Clustering output, found in /home/pauline/Research/m83_clustering/results/broad_narrow/HAlpha_I/clustering/mag05_6
mag05_814_mag05_438-mag05_657_mag05_555-mag05_657

K-means results

| Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	23555.2796936	0.40229685207	41317	18976	16009	6332	0	0	0	0	0
4	17297.1300642	0.363787624338	41317	15140	10733	9632	5812	0	0	0	0
5	14668.4280645	0.327360833058	41317	12339	11455	7590	5426	4507	0	0	0
6	12601.0533867	0.326014287653	41317	10591	9240	7040	6964	4382	3100	0	0
7	10909.1060767	0.338123744552	41317	9662	8739	6602	6483	3844	3578	2409	0
8	9623.48191237	0.327514523373	41317	8903	7035	6600	5759	5256	3914	2231	1619
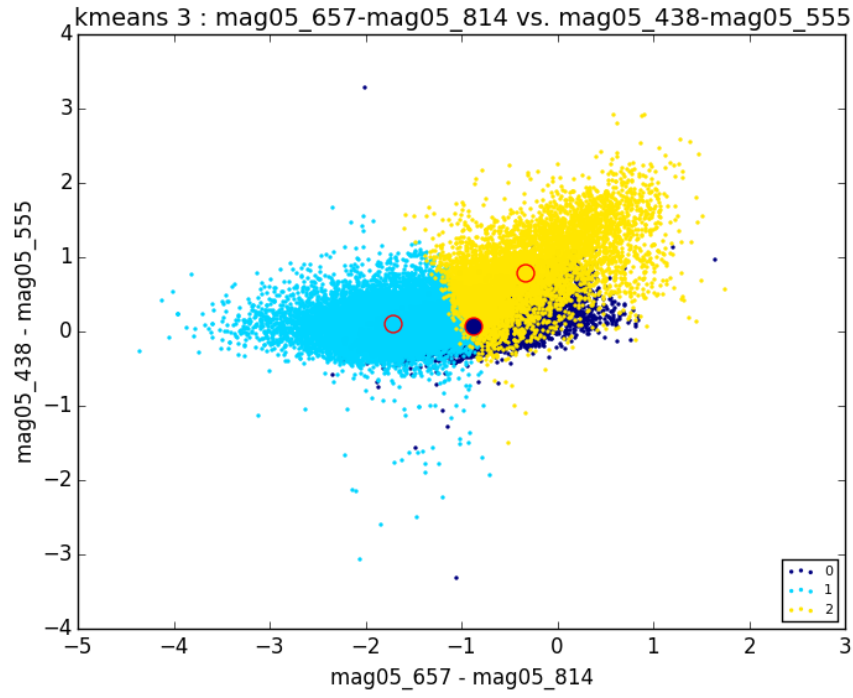
Figure 1: kmeans_base_color_3cl_mag05_657-mag05_814vsmag05_438-mag05_555.png

kmeans results, Ncl=3

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	16009	0.40229685207	0.450285249102	1.0897	0.8906	4.7880	0.0010	1.0052	-0.876727778125	1.
2	18976	0.40229685207	0.393780201548	2.0347	0.9134	6.3690	0.0010	1.8543	-1.71073071248	2.
3	6332	0.40229685207	0.306492321464	1.9432	1.0839	5.4662	0.0014	1.3537	-0.327639924195	2

2
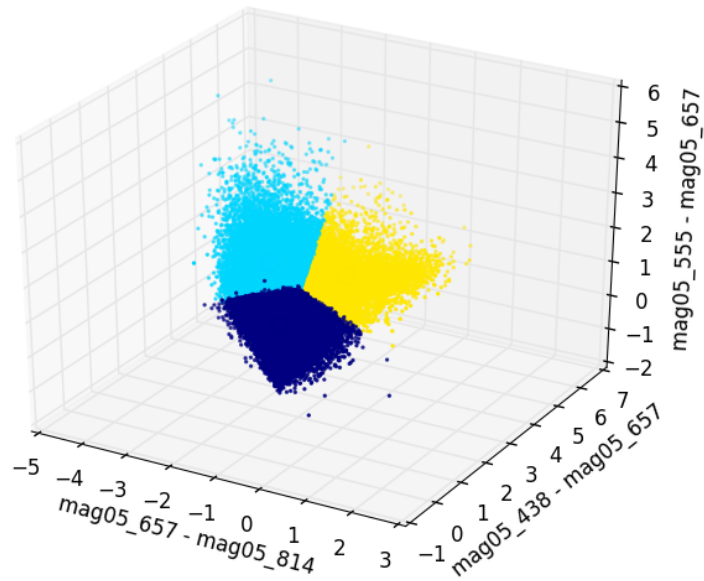
Figure 2: kmeans_3d_color_3cl_mag05_657-mag05_814vsmag05_438-mag05_657vsmag05_555-mag05_657.png
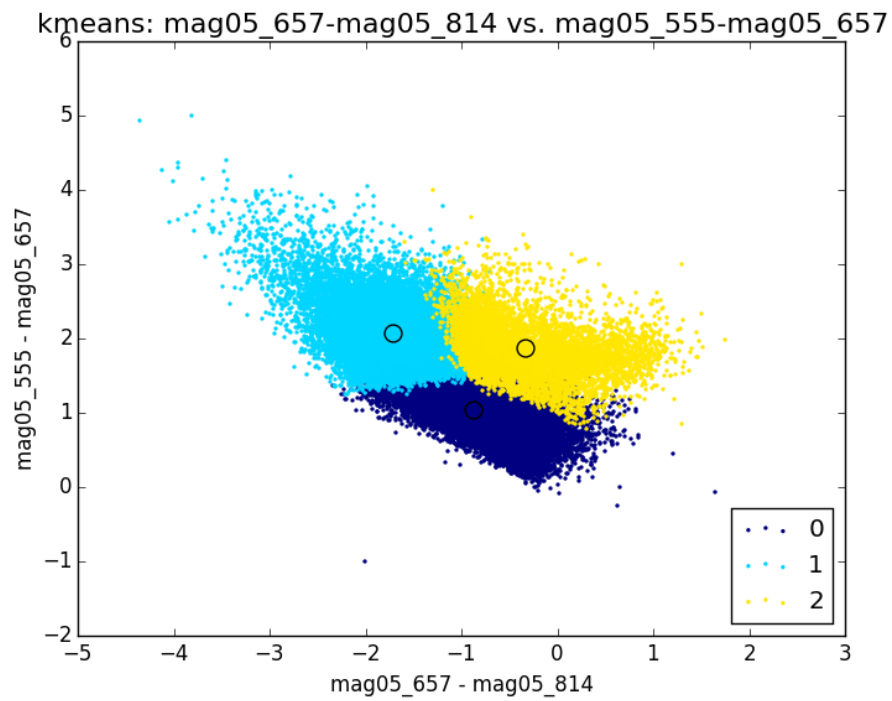

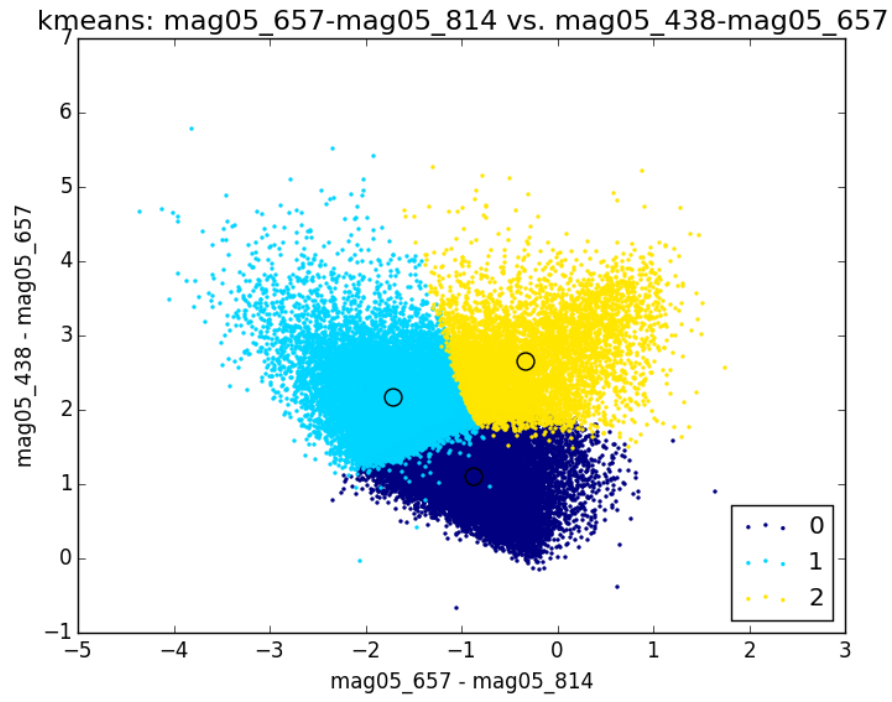Figure 3: kmeans_3d_3cl_mag05_657-mag05_814vsmag05_555-mag05_657.png

Figure 4: kmeans_3d_3cl_mag05_657-mag05_814vsmag05_438-mag05_657.png
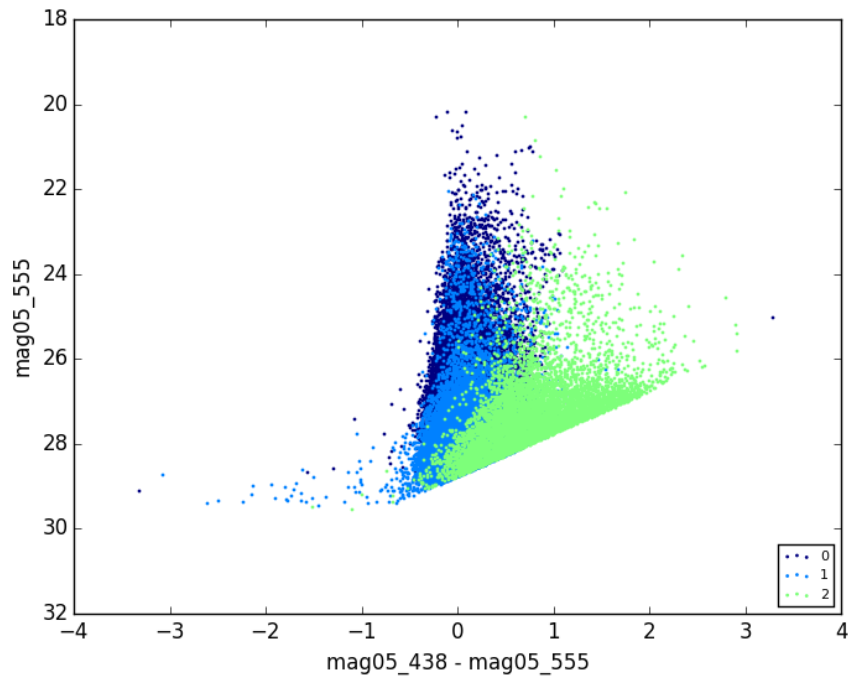

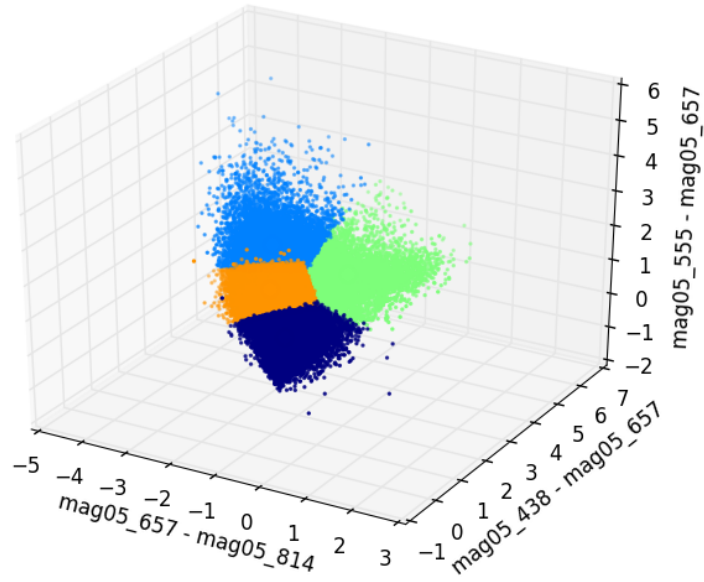Figure 5: kmeans_CMD_3cl_mag05_438-mag05_555vsmag05_555.png

Figure 6: kmeans_3d_color_4cl_mag05_657-mag05_814vsmag05_438-mag05_657vsmag05_555-mag05_657.png

kmeans results, Ncl=4

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	9632	0.363787624338	0.431870119525	0.8682	0.7604	4.7880	0.0010	0.789	-0.637724979236	0
2	10733	0.363787624338	0.322936842206	2.2648	0.8629	5.4866	0.0017	2.038	-1.83222677723	
3	5812	0.363787624338	0.296389897418	1.9368	1.0571	4.3164	0.0017	1.3268	-0.271655540262	
4	15140	0.363787624338	0.375306543747	1.5710	0.6751	3.1005	0.0010	1.4497	-1.39935653897	
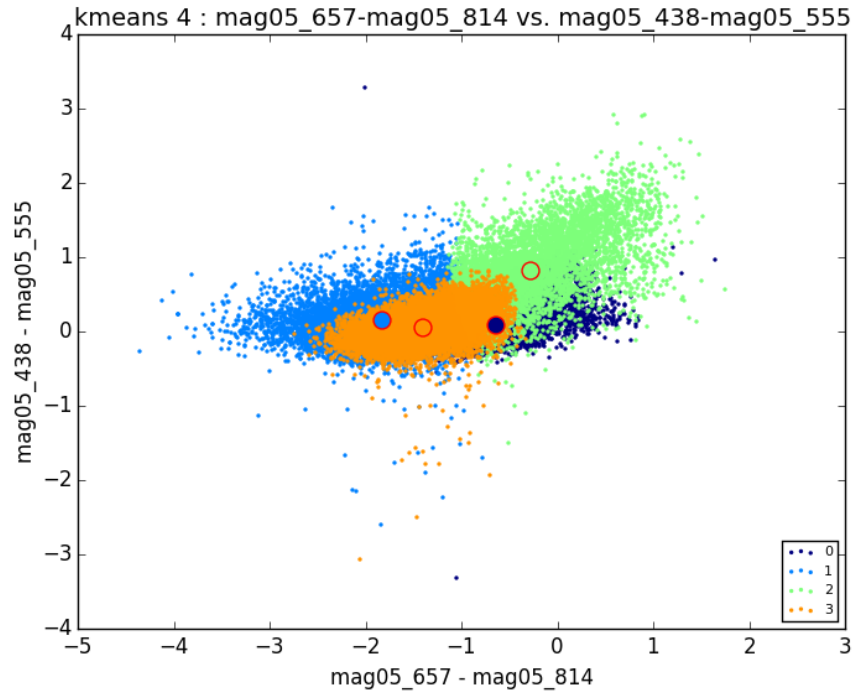
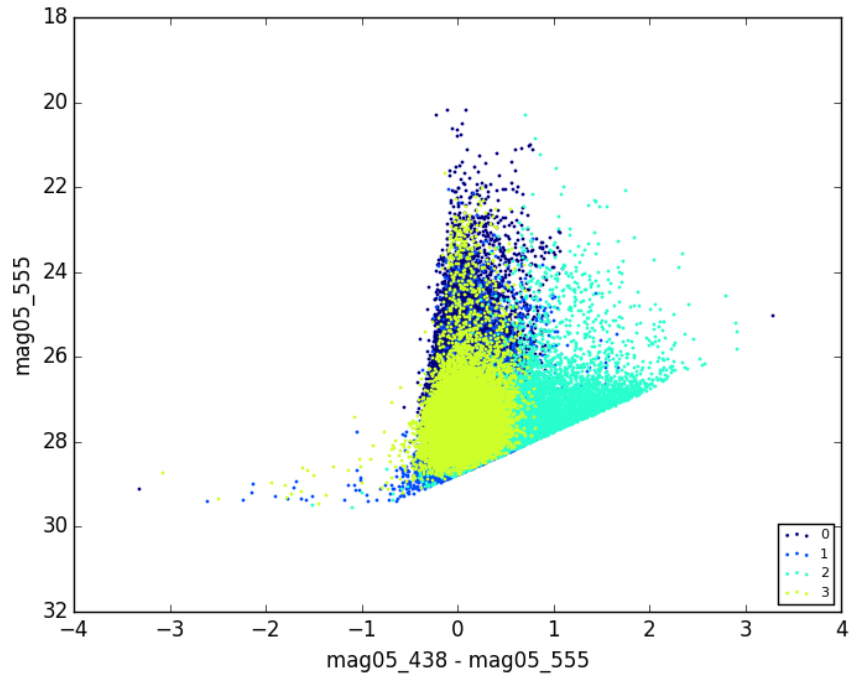Figure 7: kmeans_base_color_4cl_mag05_657-mag05_814vsmag05_438-mag05_555.png
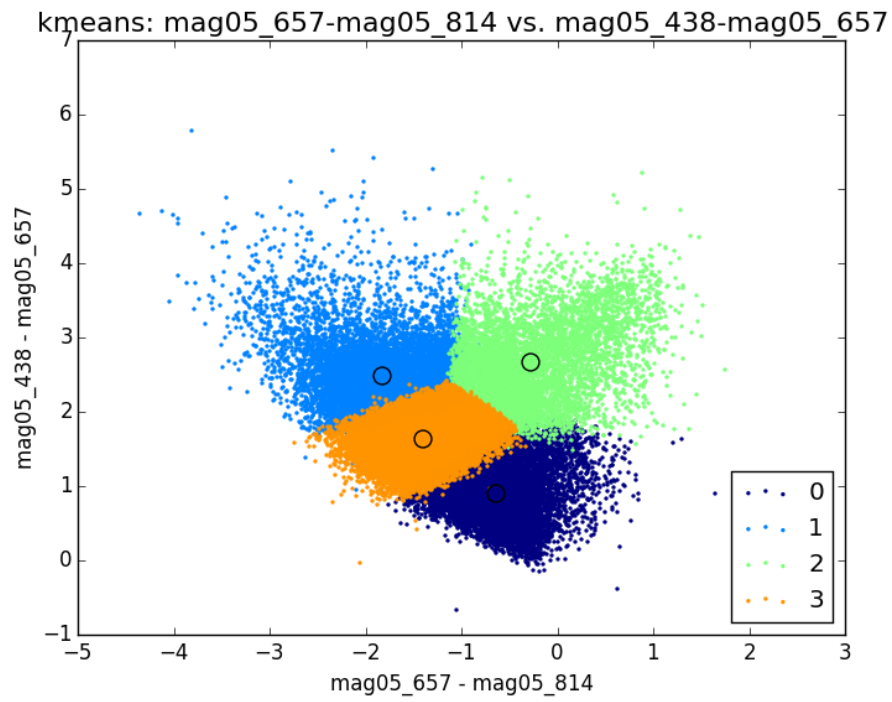

Figure 8: kmeans_CMD_4cl_mag05_438-mag05_555vsmag05_555.png

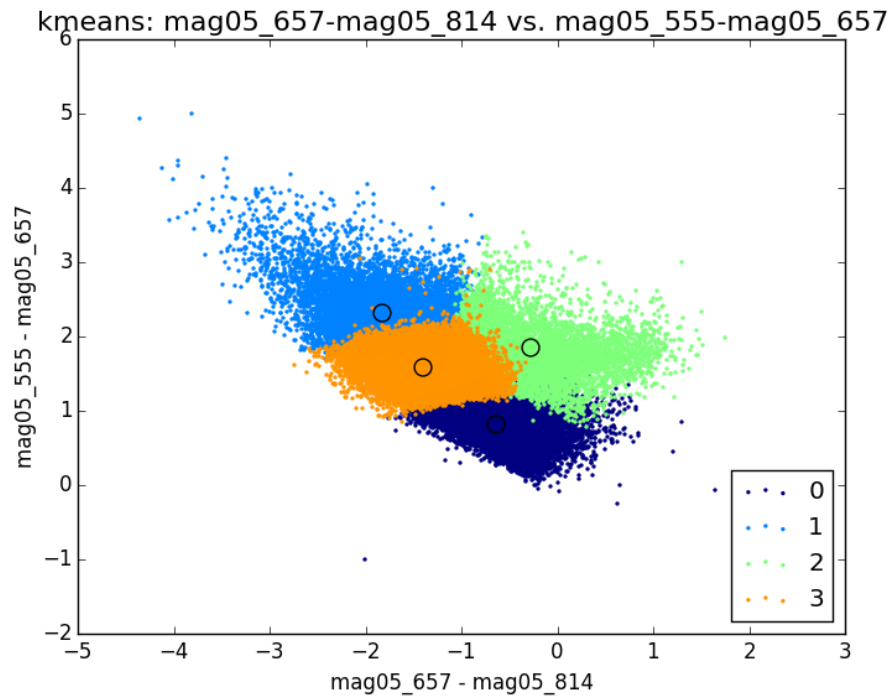Figure 9: kmeans_3d_4cl_mag05_657-mag05_814vsmag05_438-mag05_657.png

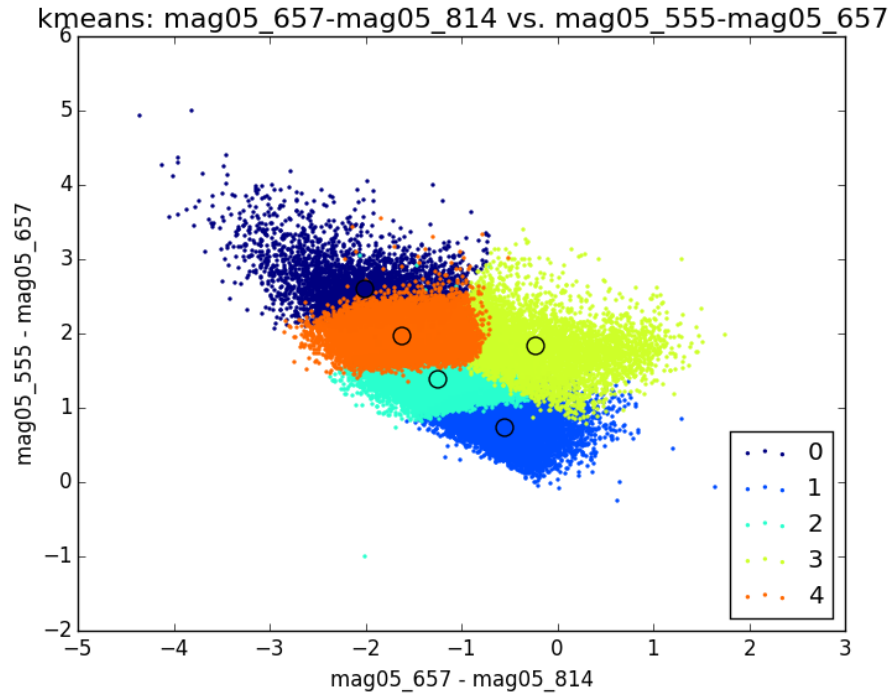Figure 10: kmeans_3d_4cl_mag05_657-mag05_814vsmag05_555-mag05_657.png

Figure 11: kmeans_3d_5cl_mag05_657-mag05_814vsmag05_555-mag05_657.png

kmeans results, Ncl=5

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	4507	0.327360833058	0.23001423512	2.5408	0.9234	5.1192	0.0036	2.2706	-2.00676015088	
2	7590	0.327360833058	0.406337821507	0.7859	0.7114	3.3651	0.0010	0.7081	-0.545783662714	
3	11455	0.327360833058	0.334716950525	1.3830	0.6252	4.7880	0.0010	1.2804	-1.24276944566	
4	5426	0.327360833058	0.290894690675	1.9378	1.0483	4.1251	0.0028	1.31	-0.226959638776	
5	12339	0.327360833058	0.323544214008	1.9184	0.6455	2.6994	0.0014	1.7391	-1.61428024962	

8
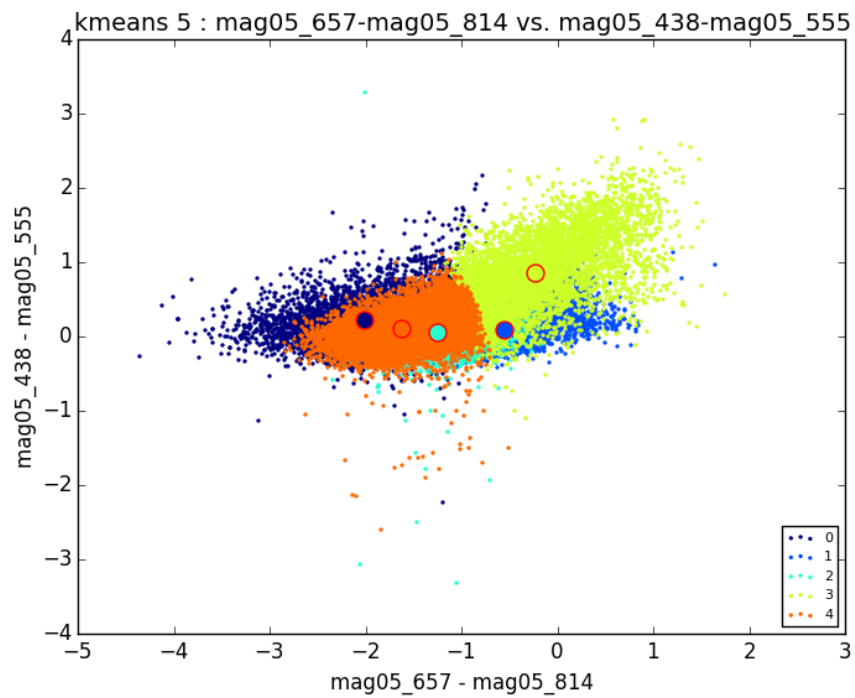
Figure 12: kmeans_base_color_5cl_mag05_657-mag05_814vsmag05_438-mag05_555.png
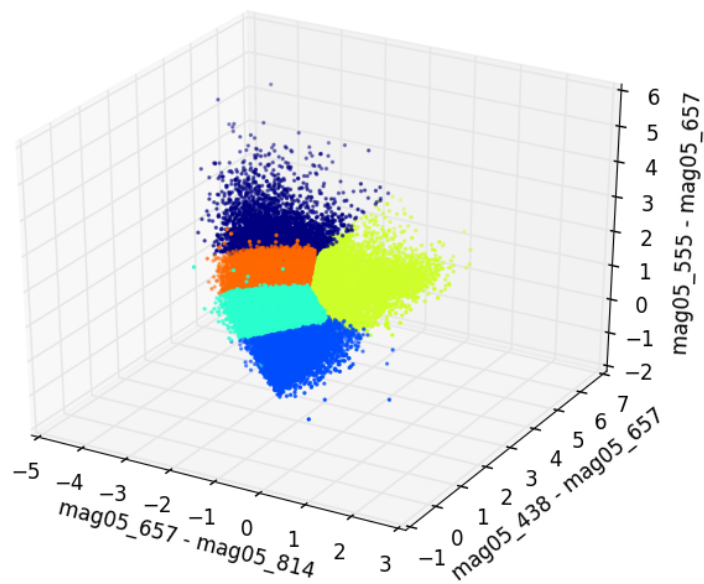

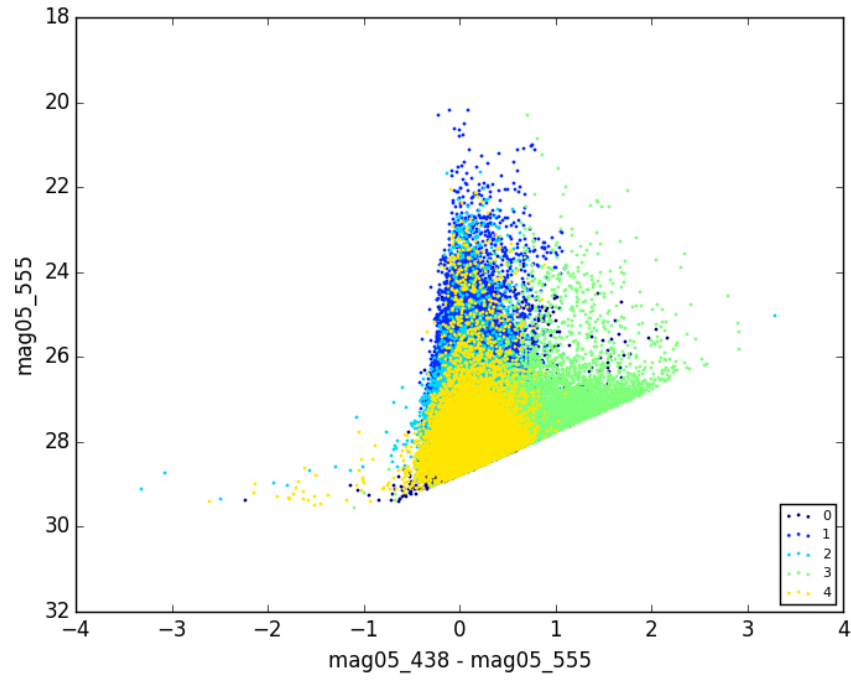Figure 13: kmeans_3d_color_5cl_mag05_657-mag05_814vsmag05_438-mag05_657vsmag05_555-mag05_657.png
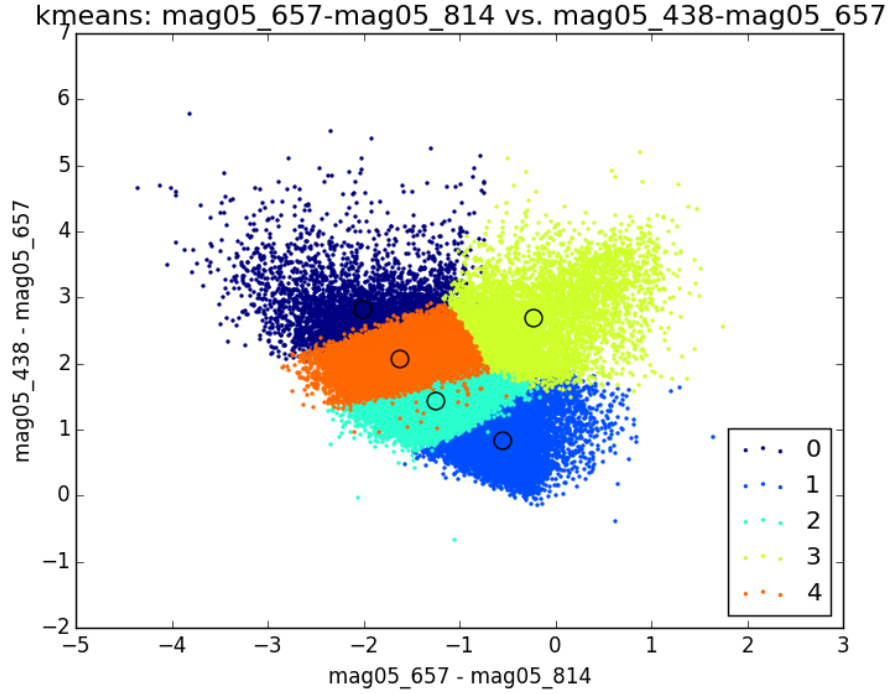
Figure 14: kmeans_CMD_5cl_mag05_438-mag05_555vsmag05_555.png

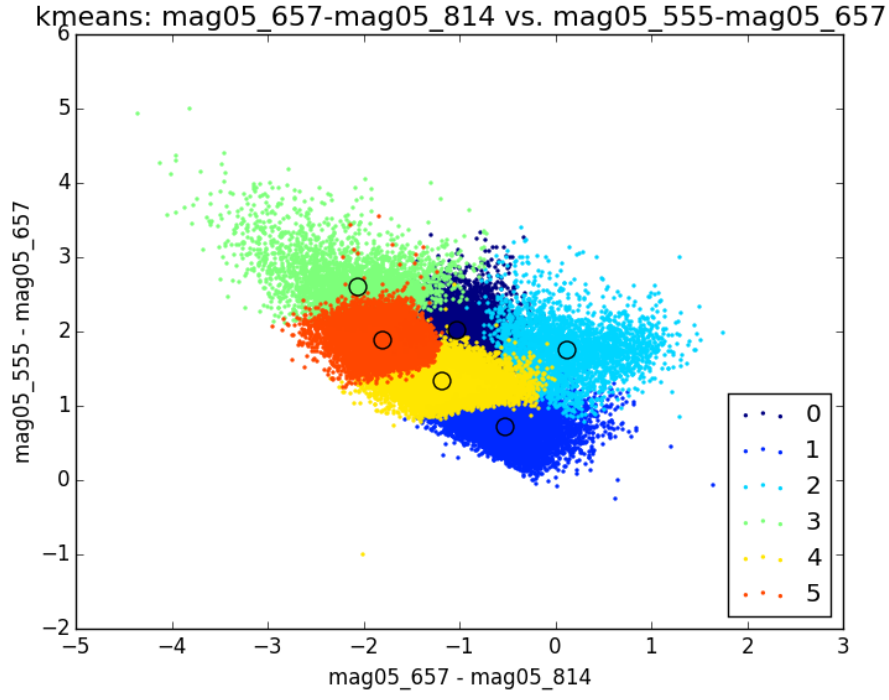Figure 15: kmeans_3d_5cl_mag05_657-mag05_814vsmag05_438-mag05_657.png

Figure 16: kmeans_3d_6cl_mag05_657-mag05_814vsmag05_555-mag05_657.png

kmeans results, Ncl=6

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	6964	0.326014287653	0.275798487351	1.9078	0.6697	2.9070	0.0014	1.549	-1.02635798392	
2	7040	0.326014287653	0.399424813946	0.7618	0.6957	3.3651	0.0010	0.6856	-0.523604545455	
3	3100	0.326014287653	0.287227072651	1.9820	1.0073	4.4102	0.0052	1.2095	0.117151935484	
4	4382	0.326014287653	0.245447785495	2.5429	0.8869	5.1192	0.0036	2.2866	-2.06085166591	
5	10591	0.326014287653	0.319640056815	1.3313	0.6101	4.7880	0.0014	1.2285	-1.17947993579	
6	9240	0.326014287653	0.366456385702	1.8831	0.5503	2.8989	0.0010	1.7599	-1.79436049784	
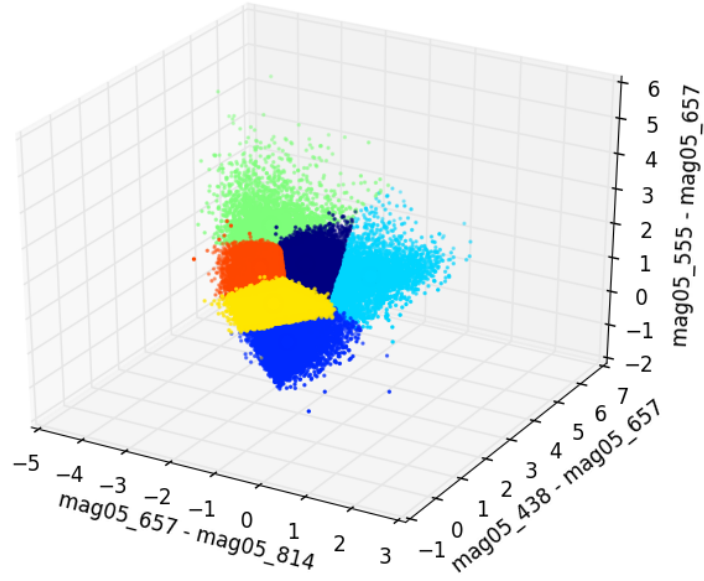
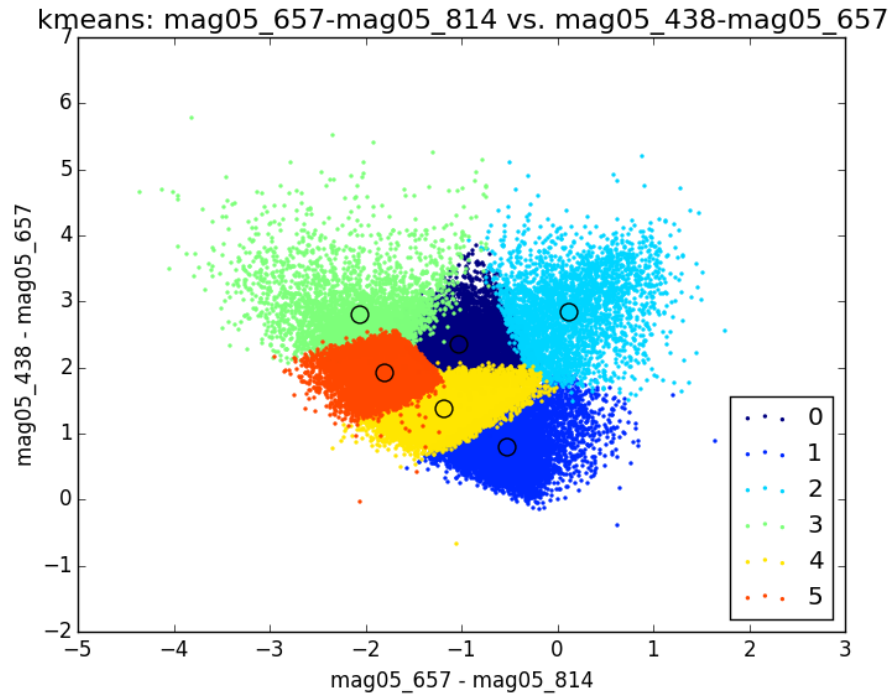Figure 17: kmeans_3d_color_6cl_mag05_657-mag05_814vsmag05_438-mag05_657vsmag05_555-mag05_657.png

Figure 18: kmeans_3d_6cl_mag05_657-mag05_814vsmag05_438-mag05_657.png

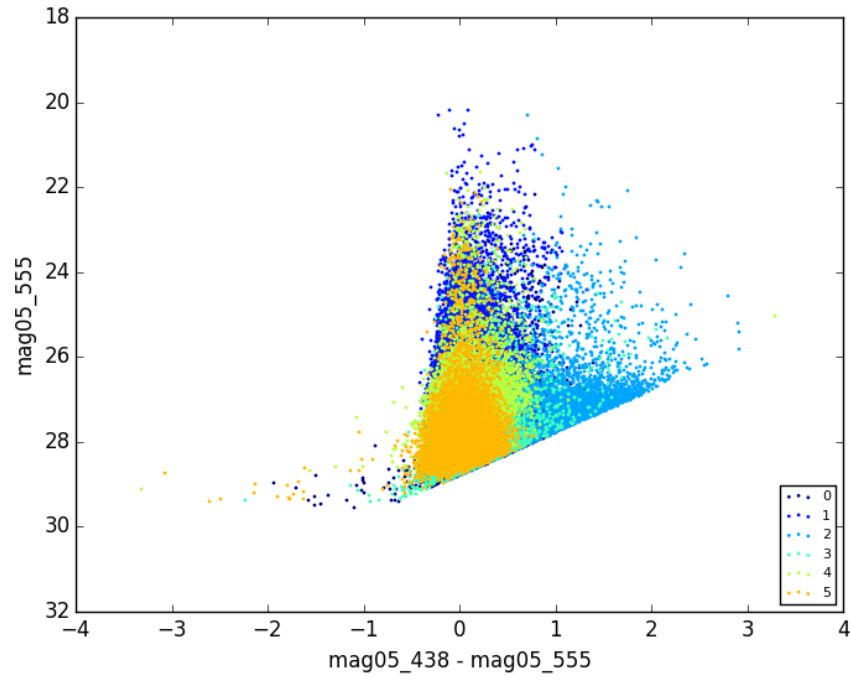Figure 19: kmeans_CMD_6cl_mag05_438-mag05_555vsmag05_555.png

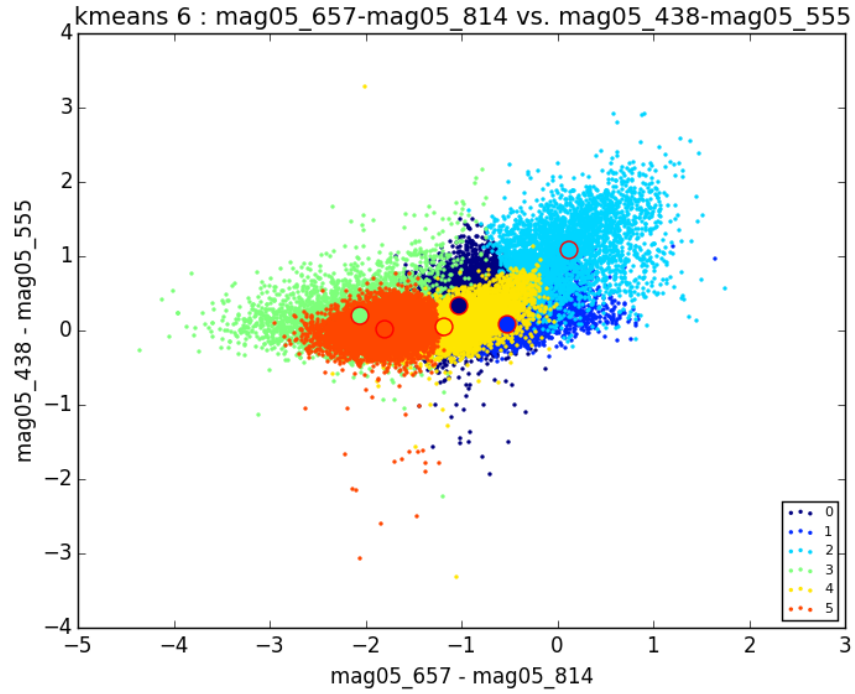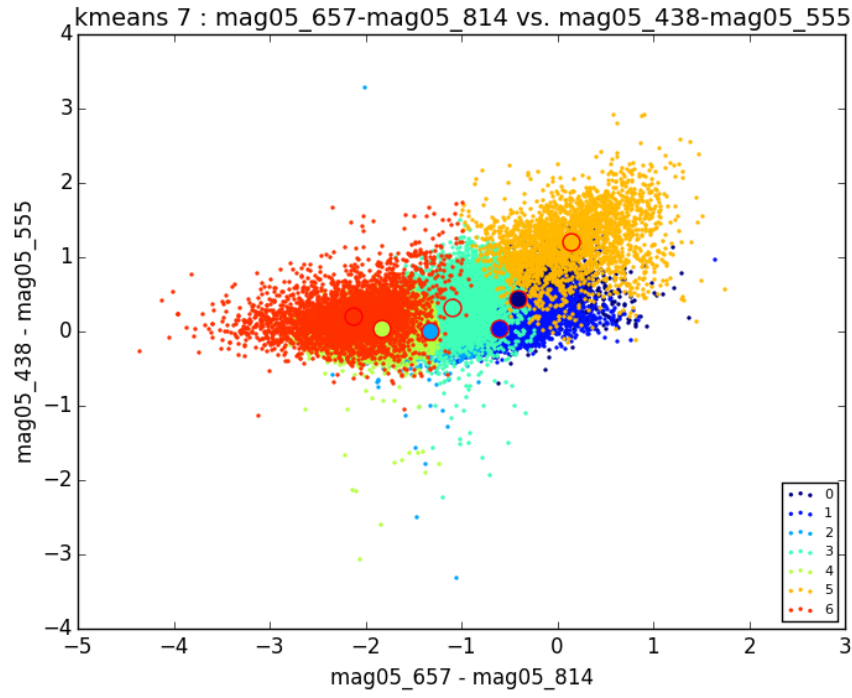Figure 20: kmeans_base_color_6cl_mag05_657-mag05_814vsmag05_438-mag05_555.png

13

Figure 21: kmeans_base_color_7cl_mag05_657-mag05_814vsmag05_438-mag05_555.png

kmeans results, Ncl=7

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	3844	0.338123744552	0.269687110567	1.3242	0.6883	2.5123	0.0028	0.9811	-0.402198491155	1
2	6483	0.338123744552	0.449675759598	0.7306	0.6156	3.3651	0.0010	0.6767	-0.59429816443	0.
3	9662	0.338123744552	0.354821504924	1.3790	0.5462	4.7880	0.0014	1.2961	-1.32883709377	1
4	6602	0.338123744552	0.277045222595	1.9515	0.6416	2.8507	0.0014	1.5942	-1.08431535898	2
5	8739	0.338123744552	0.350663464148	1.9325	0.5431	2.9440	0.0010	1.8008	-1.8220526376	1
6	2409	0.338123744552	0.341840437864	2.1288	0.9320	3.9185	0.0071	1.2787	0.142253632213	3
7	3578	0.338123744552	0.244006143942	2.6014	0.8923	4.7882	0.0036	2.3426	-2.12297037451	2
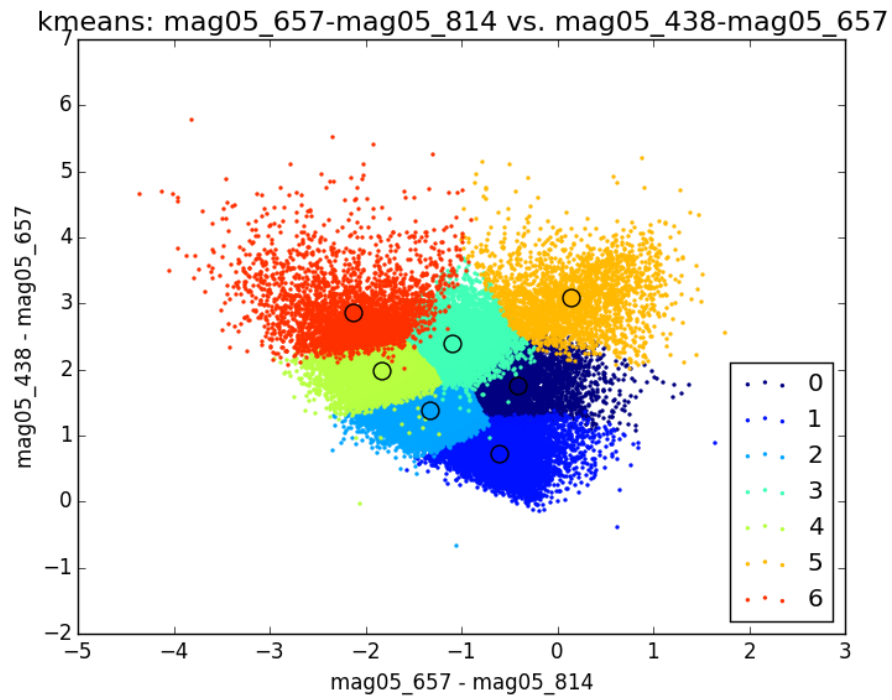
Figure 22: kmeans_3d_7cl_mag05_657-mag05_814vsmag05_438-mag05_657.png
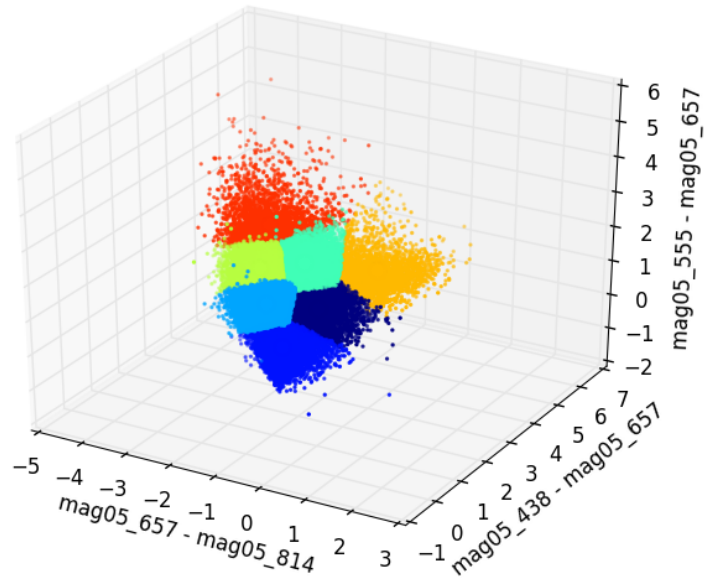

Figure 23: kmeans_3d_color_7cl_mag05_657-mag05_814vsmag05_438-mag05_657vsmag05_555-mag05_657.png

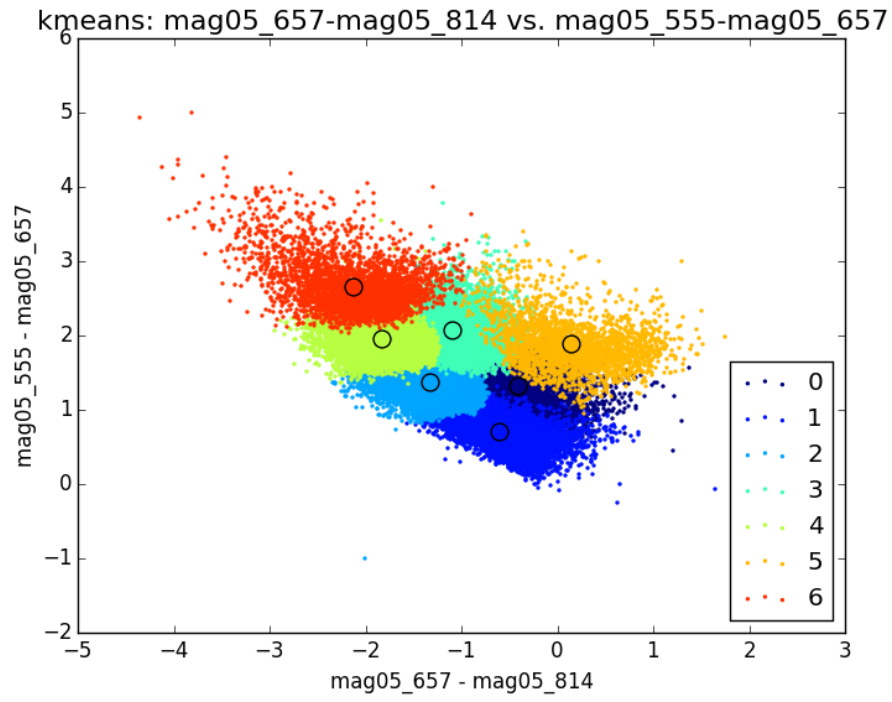Figure 24: kmeans_3d_7cl_mag05_657-mag05_814vsmag05_555-mag05_657.png
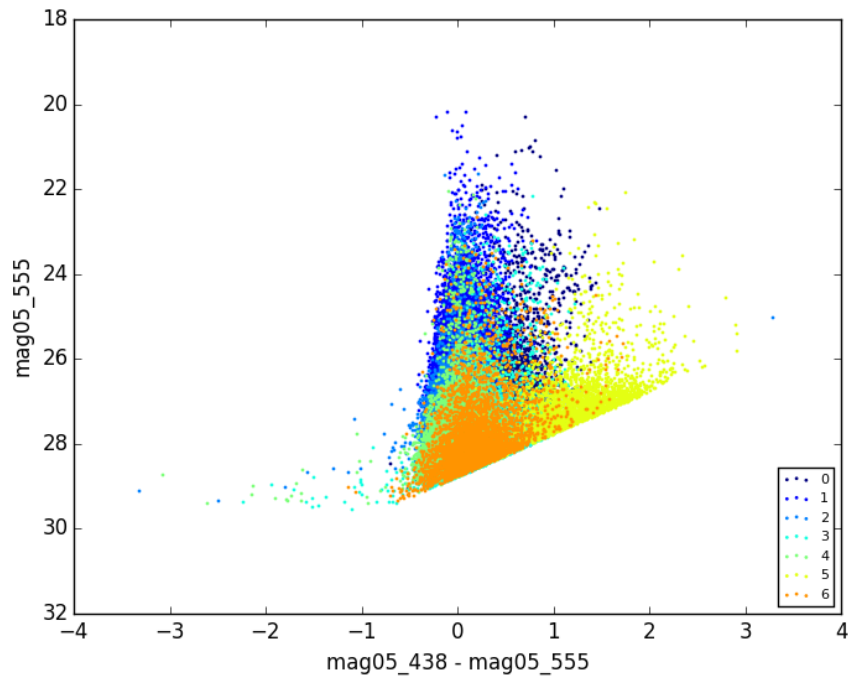

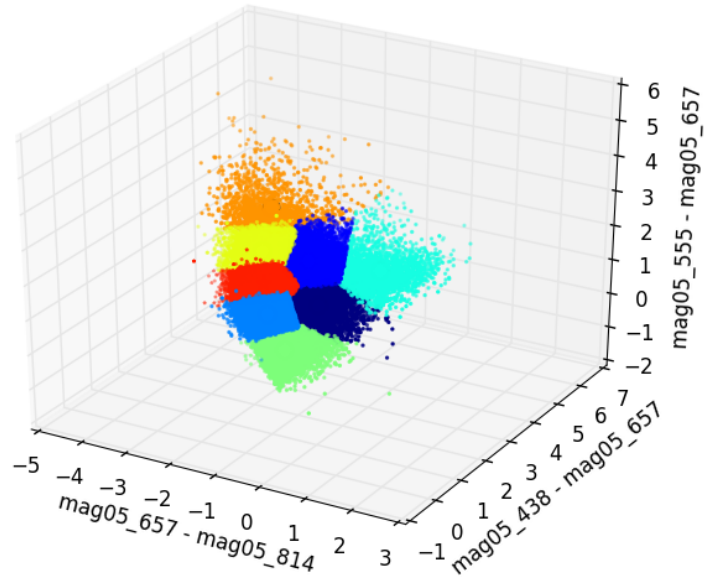Figure 25: kmeans_CMD_7cl_mag05_438-mag05_555vsmag05_555.png

Figure 26: kmeans_3d_color_8cl_mag05_657-mag05_814vsmag05_438-mag05_657vsmag05_555-mag05_657.png

kmeans results, Ncl=8

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	3914	0.327514523373	0.257022943389	1.3598	0.6872	2.5649	0.0028	1.0103	-0.425336228922	1
2	5759	0.327514523373	0.266915434781	1.9880	0.6491	2.7040	0.0014	1.6033	-1.04430699774	2
3	7035	0.327514523373	0.360398329341	1.1979	0.4919	4.7880	0.0017	1.1306	-1.17178820185	1
4	2231	0.327514523373	0.359541244186	2.1234	0.8991	4.0508	0.0086	1.252	0.196167189601	3
5	5256	0.327514523373	0.424731181748	0.6648	0.5839	3.1187	0.0010	0.6076	-0.501051940639	0.
6	6600	0.327514523373	0.342172005475	2.1611	0.5520	2.6948	0.0017	1.9861	-1.93439848485	
7	1619	0.327514523373	0.219853013502	2.8661	1.0082	4.3780	0.0057	2.5647	-2.28066399012	3
8	8903	0.327514523373	0.315012990445	1.6718	0.5137	2.8458	0.0010	1.5578	-1.57196585421	1
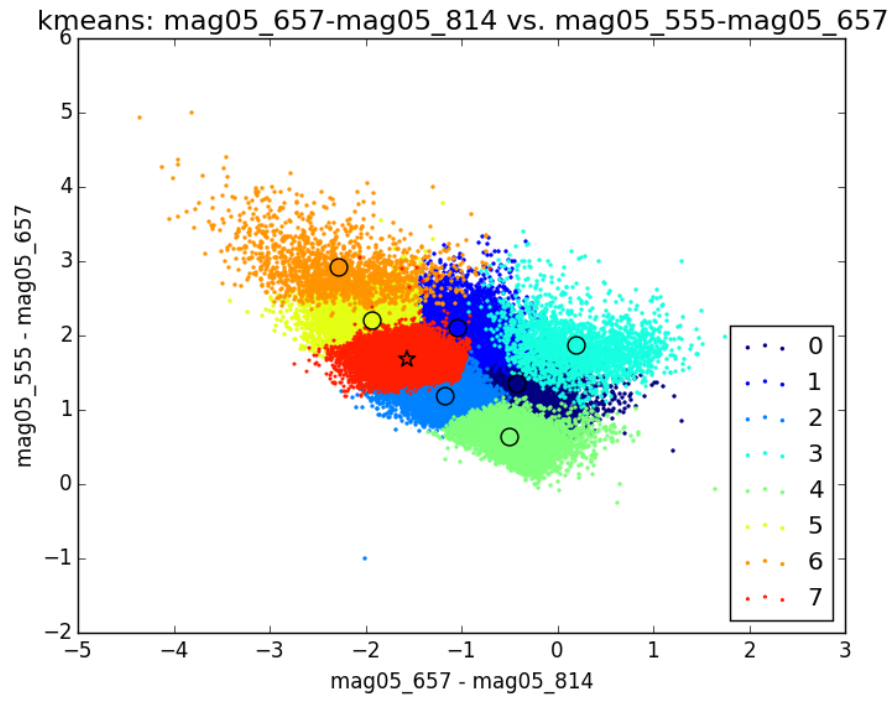
Figure 27: kmeans_3d_8cl_mag05_657-mag05_814vsmag05_555-mag05_657.png
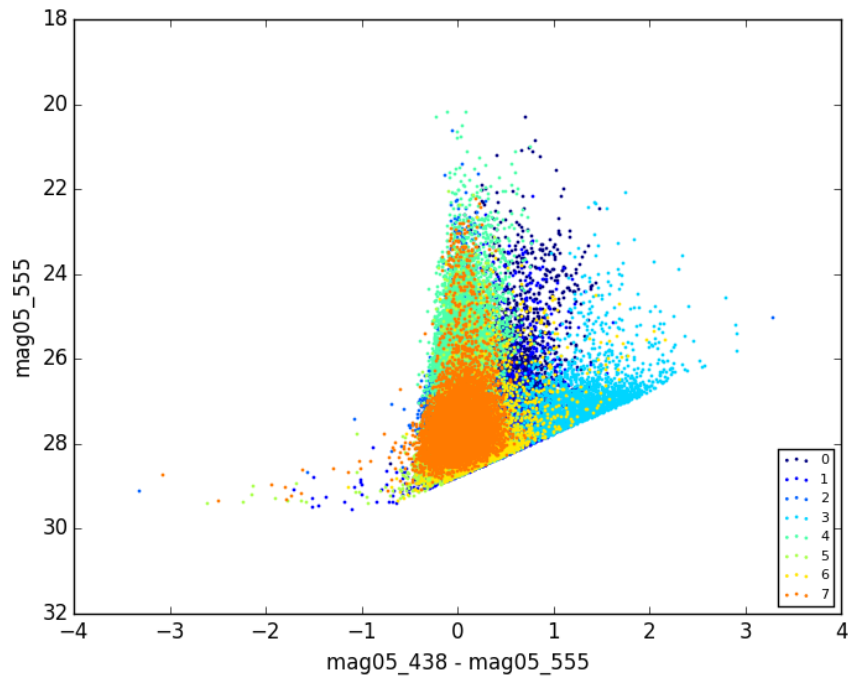

Figure 28: kmeans_CMD_8cl_mag05_438-mag05_555vsmag05_555.png
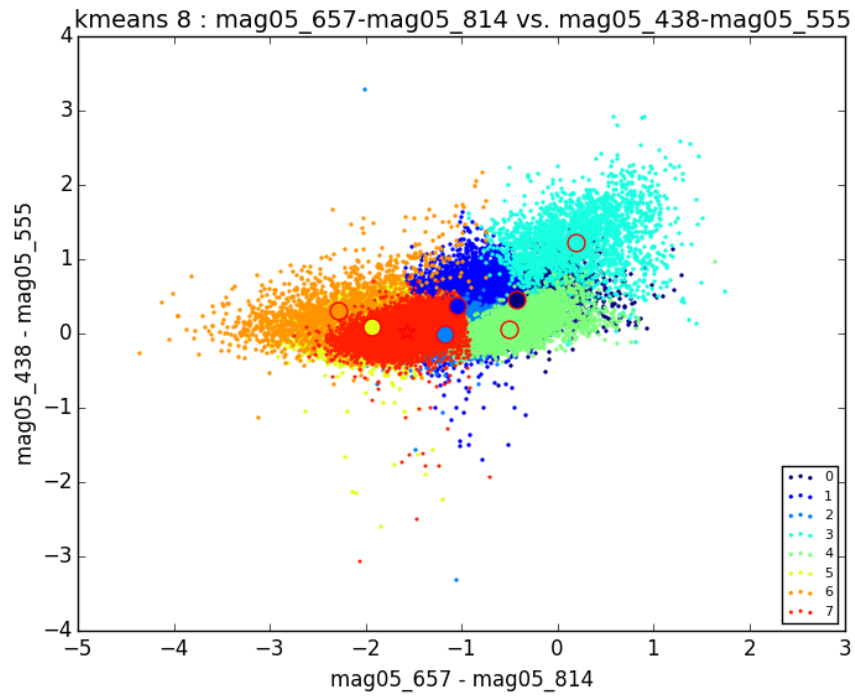
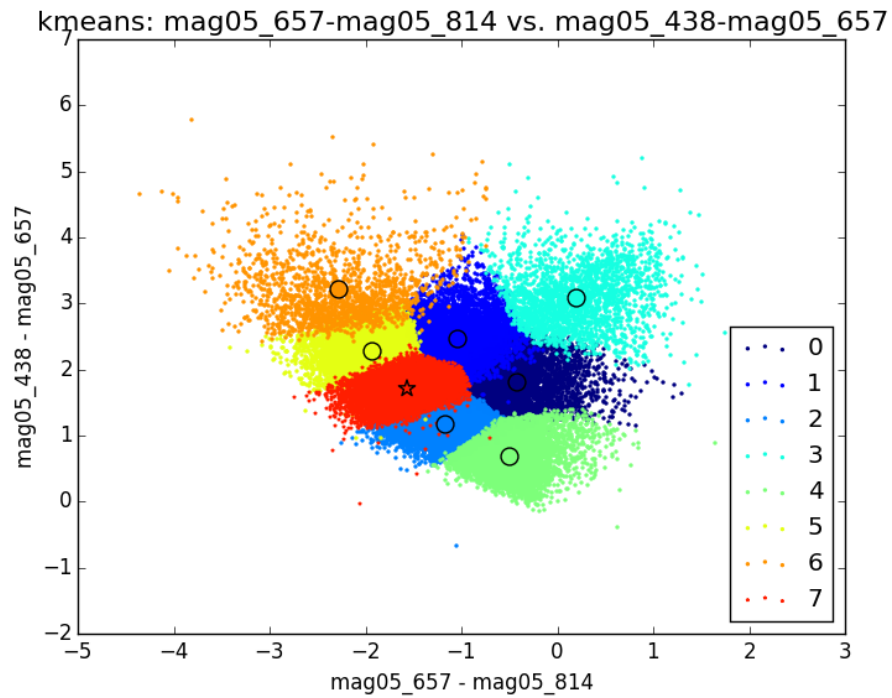Figure 29: kmeans_base_color_8cl_mag05_657-mag05_814vsmag05_438-mag05_555.png

Figure 30: kmeans_3d_8cl_mag05_657-mag05_814vsmag05_438-mag05_657.png

Meanshift results

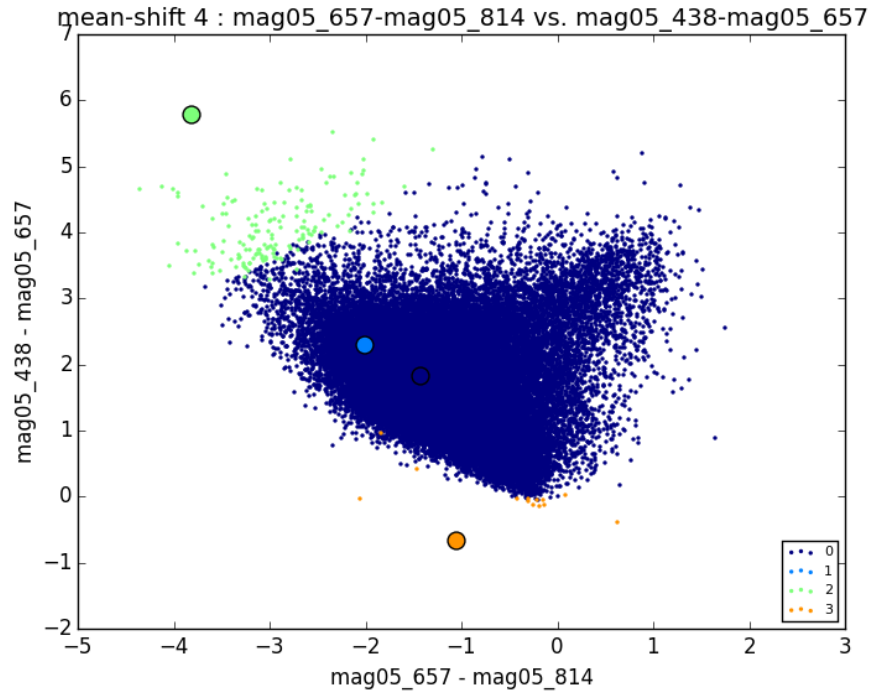| Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
1.0381	4	0.368085145249	41317	41143	159	14	1	0	0	0	0	0	0
0.7000	7	0.165159273109	41317	39368	1511	284	150	2	1	1	0	0	0
0.8000	6	0.167721676267	41317	39596	1549	153	17	1	1	0	0	0	0
0.9000	5	0.260503357663	41317	39678	1477	157	4	1	0	0	0	0	0
0.9500	5	0.259681705554	41317	39702	1451	159	4	1	0	0	0	0	0

Figure 31: meanshift_3d_color_4cl_mag05_657-mag05_814vsmag05_438-mag05_657.png

meanshift results, Ncl=4

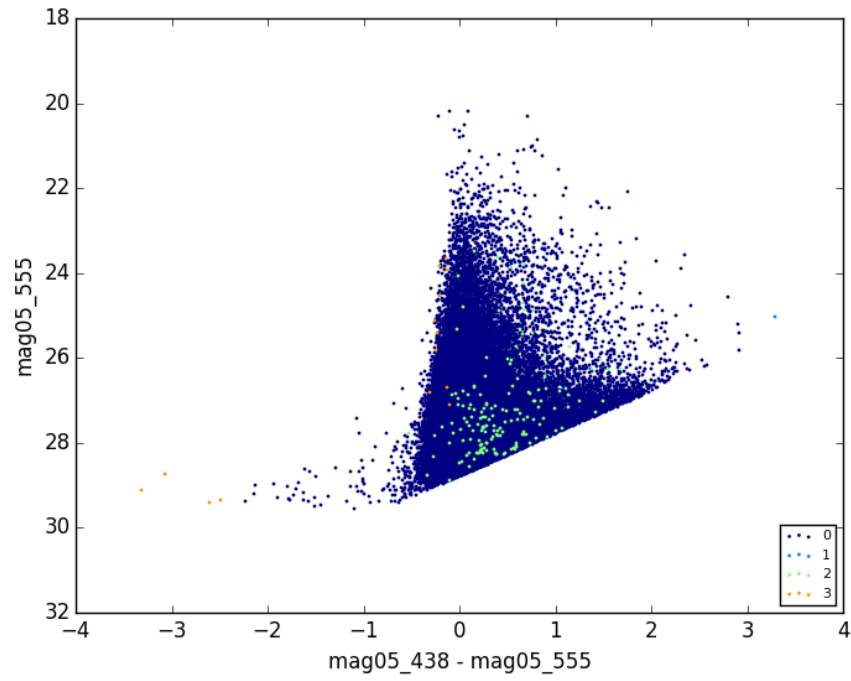| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	-24393	0.368085145249	0.366663752447	1.7033	1.4591	6.5944	0.0010	1.5252	-1.42187555706	1
2	1	0.368085145249	0.0	N/A	N/A	N/A	N/A	1.8353	-2.005	
3	159	0.368085145249	0.739381330097	3.6277	0.9606	3.3013	0.0225	3.2532	-3.807	
4	14	0.368085145249	0.35468198944	1.1045	1.7399	4.7346	0.0346	1.0976	-1.055	

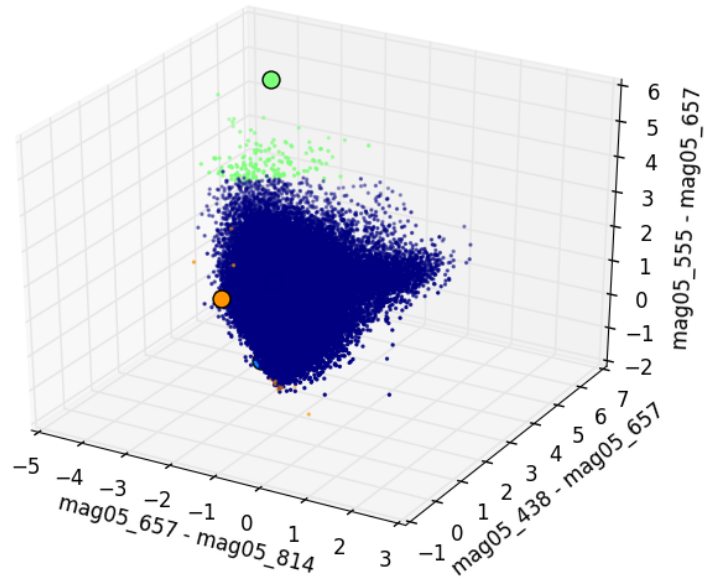Figure 32: meanshift__CMD__4cl__mag05__438-mag05__555vsmag05__555.png

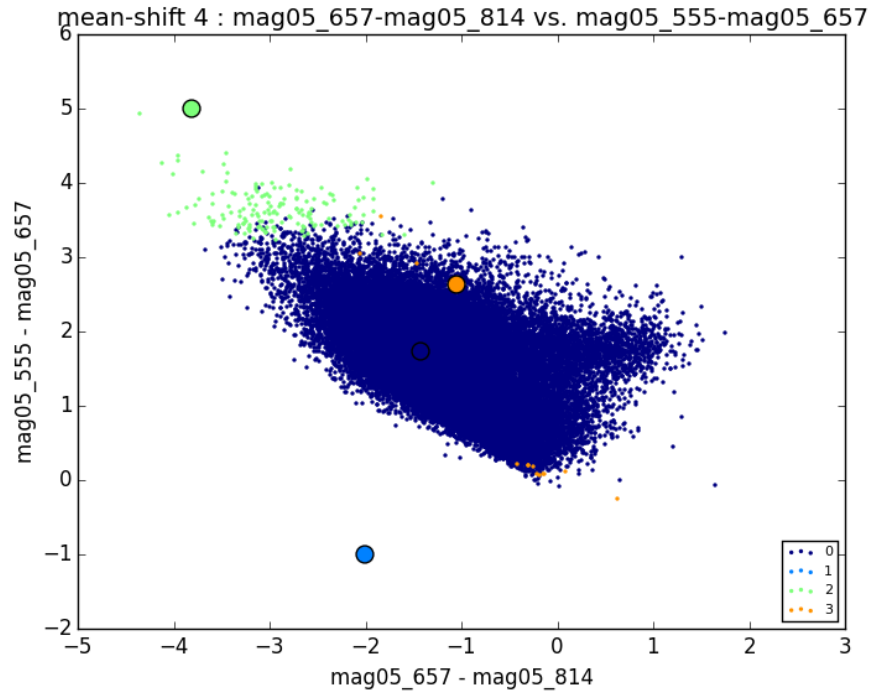Figure 33: meanshift_3d_color_4cl_mag05__657-mag05__814vsmag05__438-mag05__657vsmag05__555-mag05__657.png

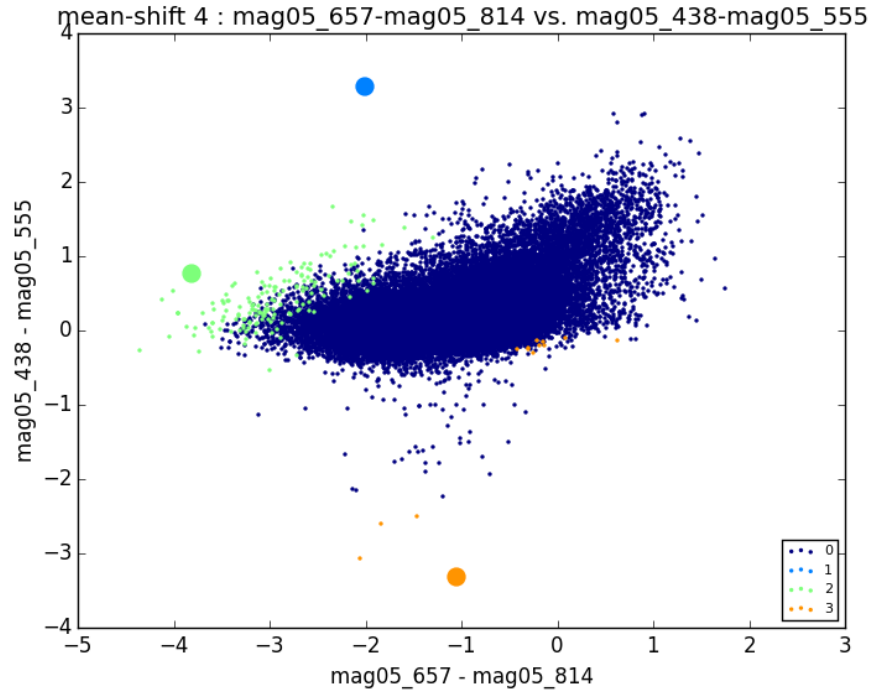Figure 34: meanshift__3d__color__4cl__mag05__657-mag05__814vsmag05__555-mag05__657.png

Figure 35: meanshift__base__color__4cl__mag05__657-mag05__814vsmag05__438-mag05__555.png
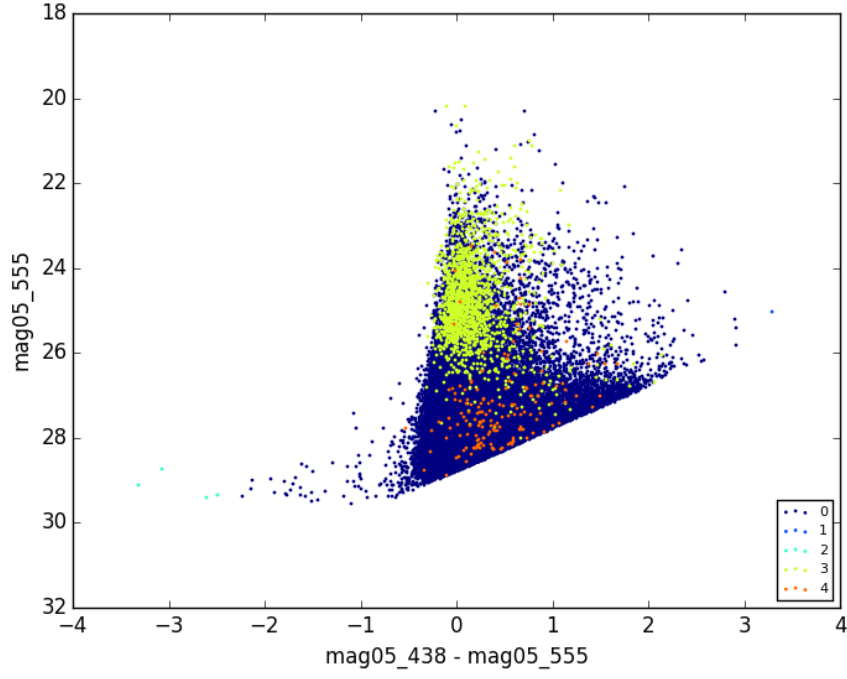
Figure 36: meanshift_CMD_5cl_mag05_438-mag05_555vsmag05_555.png

meanshift results, Ncl=5

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	-25858	0.260503357663	0.244112844405	1.7300	1.4017	5.6852	0.0010	1.5483	-1.45571865397	1
2	1	0.260503357663	0.0	N/A	N/A	N/A	N/A	1.8353	-2.005	
3	1477	0.260503357663	0.649940969064	0.6600	0.7912	4.5421	0.0020	0.5293	1.647	
4	157	0.260503357663	0.734206098463	3.6313	0.9624	3.3013	0.0225	3.2549	-3.807	
5	4	0.260503357663	0.518654880501	2.0374	1.2156	2.0272	0.7569	1.9659	-1.055	
1	-25834	0.259681705554	0.243366437789	1.7295	1.4025	5.6852	0.0010	1.5478	-1.44218508417	1
2	1	0.259681705554	0.0	N/A	N/A	N/A	N/A	1.8353	-2.005	
3	4	0.259681705554	0.518682726668	2.0374	1.2156	2.0272	0.7569	1.9659	-1.055	
4	1451	0.259681705554	0.653542257533	0.6536	0.7831	4.5421	0.0020	0.5236	1.647	
5	159	0.259681705554	0.734403576557	3.6277	0.9606	3.3013	0.0225	3.2532	-3.807	
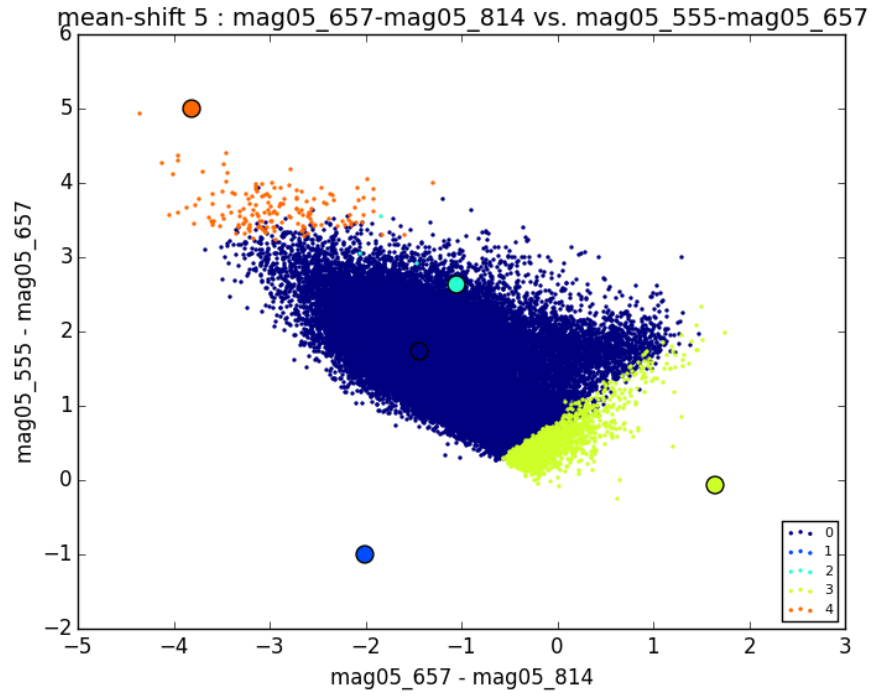
Figure 37: meanshift_3d_color_5cl_mag05_657-mag05_814vsmag05_555-mag05_657.png
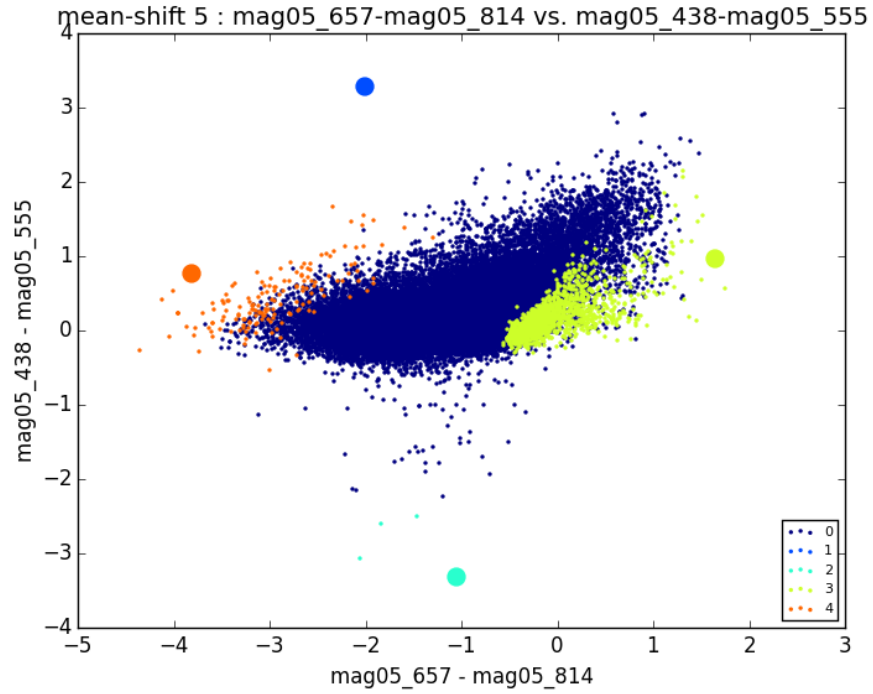

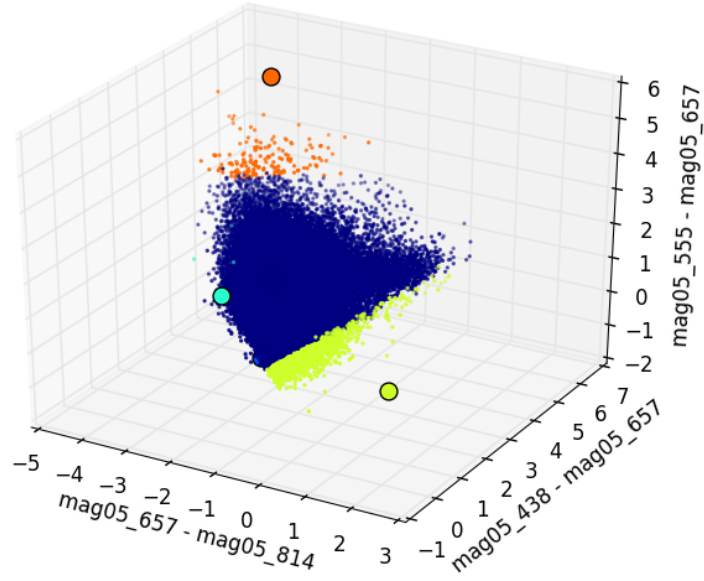Figure 38: meanshift_base_color_5cl_mag05_657-mag05_814vsmag05_438-mag05_555.png

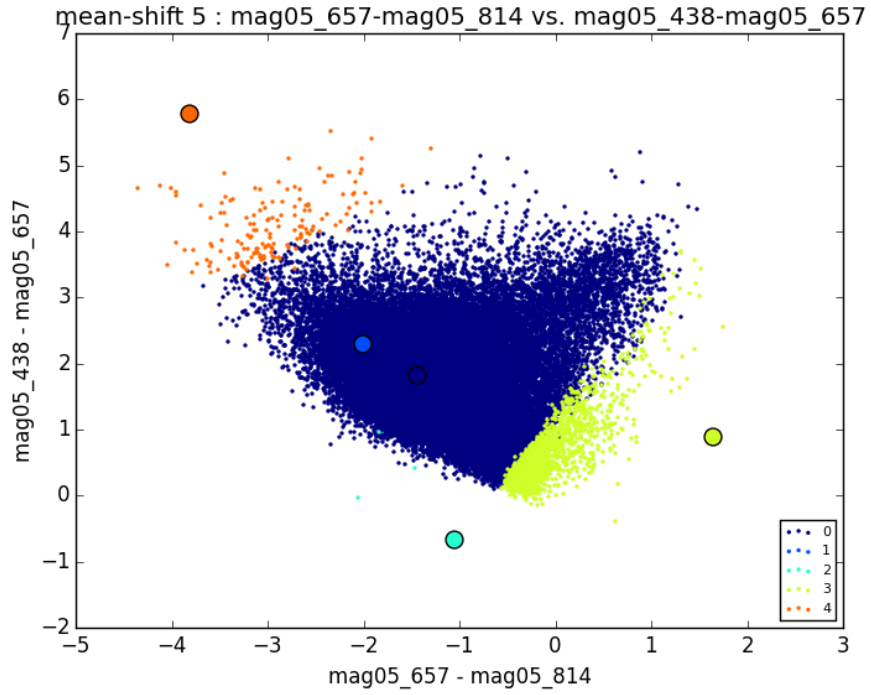Figure 39: meanshift_3d_color_5cl_mag05_657-mag05_814vsmag05_438-mag05_657vsmag05_555-mag05_657.png

Figure 40: meanshift_3d_color_5cl_mag05_657-mag05_814vsmag05_438-mag05_657.png

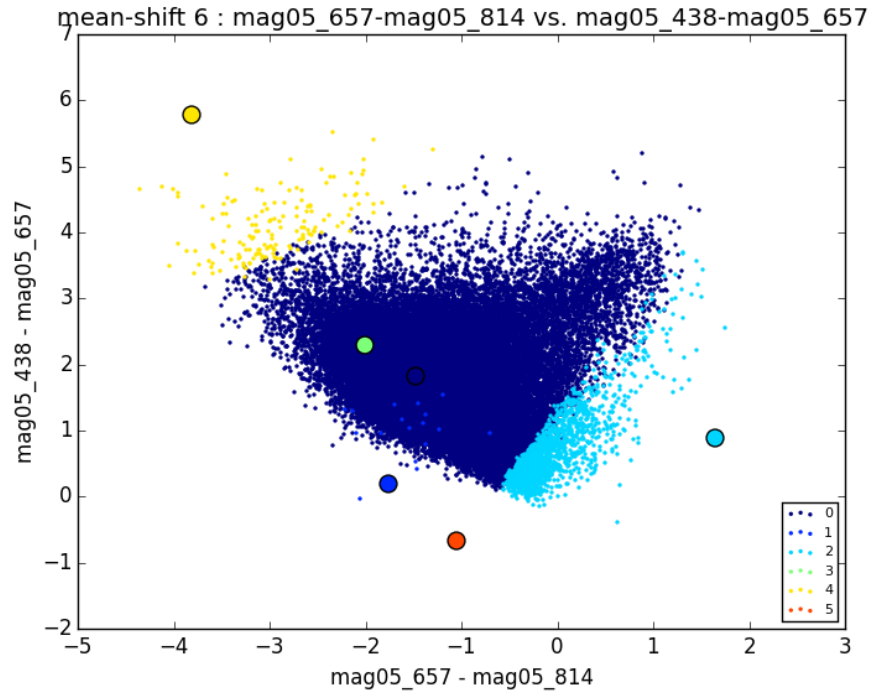Figure 41: meanshift__3d__color__6cl__mag05__657-mag05__814vsmag05__438-mag05__657.png

meanshift results, Ncl=6

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	-25940	0.167721676267	0.146831148764	1.7313	1.3994	5.6852	0.0010	1.5495	-1.48005045468	1
2	17	0.167721676267	0.47607044738	2.0723	0.8895	1.9929	0.1863	1.9094	-1.7605	
3	1549	0.167721676267	0.643326647491	0.6708	0.8033	4.5421	0.0020	0.5378	1.647	
4	1	0.167721676267	0.0	N/A	N/A	N/A	N/A	1.8353	-2.005	
5	153	0.167721676267	0.726955276491	3.6387	0.9672	3.3013	0.0281	3.259	-3.807	
6	1	0.167721676267	0.0	N/A	N/A	N/A	N/A	1.6598	-1.055	
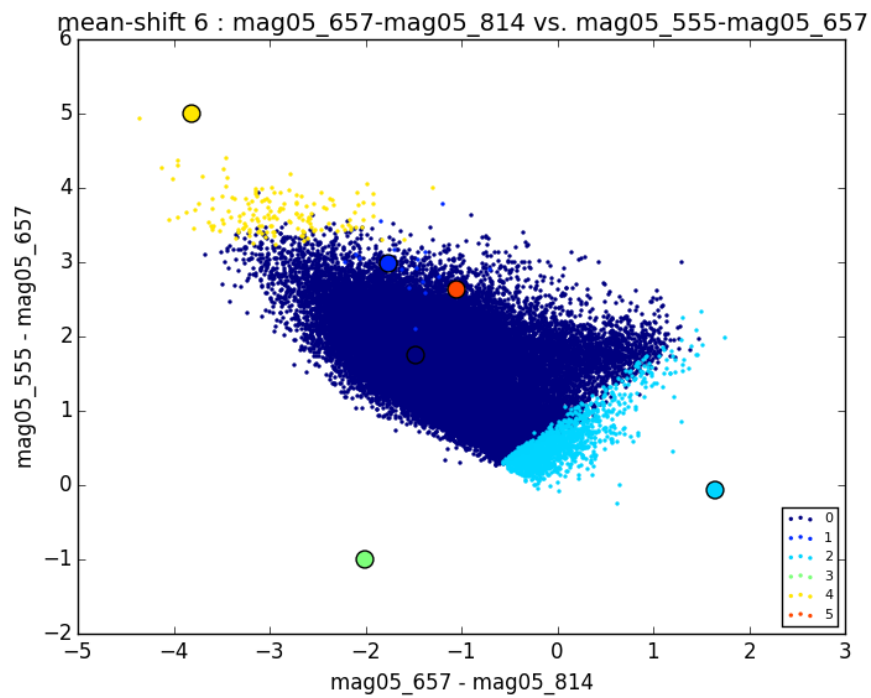
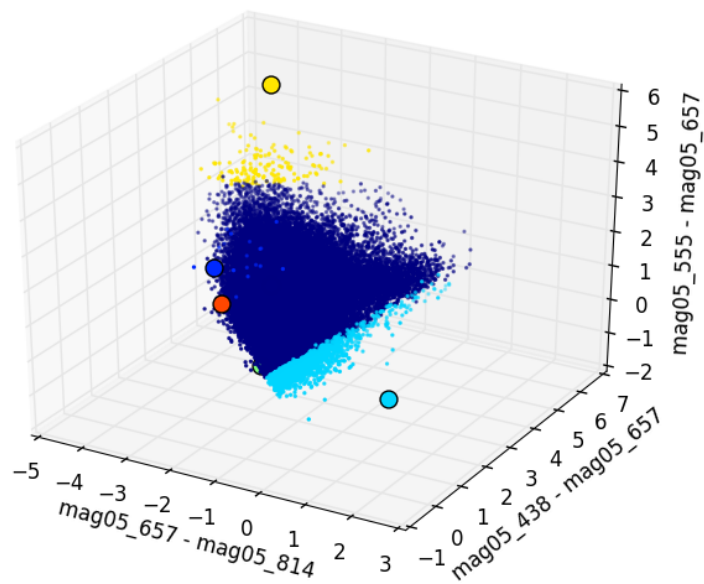Figure 42: meanshift__3d__color__6cl__mag05__657-mag05__814vsmag05__555-mag05__657.png

Figure 43: meanshift__3d__color__6cl__mag05__657-mag05__814vsmag05__438-mag05__657vsmag05__555-mag05__657.png
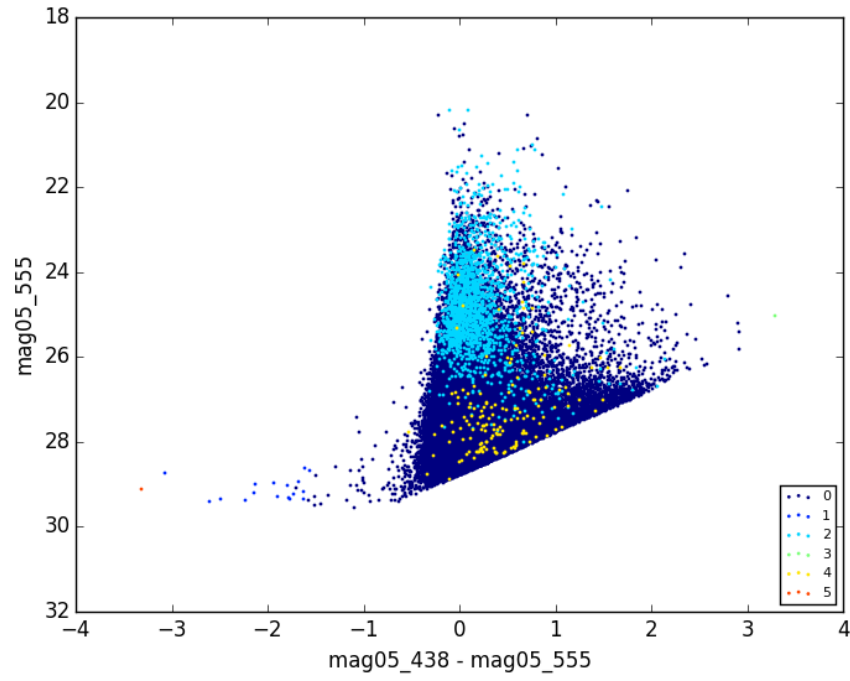
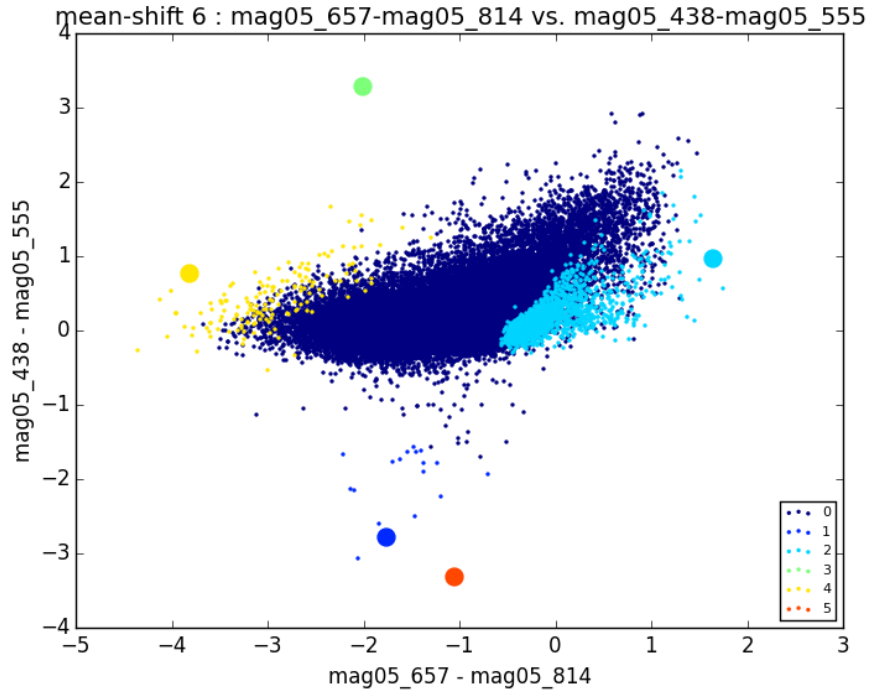Figure 44: meanshift_CMD_6cl_mag05_438-mag05_555vsmag05_555.png

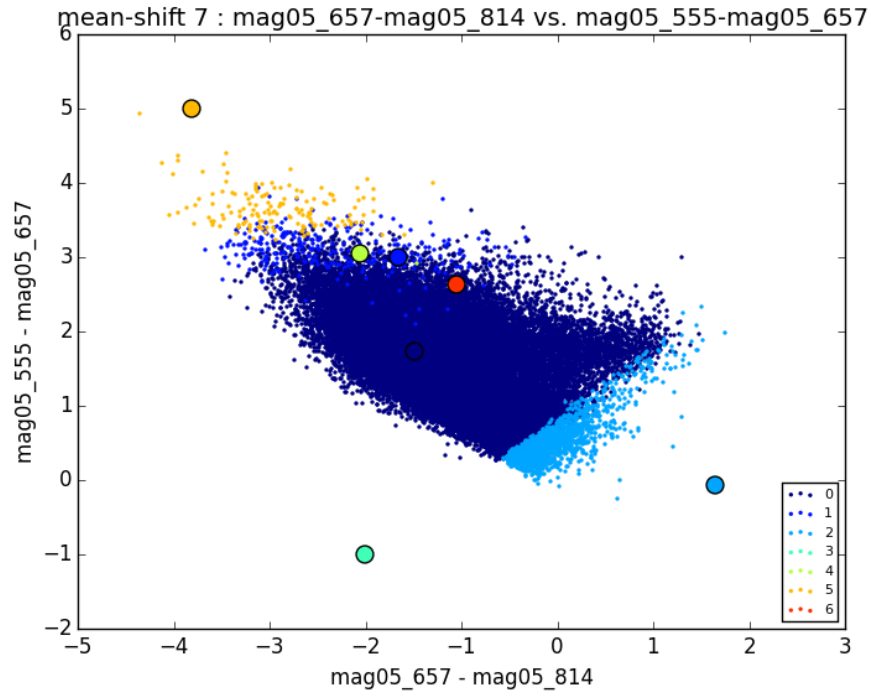Figure 45: meanshift_base_color_6cl_mag05_657-mag05_814vsmag05_438-mag05_555.png

Figure 46: meanshift__3d__color__7cl__mag05__657-mag05__814vsmag05__555-mag05__657.png

meanshift results, Ncl=7

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	-26168	0.165159273109	0.146164308951	1.7206	1.3876	5.6852	0.0010	1.5393	-1.49376153133	1
2	284	0.165159273109	0.145273049172	2.8013	1.2394	3.7018	0.0150	2.5454	-1.663	
3	1511	0.165159273109	0.633053143794	0.6832	0.8232	4.5421	0.0020	0.5457	1.647	
4	1	0.165159273109	0.0	N/A	N/A	N/A	N/A	1.8353	-2.005	
5	2	0.165159273109	0.383574154432	2.0136	0.7569	0.7569	0.7569	1.9576	-2.06	
6	150	0.165159273109	0.474141184565	3.6438	0.9690	3.3013	0.0281	3.2605	-3.807	
7	1	0.165159273109	0.0	N/A	N/A	N/A	N/A	1.6598	-1.055	
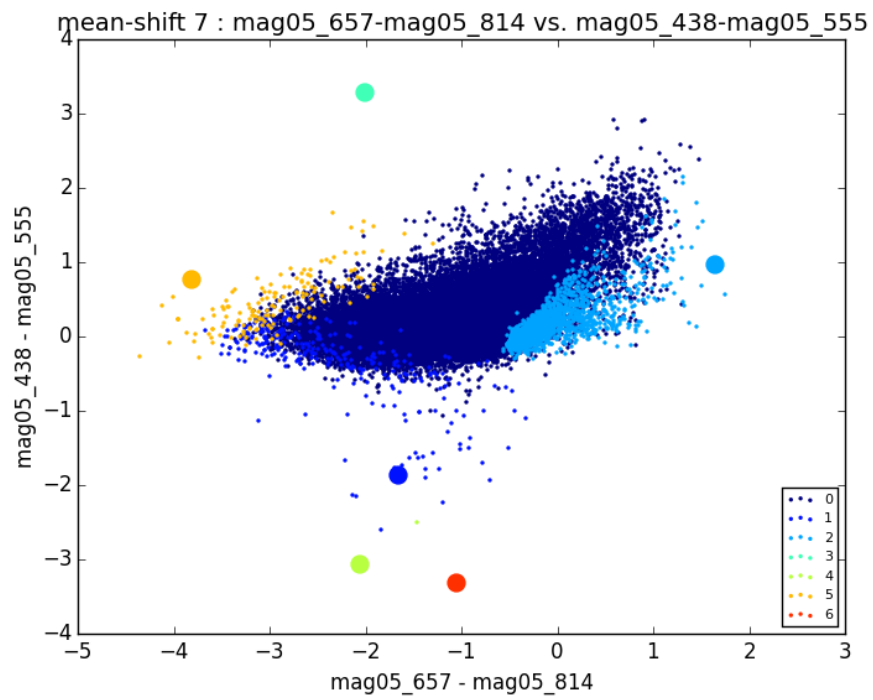
Figure 47: meanshift_base_color_7cl_mag05_657-mag05_814vsmag05_438-mag05_555.png

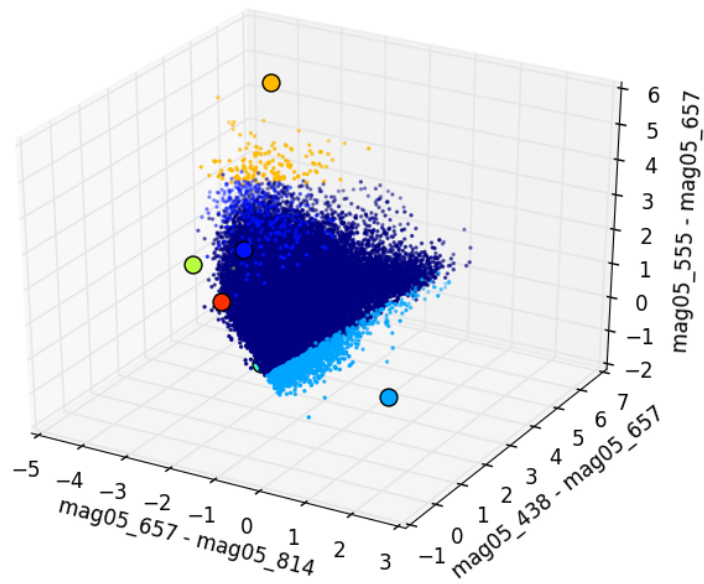
Figure 48: meanshift_3d_color_7cl_mag05_657-mag05_814vsmag05_438-mag05_657vsmag05_555-mag05_657.png

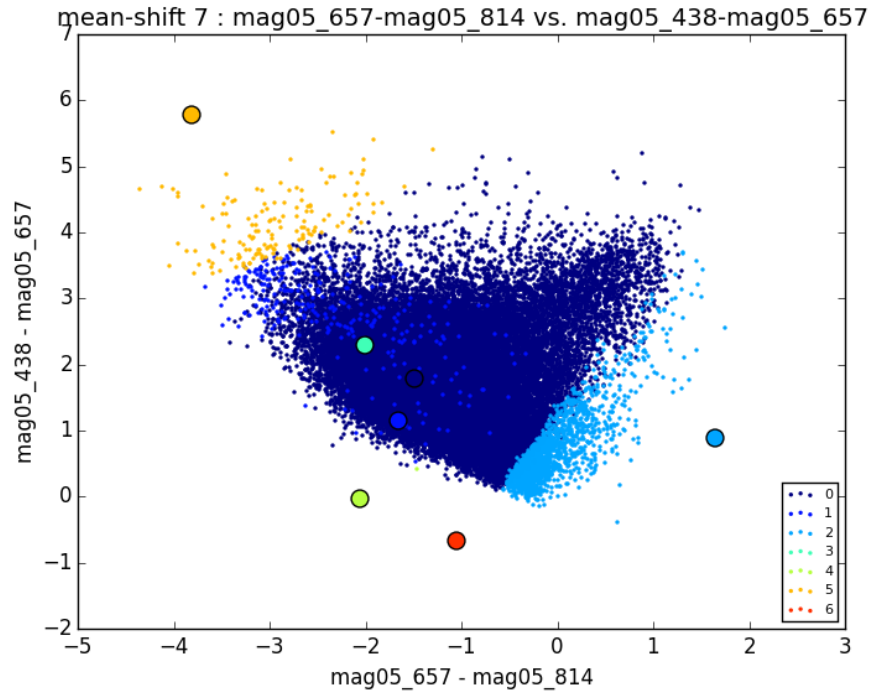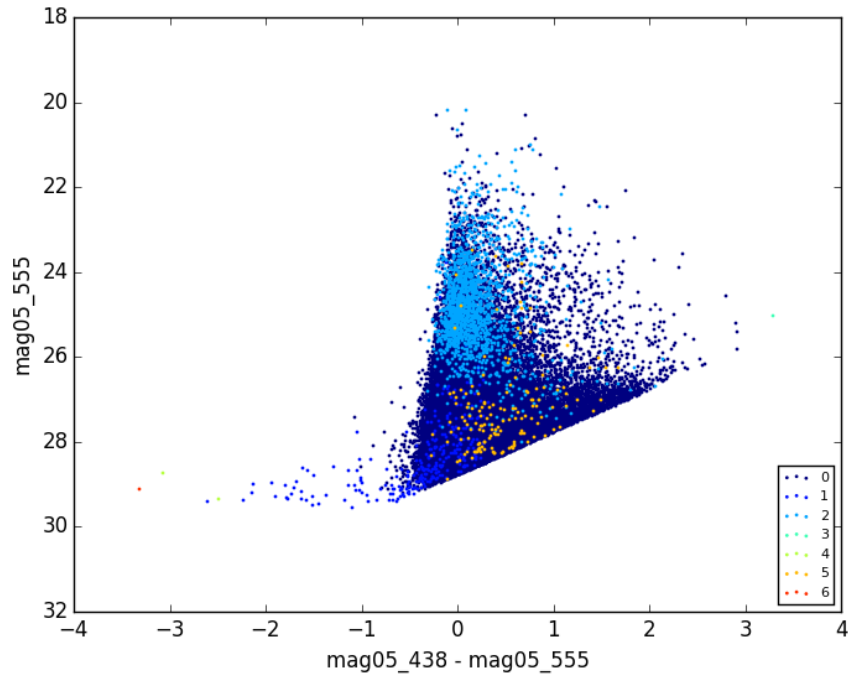Figure 49: meanshift__3d_color__7cl__mag05__657-mag05__814vsmag05__438-mag05__657.png

Figure 50: meanshift__CMD__7cl__mag05__438-mag05__555vsmag05__555.png