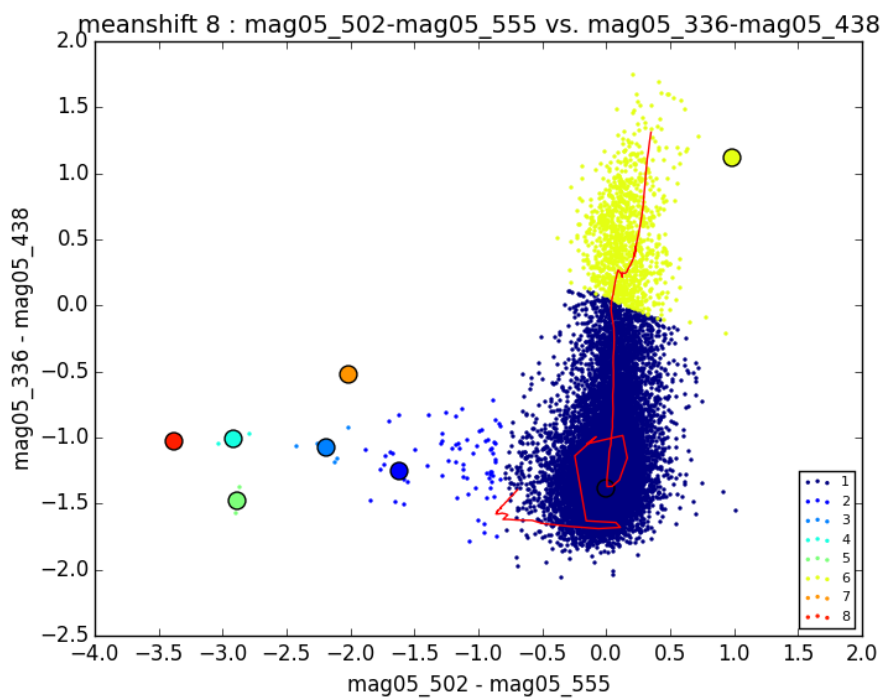| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	12267	0.546477476421	0.53266863066	0.8806	0.5169	2.1797	0.0000	0.6611	-0.00159565851288
2	73	0.546477476421	0.412422118597	1.2132	0.4831	1.2247	0.0072	0.2717	-1.6175
3	5	0.546477476421	0.514439877287	1.7274	0.2516	0.4390	0.0362	0.5678	-2.186
4	2	0.546477476421	0.375938463883	2.1810	0.2572	0.2572	0.2572	0.9581	-2.913
5	2	0.546477476421	0.573309319498	2.2934	0.2010	0.2010	0.2010	0.7083	-2.886
6	1038	0.546477476421	0.71854639088	0.4642	0.4686	2.0917	0.0010	0.327	0.987
7	2	0.546477476421	0.829326813077	1.4741	0.1010	0.1010	0.1010	0.7484	-2.0175
8	1	0.546477476421	1.0	N/A	N/A	N/A	N/A	1.1755	-3.378

Figure 28: meanshift_color_8cl_mag05_502-mag05_555vsmag05_336-mag05_438.png