Clustering output, found in/home/pauline/Research/m83_clustering/results/broad_narrow/UVW_U/clustering/mag05_22 mag05_336_mag05_225-mag05_438_mag05_225-mag05_814

K-means results

| Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	5932.67686458	0.456795666825	14095	7485	5217	1393	0	0	0	0	0
4	4363.57299683	0.409178160603	14095	5694	5271	2375	755	0	0	0	0
5	3512.92848308	0.374927804943	14095	5325	3664	3287	1437	382	0	0	0
6	2970.10036736	0.356369408341	14095	4843	3468	2920	1803	865	196	0	0
7	2607.20622013	0.361416449667	14095	4714	3600	2757	1648	764	420	192	0
8	2312.48865082	0.329129964304	14095	3861	3522	2361	2086	1091	628	393	153
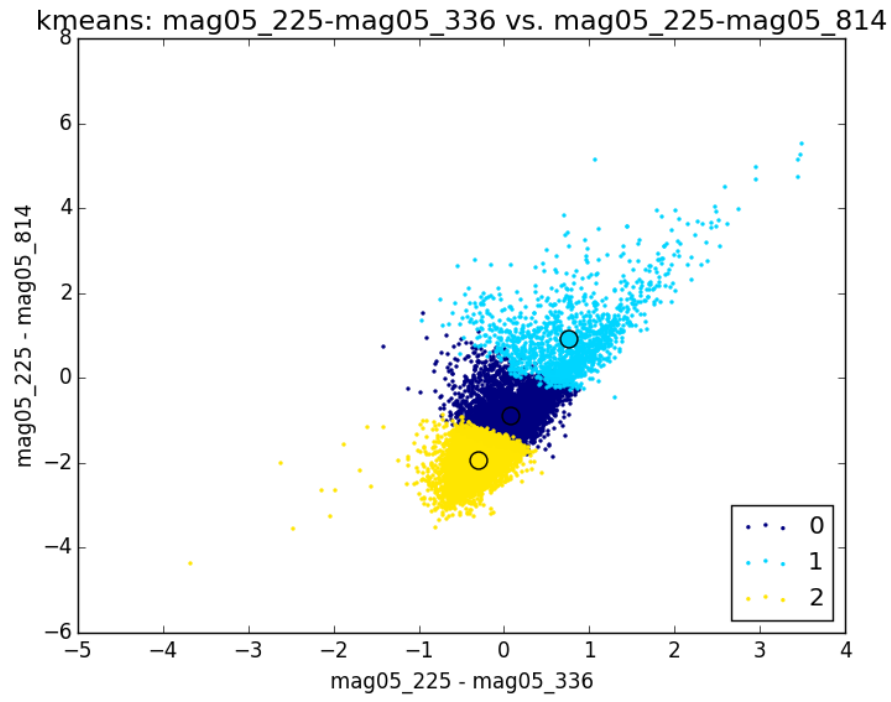
Figure 1: kmeans_3d_3cl_mag05_225-mag05_336vsmag05_225-mag05_814.png

kmeans results, Ncl=3

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	5217	0.456795666825	0.397257981955	0.9041	0.7306	3.8360	0.0024	0.6311	0.0873615104466	-
2	1393	0.456795666825	0.353845080482	1.0065	1.4500	8.1749	0.0037	0.8224	0.765206748026	0.
3	7485	0.456795666825	0.517452750157	1.5434	0.6139	6.0093	0.0010	0.7884	-0.295916766867	-
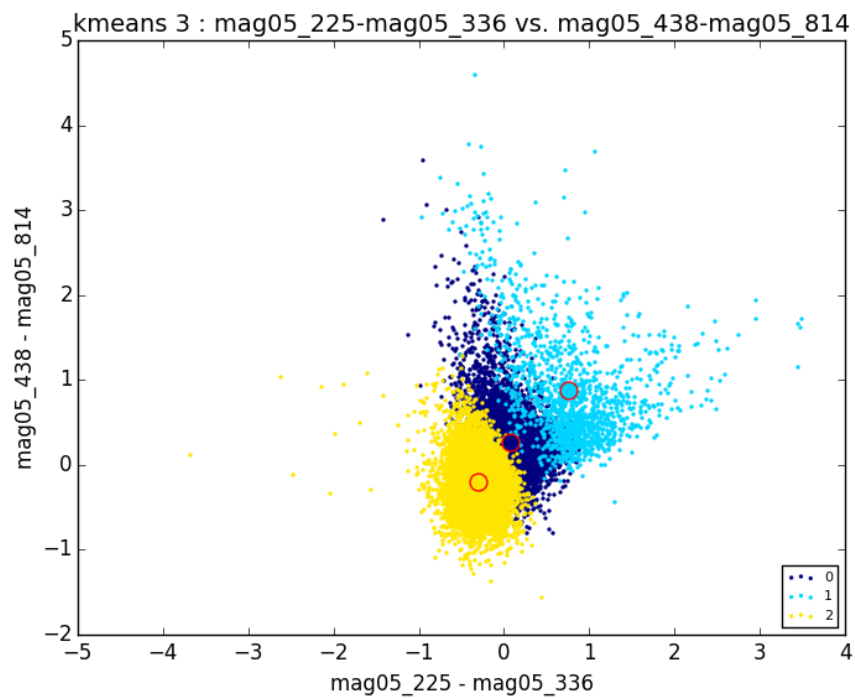
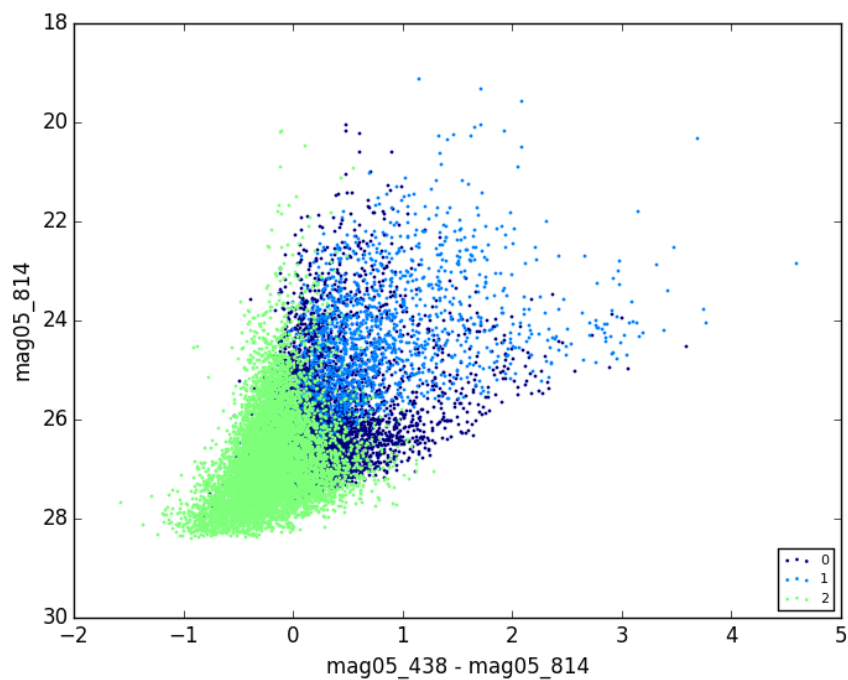Figure 2: kmeans_base_color_3cl_mag05_225-mag05_336vsmag05_438-mag05_814.png

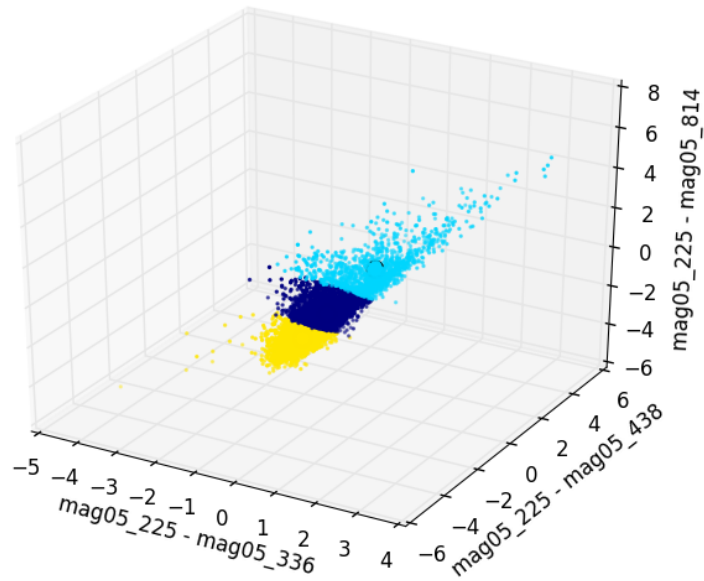Figure 3: kmeans_CMD_3cl_mag05_438-mag05_814vsmag05_814.png

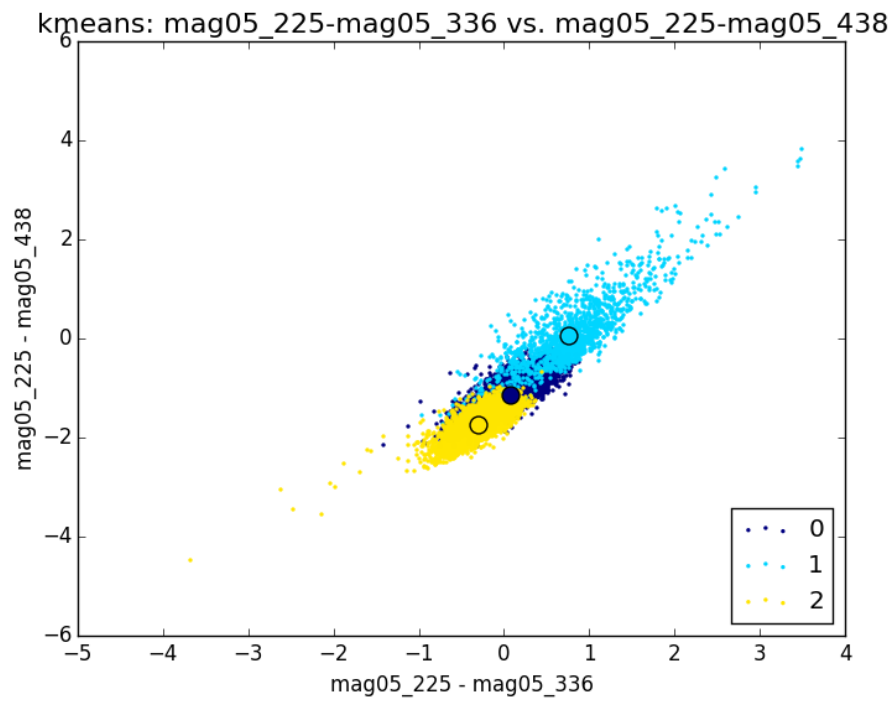Figure 4: kmeans_3d_color_3cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_814.png

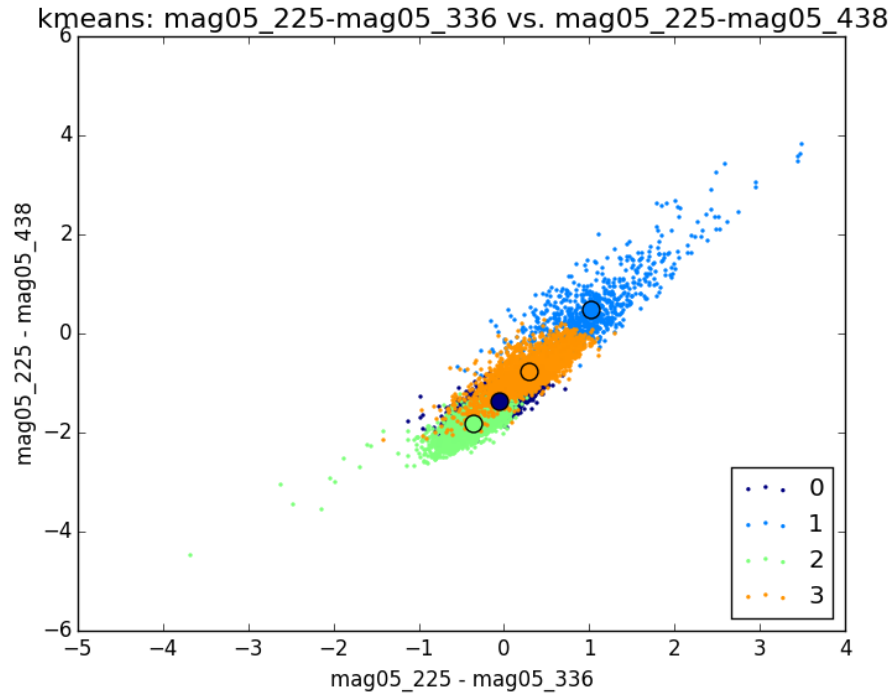Figure 5: kmeans_3d_3cl_mag05_225-mag05_336vsmag05_225-mag05_438.png

Figure 6: kmeans_3d_4cl_mag05_225-mag05_336vsmag05_225-mag05_438.png

kmeans results, Ncl=4

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	5694	0.409178160603	0.402737185781	1.1177	0.5442	2.7613	0.0010	0.6526	-0.0543201615736	
2	755	0.409178160603	0.349694289107	1.2588	1.4086	7.3659	0.0037	0.8057	1.0195589404	
3	5271	0.409178160603	0.459598800177	1.6438	0.5376	5.6335	0.0014	0.8089	-0.35592278505	
4	2375	0.409178160603	0.331627862673	0.6340	0.8541	3.6524	0.0030	0.5947	0.304152421053	

5
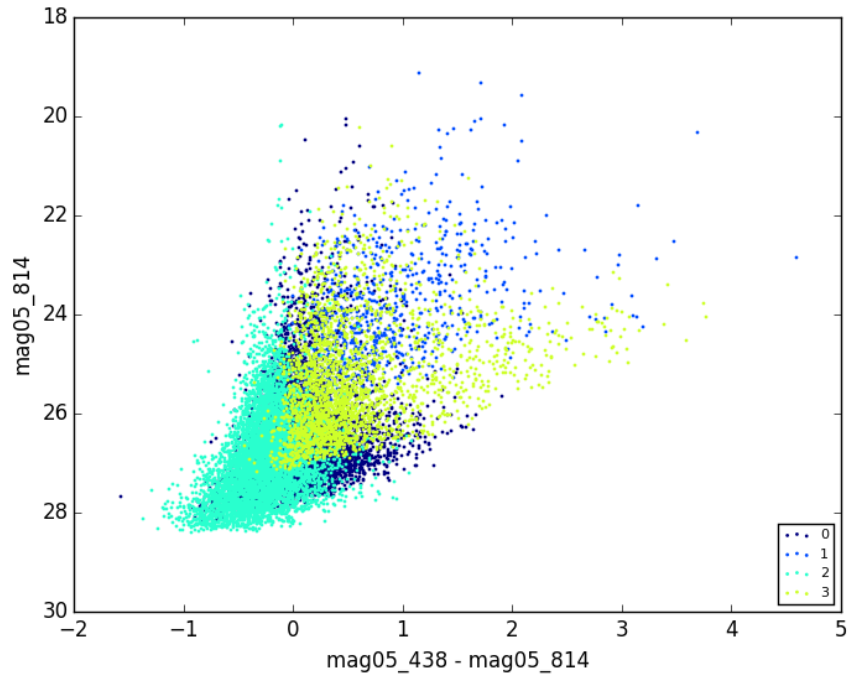
Figure 7: kmeans_CMD_4cl_mag05_438-mag05_814vsmag05_814.png
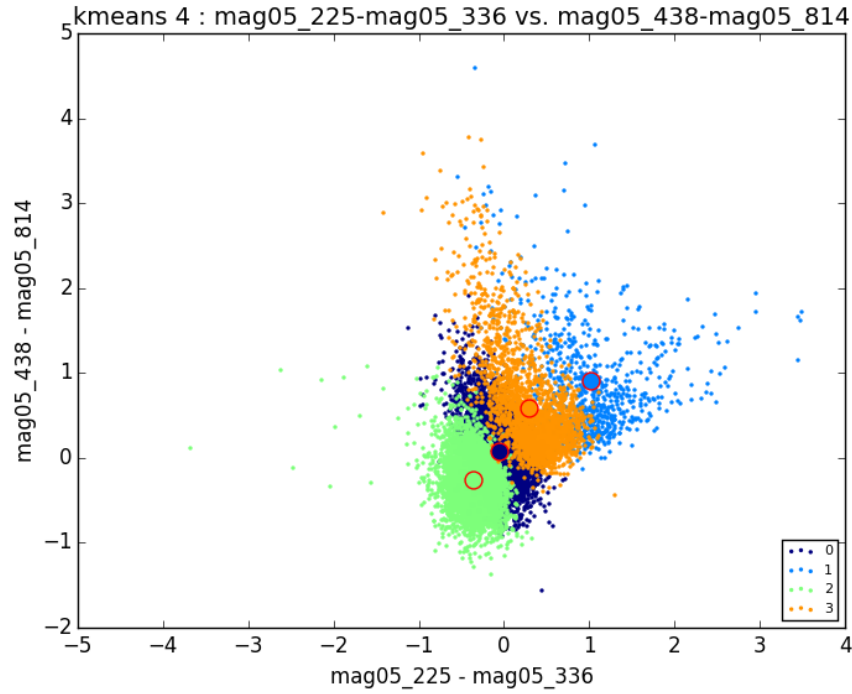

Figure 8: kmeans_base_color_4cl_mag05_225-mag05_336vsmag05_438-mag05_814.png
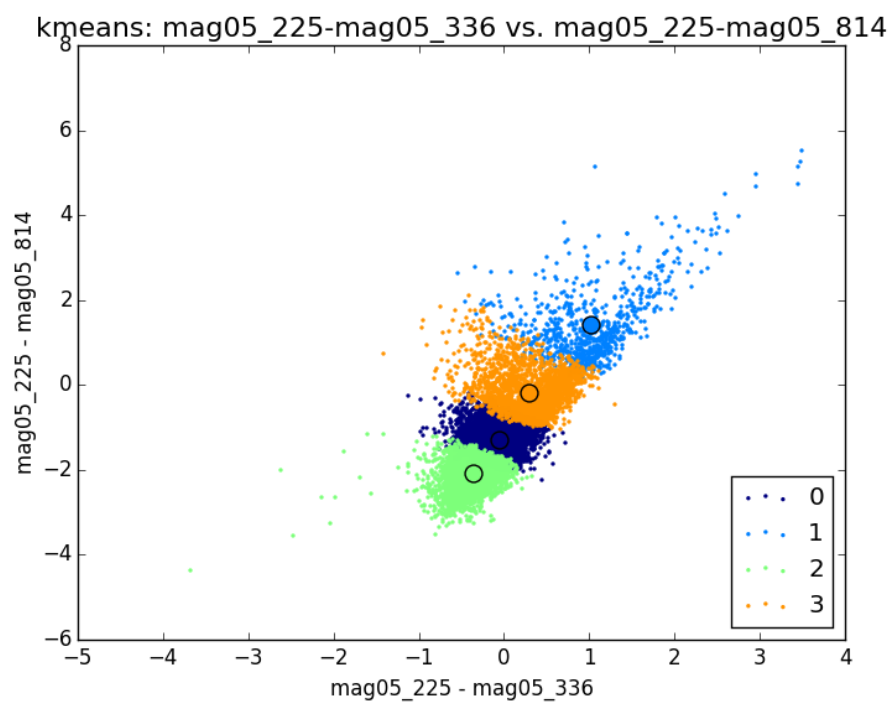
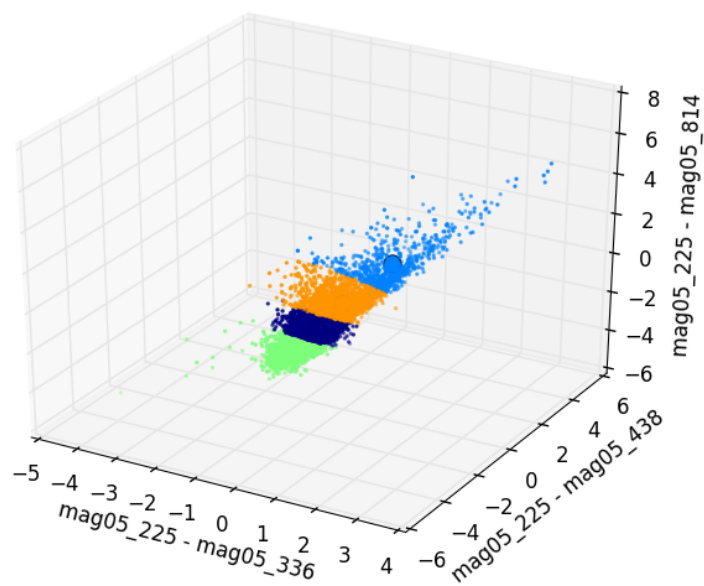Figure 9: kmeans_3d_4cl_mag05_225-mag05_336vsmag05_225-mag05_814.png

Figure 10: kmeans_3d_color_4cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_814.png
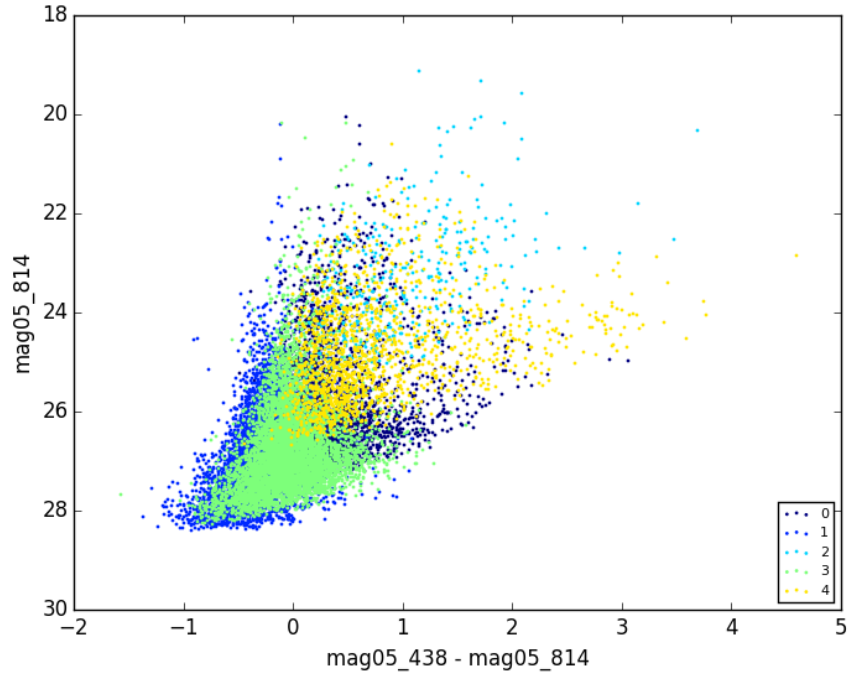
Figure 11: kmeans_CMD_5cl_mag05_438-mag05_814vsmag05_814.png

kmeans results, Ncl=5

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	3287	0.374927804943	0.341786949421	0.8349	0.6037	3.3021	0.0024	0.5899	0.122793732887	-1
2	3664	0.374927804943	0.425440385098	1.7303	0.4897	5.3428	0.0022	0.8297	-0.407652019651	-1
3	382	0.374927804943	0.364066864171	1.6081	1.4133	6.2602	0.0184	0.8169	1.29542408377	0.
4	5325	0.374927804943	0.38070373658	1.2787	0.4621	2.5192	0.0010	0.6871	-0.153014460094	-1
5	1437	0.374927804943	0.303423241141	0.6196	0.9665	4.0441	0.0037	0.6007	0.498764787752	-0
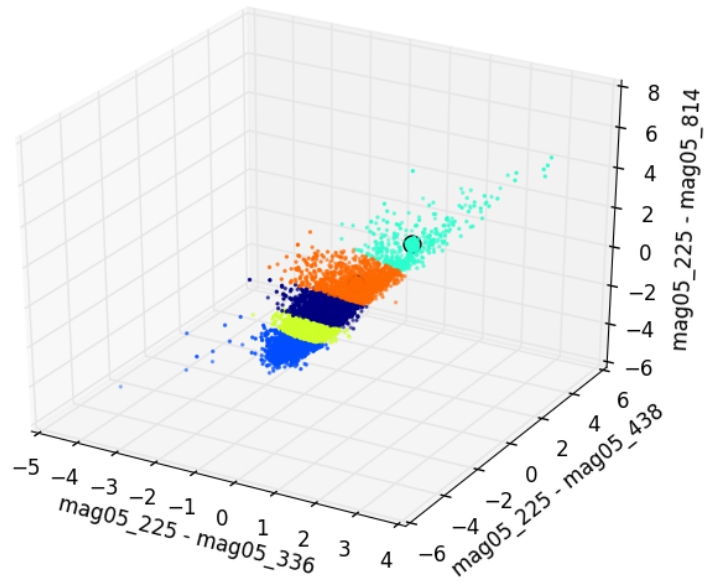
Figure 12: kmeans_3d_color_5cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_814.png
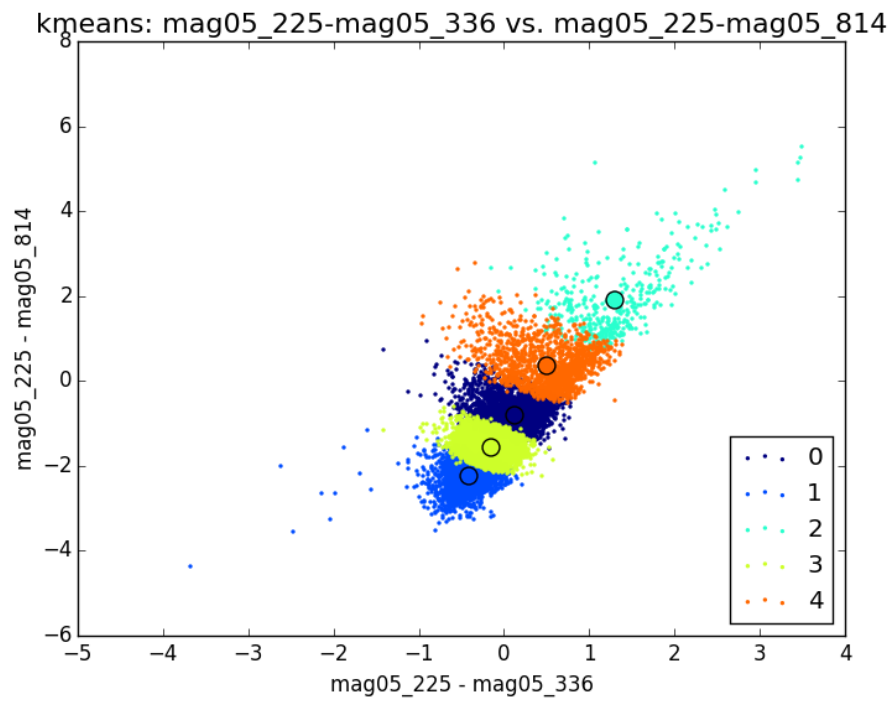

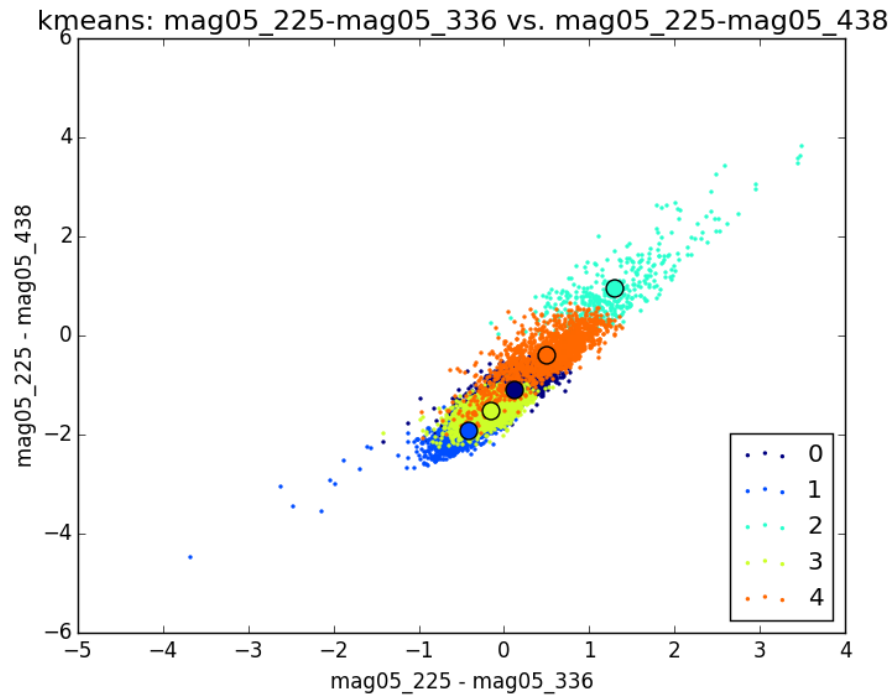Figure 13: kmeans_3d_5cl_mag05_225-mag05_336vsmag05_225-mag05_814.png

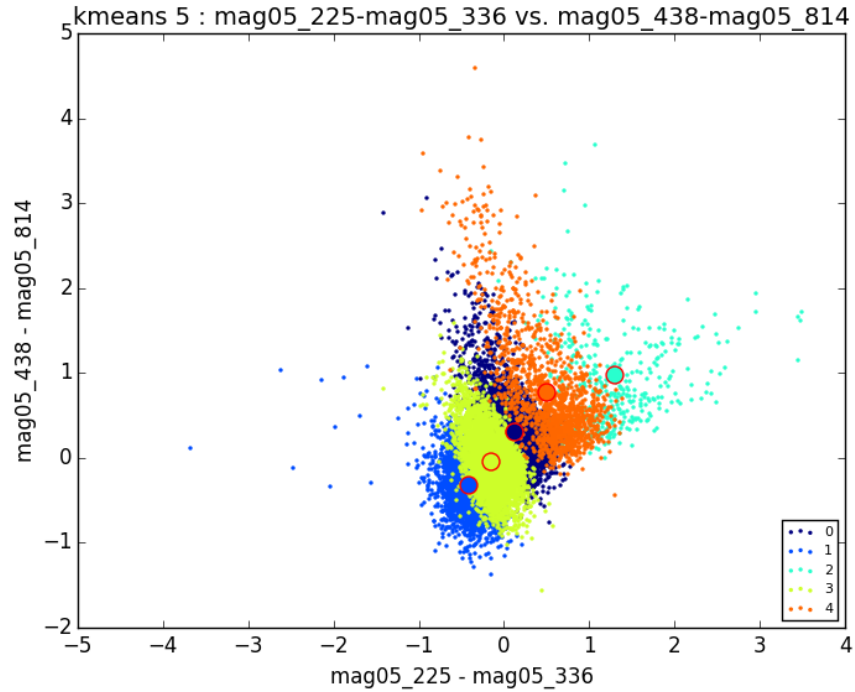Figure 14: kmeans_3d_5cl_mag05_225-mag05_336vsmag05_225-mag05_438.png

Figure 15: kmeans_base_color_5cl_mag05_225-mag05_336vsmag05_438-mag05_814.png
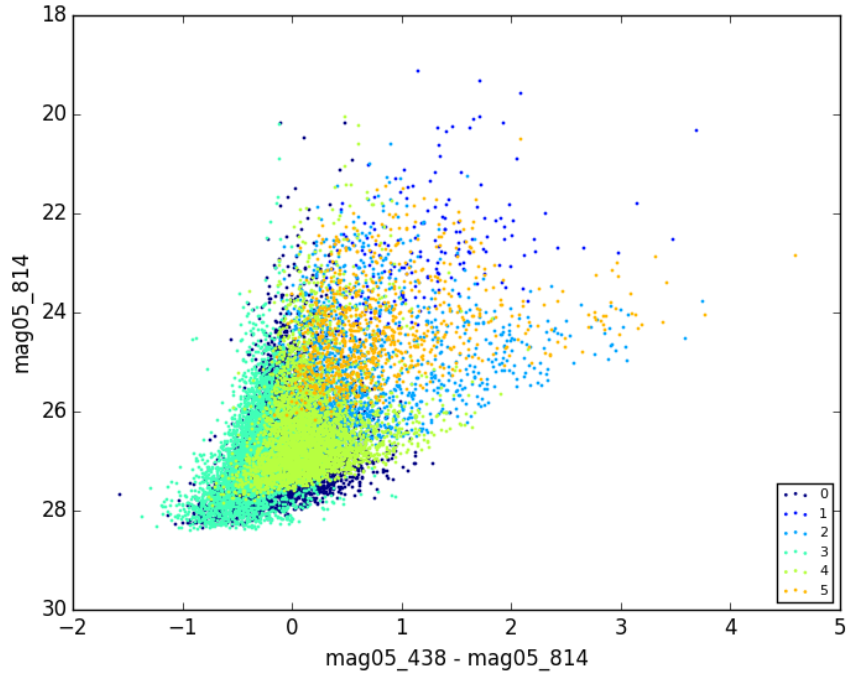
Figure 16: kmeans_CMD_6cl_mag05_438-mag05_814vsmag05_814.png

kmeans results, Ncl=6

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	4843	0.356369408341	0.355035175568	1.3613	0.4296	2.8017	0.0010	0.7085	-0.200651662193	
2	196	0.356369408341	0.367599372169	2.0027	1.4636	5.8445	0.0184	0.8792	1.53730102041	
3	1803	0.356369408341	0.279968312466	0.6183	0.7340	3.6524	0.0030	0.5653	0.287321686079	-
4	2920	0.356369408341	0.412413464226	1.7783	0.4657	5.3113	0.0022	0.8424	-0.435226712329	
5	3468	0.356369408341	0.353543509961	0.9759	0.4898	2.3715	0.0024	0.6074	0.0286998269896	-
6	865	0.356369408341	0.342685436853	0.7752	0.9543	3.6285	0.0037	0.5755	0.728897109827	0.
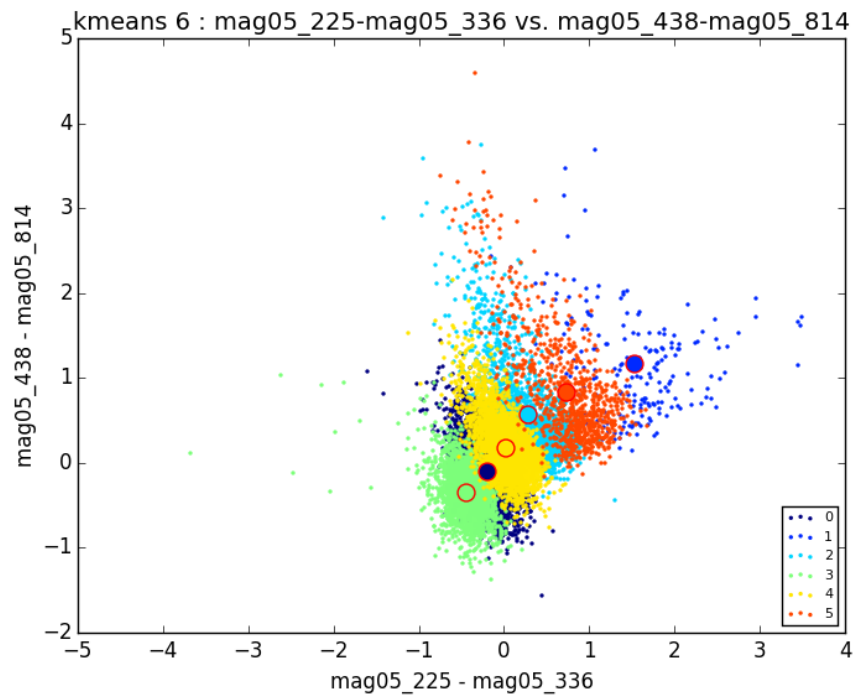
Figure 17: kmeans_base_color_6cl_mag05_225-mag05_336vsmag05_438-mag05_814.png
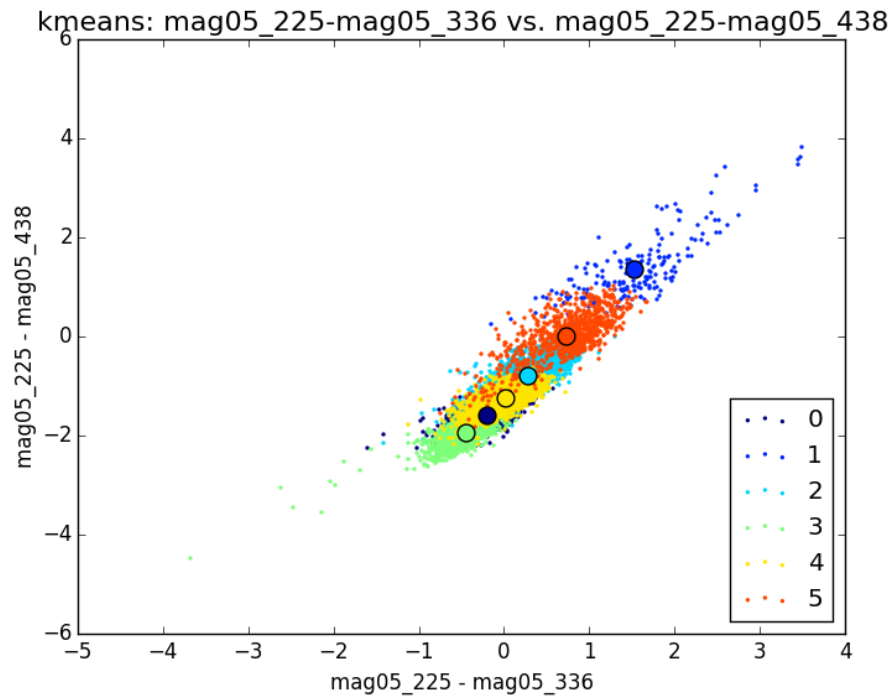

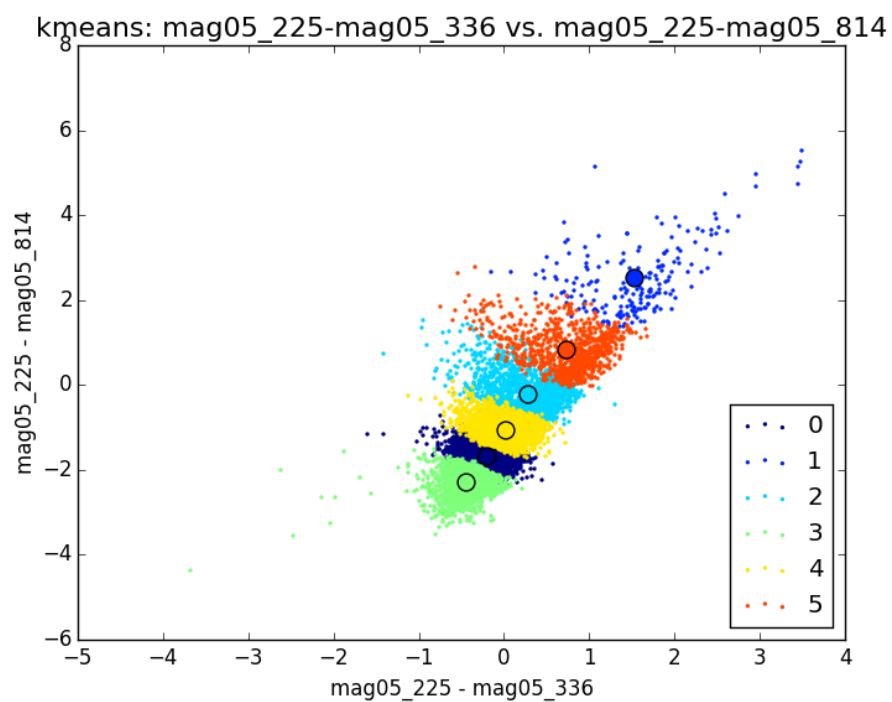Figure 18: kmeans_3d_6cl_mag05_225-mag05_336vsmag05_225-mag05_438.png

Figure 19: kmeans_3d_6cl_mag05_225-mag05_336vsmag05_225-mag05_814.png
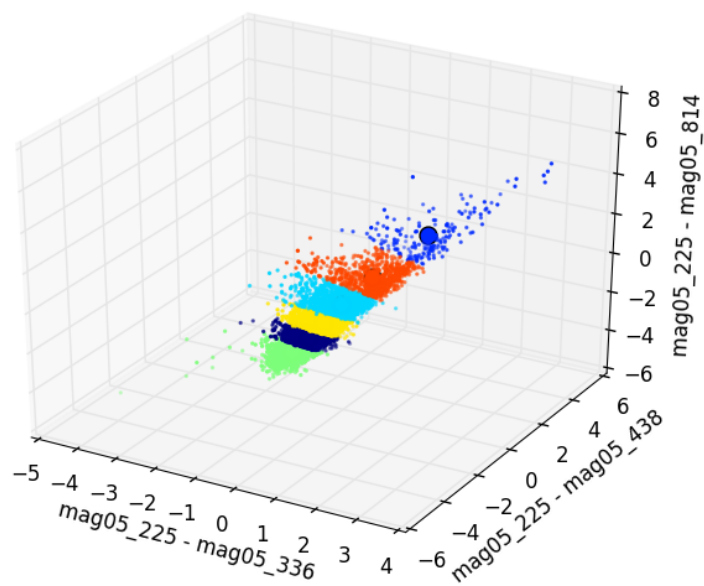

Figure 20: kmeans_3d_color_6cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_814.png
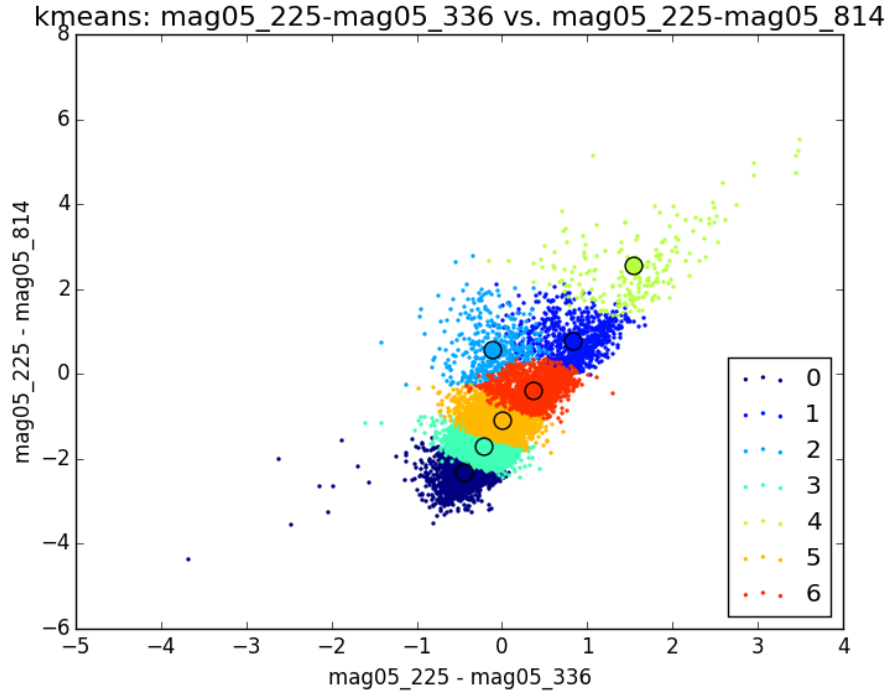
Figure 21: kmeans_3d_7cl_mag05_225-mag05_336vsmag05_225-mag05_814.png

kmeans results, Ncl=7

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	2757	0.361416449667	0.411594007297	1.7899	0.4590	5.1953	0.0022	0.8447	-0.443291984041
2	764	0.361416449667	0.405332017604	0.7553	0.8143	2.4127	0.0037	0.491	0.829251308901
3	420	0.361416449667	0.224358013252	0.8529	0.9412	3.1715	0.0121	0.823	-0.115026190476
4	4714	0.361416449667	0.355762118942	1.3800	0.4228	2.8017	0.0010	0.7144	-0.209531183708
5	192	0.361416449667	0.344995742156	2.0152	1.4663	5.8445	0.0184	0.8828	1.5416875
6	3600	0.361416449667	0.32855005276	1.0011	0.4851	2.2669	0.0024	0.6107	0.00667638888889
7	1648	0.361416449667	0.381926062989	0.5869	0.5593	2.0329	0.0030	0.5284	0.370977548544

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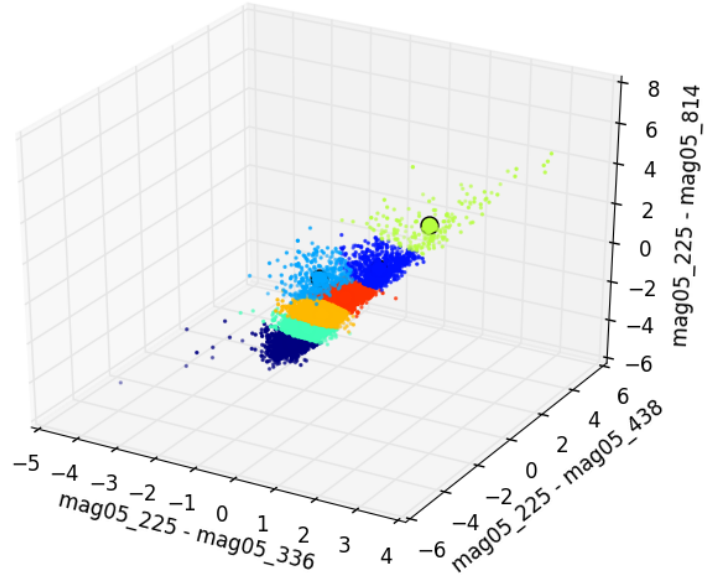
Figure 22: kmeans_3d_color_7cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_814.png
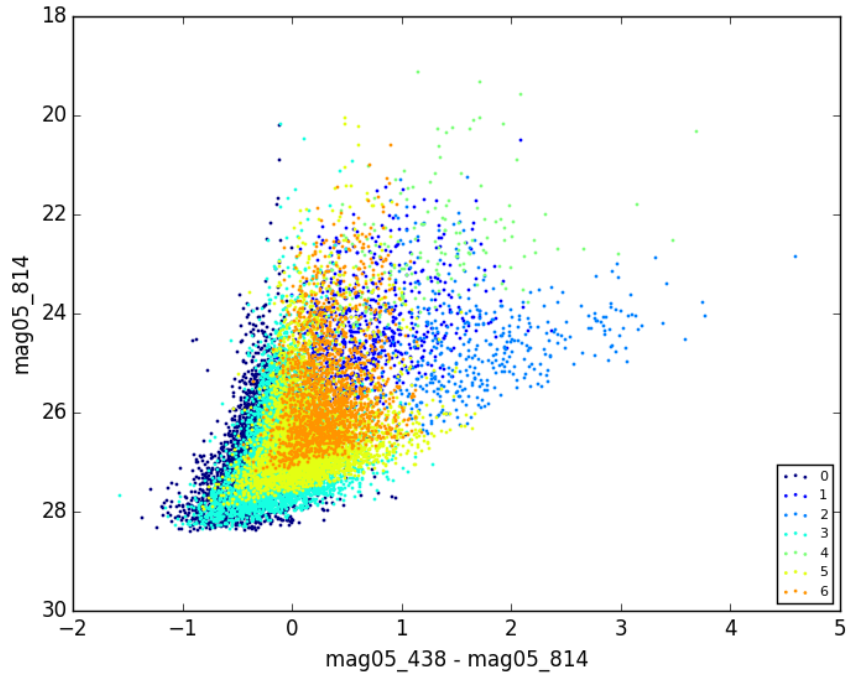

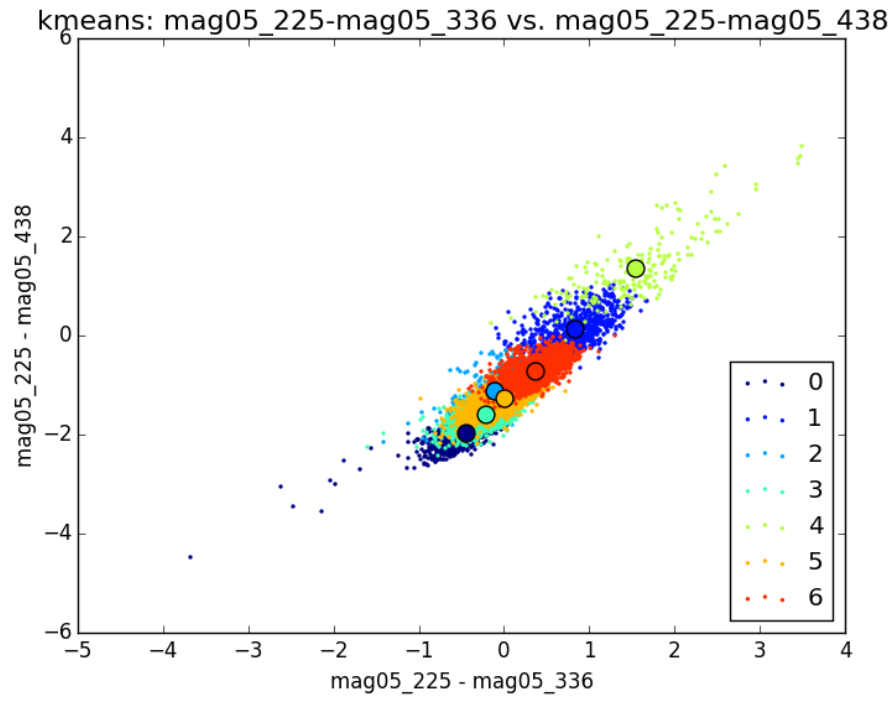Figure 23: kmeans_CMD_7cl_mag05_438-mag05_814vsmag05_814.png

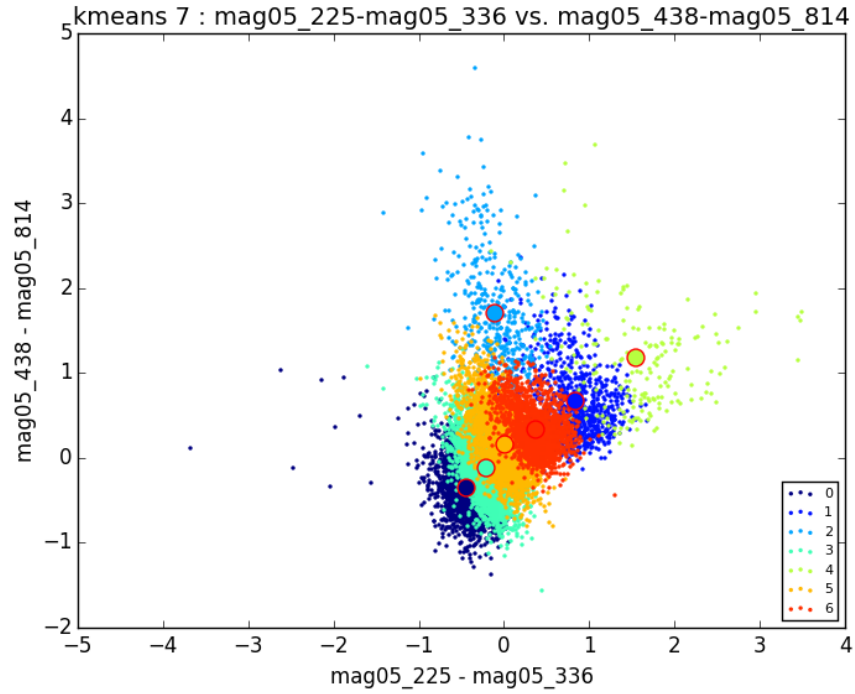Figure 24: kmeans_3d_7cl_mag05_225-mag05_336vsmag05_225-mag05_438.png

Figure 25: kmeans_base_color_7cl_mag05_225-mag05_336vsmag05_438-mag05_814.png
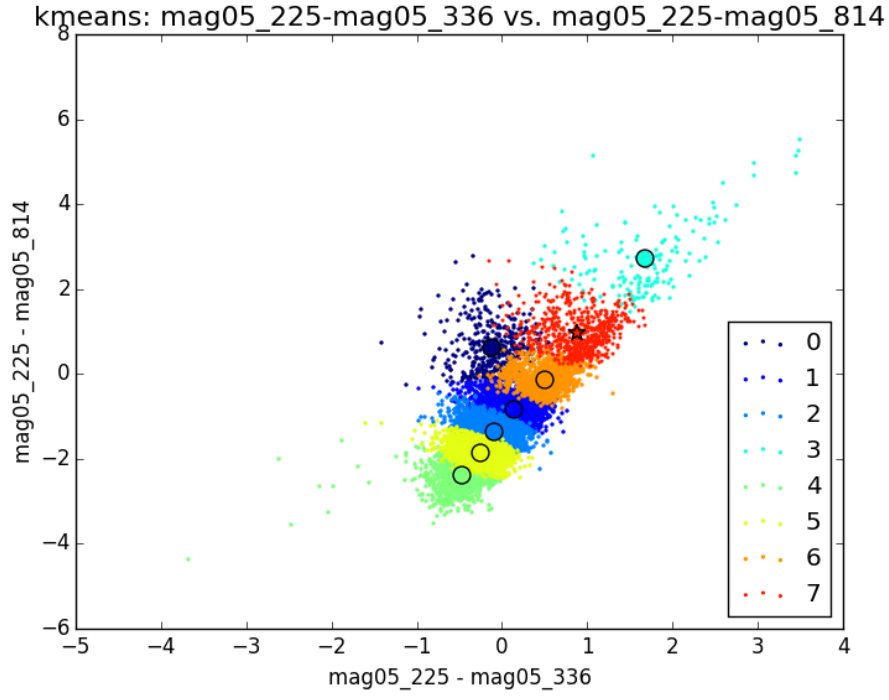
Figure 26: kmeans_3d_8cl_mag05_225-mag05_336vsmag05_225-mag05_814.png

kmeans results, Ncl=8

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	393	0.329129964304	0.221671924238	0.8637	0.9376	3.1715	0.0121	0.8372	-0.119155216285	
2	2361	0.329129964304	0.301900259874	0.8249	0.4890	2.0608	0.0024	0.5709	0.132365523083	
3	3522	0.329129964304	0.290142394109	1.1581	0.4270	2.5449	0.0010	0.6454	-0.0919821124361	
4	153	0.329129964304	0.364822773185	2.1534	1.4461	5.4284	0.0184	0.8842	1.67110457516	
5	2086	0.329129964304	0.387933532846	1.8432	0.4378	5.0485	0.0030	0.8578	-0.477087727709	
6	3861	0.329129964304	0.333613917805	1.4712	0.3875	2.4054	0.0014	0.741	-0.258394457394	
7	1091	0.329129964304	0.392475382807	0.4926	0.5508	1.7682	0.0030	0.4899	0.504004582951	-
8	628	0.329129964304	0.375765194143	0.8605	0.8314	2.7556	0.0037	0.4983	0.879542993631	
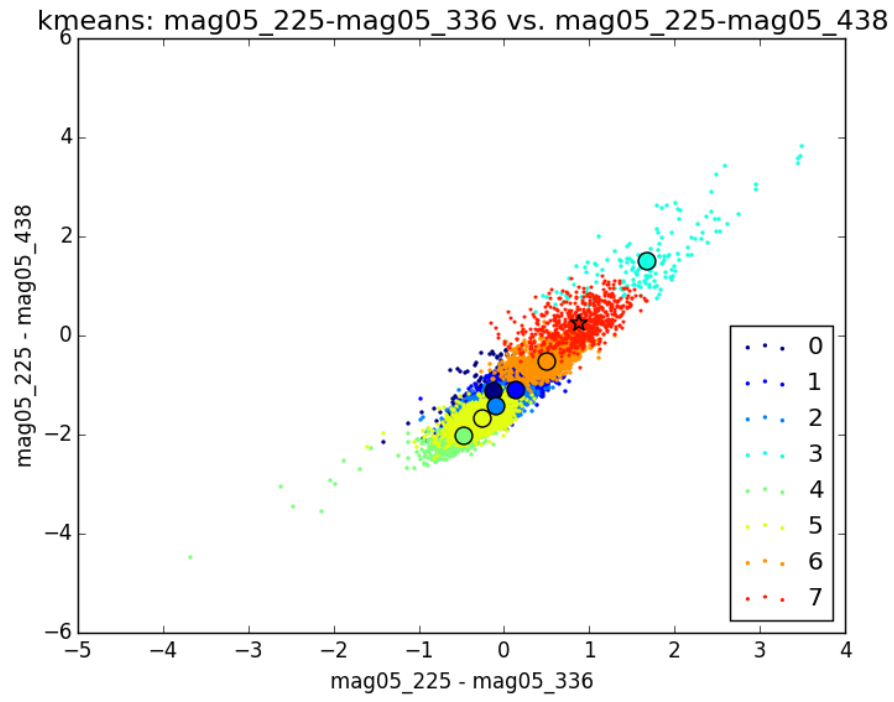
Figure 27: kmeans_3d_8cl_mag05_225-mag05_336vsmag05_225-mag05_438.png
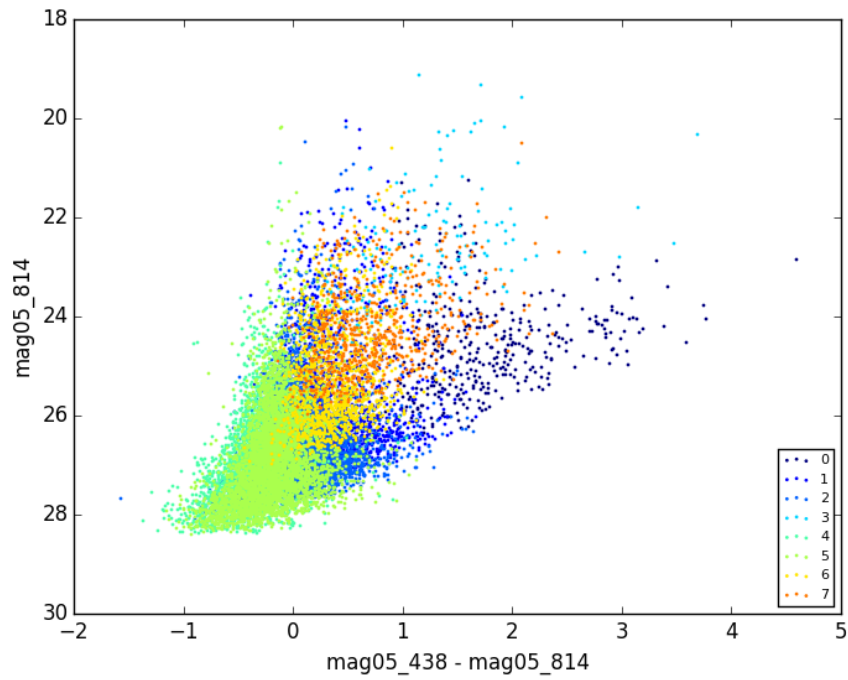

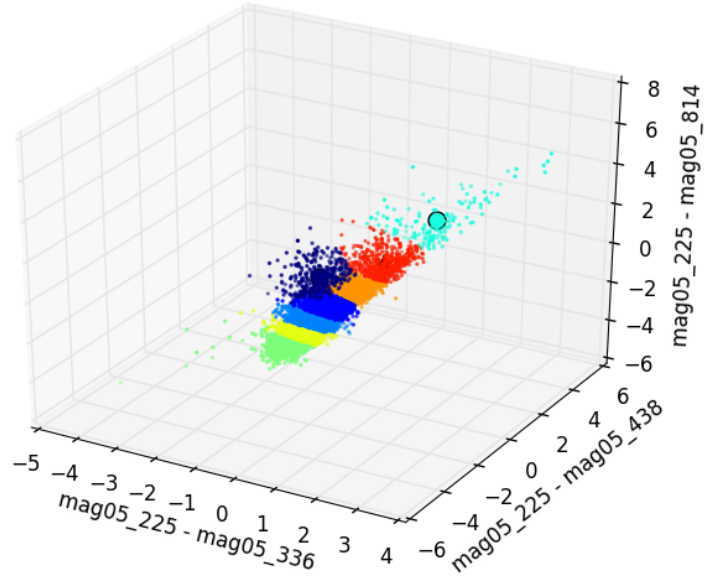Figure 28: kmeans_CMD_8cl_mag05_438-mag05_814vsmag05_814.png

Figure 29: kmeans_3d_color_8cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_814.png
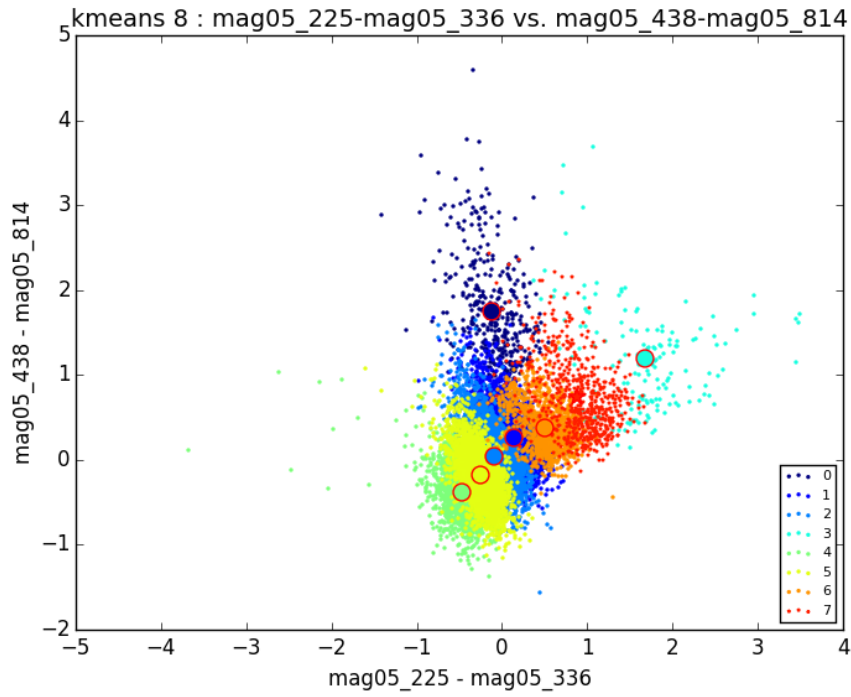

Figure 30: kmeans_base_color_8cl_mag05_225-mag05_336vsmag05_438-mag05_814.png

Meanshift results

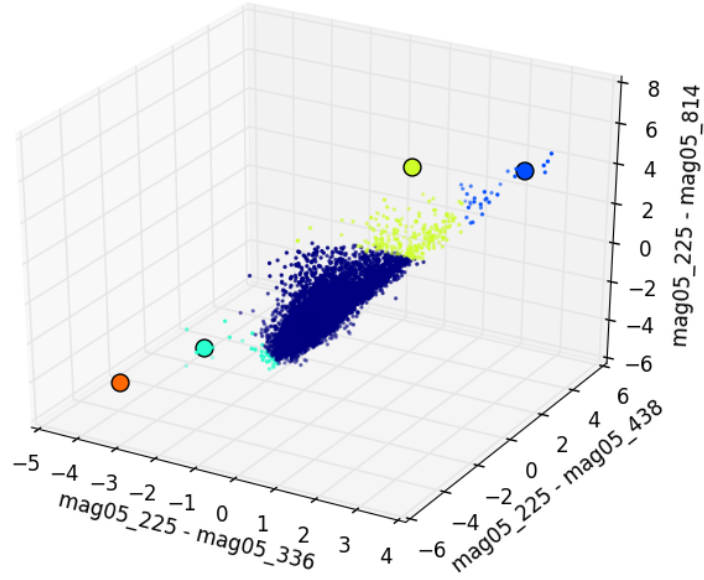| Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
0.8641	7	0.30670724062	14095	13628	376	69	11	7	3	1	0	0	0
0.8000	7	0.310076863489	14095	13630	378	65	11	7	3	1	0	0	0
0.9000	7	0.336412627504	14095	13654	375	44	11	7	3	1	0	0	0
0.9500	5	0.345109962386	14095	13781	245	46	22	1	0	0	0	0	0
1.0000	5	0.354919286281	14095	13791	235	38	30	1	0	0	0	0	0
0.6800	13	0.289107609574	14095	12996	534	354	96	58	40	4	4	3	3

Figure 31: meanshift_3d_color_5cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_814.png

meanshift results, Ncl=5

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	13781	0.345109962386	0.339954587063	1.2737	1.2384	5.6979	0.0010	0.8698	-0.180840083945	-
2	22	0.345109962386	0.574116262683	3.2531	1.2580	3.1385	0.0758	0.8523	3.19542857143	
3	46	0.345109962386	0.660046671439	2.3217	0.7453	2.4589	0.0287	0.8986	-2.0626	
4	245	0.345109962386	0.556808370797	1.6302	1.2159	5.0777	0.0184	0.7443	1.071	
5	1	0.345109962386	0.0	N/A	N/A	N/A	N/A	0.3507	-3.682	
1	13791	0.354919286281	0.350334426092	1.2745	1.2401	5.7845	0.0010	0.8706	-0.180561571341	-
2	30	0.354919286281	0.543431582519	3.1006	1.2511	3.6323	0.0758	0.8451	3.05385714286	
3	38	0.354919286281	0.617419317544	2.3332	0.8399	2.4506	0.0287	0.8718	-2.15566666667	-
4	235	0.354919286281	0.558980375936	1.5883	1.1533	4.5983	0.0184	0.7195	1.071	
5	1	0.354919286281	0.0	N/A	N/A	N/A	N/A	0.3507	-3.682	

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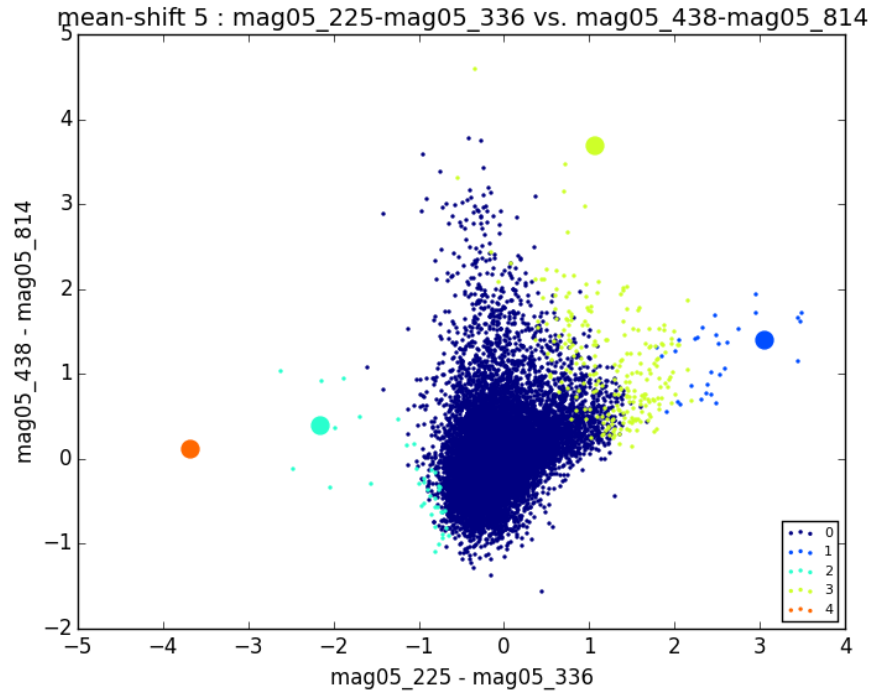
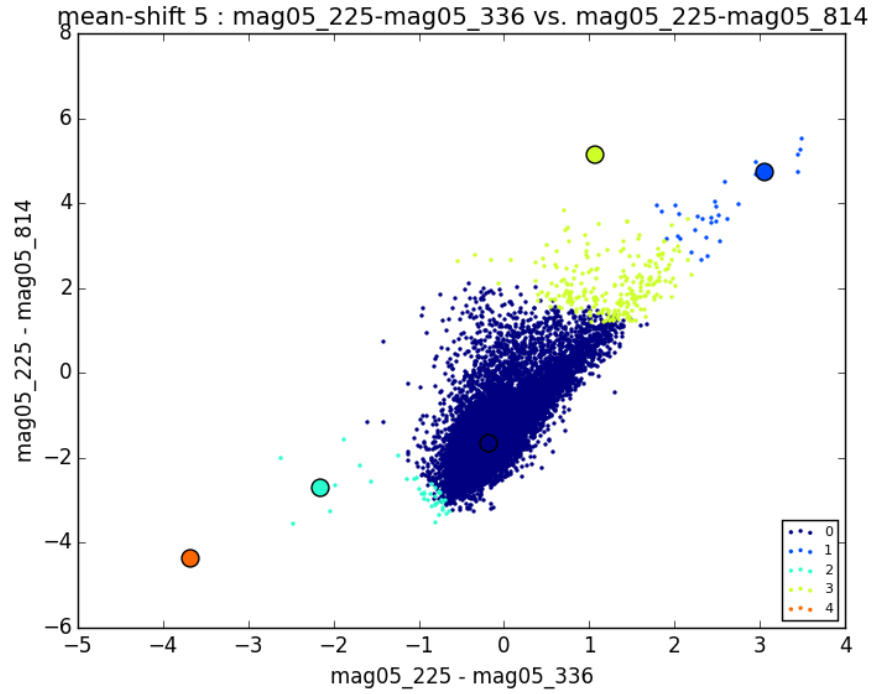Figure 32: meanshift_base_color_5cl_mag05_225-mag05_336vsmag05_438-mag05_814.png

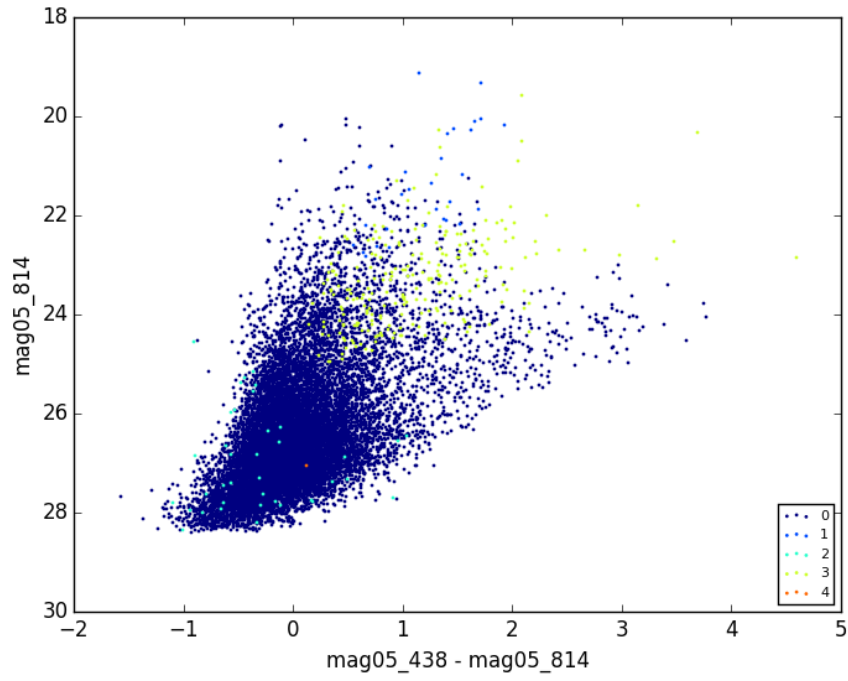Figure 33: meanshift_3d_color_5cl_mag05_225-mag05_336vsmag05_225-mag05_814.png

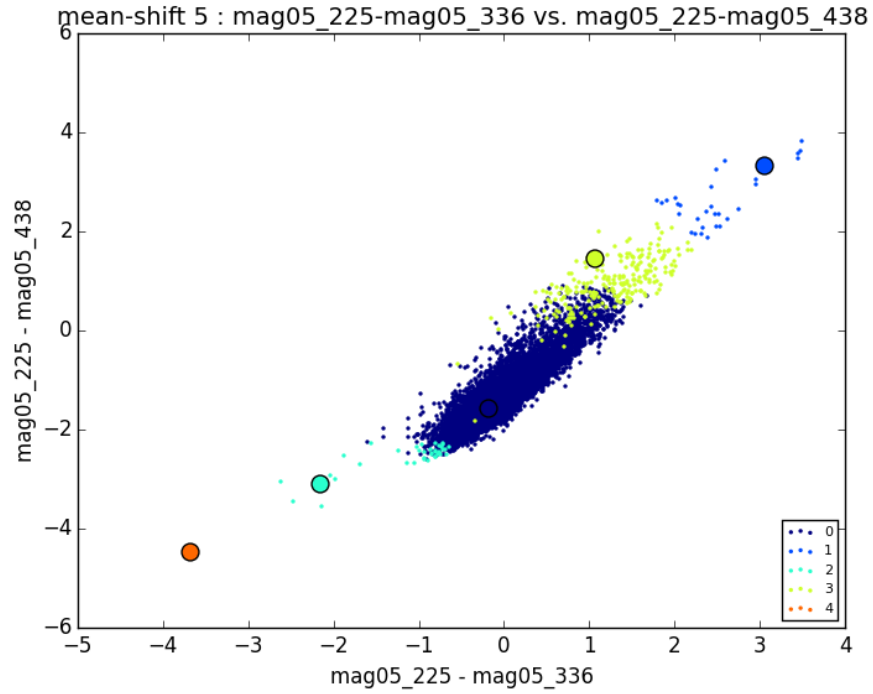Figure 34: meanshift_CMD_5cl_mag05_438-mag05_814vsmag05_814.png

Figure 35: meanshift_3d_color_5cl_mag05_225-mag05_336vsmag05_225-mag05_438.png

meanshift results, Ncl=7

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	13628	0.30670724062	0.301702281668	1.2741	1.1961	5.4699	0.0010	0.8541	-0.184962505613	-
2	376	0.30670724062	0.415227389983	1.5030	1.2606	4.5737	0.0184	0.7183	2.24945454545	2
3	7	0.30670724062	0.824562950739	3.9528	0.7810	1.4152	0.2034	0.8505	3.14666666667	
4	69	0.30670724062	0.653695739695	2.2547	0.5891	2.3320	0.0287	0.9003	-1.961	
5	11	0.30670724062	0.278955869276	1.9782	1.6202	4.3003	0.2524	1.5521	1.071	
6	3	0.30670724062	0.456300689842	2.1467	1.0284	1.5310	0.5485	0.5573	-2.621	
7	1	0.30670724062	0.0	N/A	N/A	N/A	N/A	0.3507	-3.682	
1	13630	0.310076863489	0.305309242291	1.2745	1.1959	5.4699	0.0010	0.8541	-0.190518147087	-
2	378	0.310076863489	0.415794320622	1.5001	1.2601	4.5737	0.0184	0.7179	2.24945454545	2
3	7	0.310076863489	0.824774125001	3.9528	0.7810	1.4152	0.2034	0.8505	3.14666666667	
4	65	0.310076863489	0.642940272069	2.2600	0.6055	2.3320	0.0287	0.8975	-1.961	
5	1	0.310076863489	0.0	N/A	N/A	N/A	N/A	0.3507	-3.682	
6	11	0.310076863489	0.27913002253	1.9782	1.6202	4.3003	0.2524	1.5521	1.071	
7	3	0.310076863489	0.454399483986	2.1467	1.0284	1.5310	0.5485	0.5573	-2.621	
1	13654	0.336412627504	0.333100981476	1.2762	1.1989	5.4699	0.0010	0.8552	-0.183897178957	-
2	375	0.336412627504	0.414853361343	1.5044	1.2610	4.5737	0.0184	0.7184	2.24945454545	2
3	7	0.336412627504	0.824458138785	3.9528	0.7810	1.4152	0.2034	0.8505	3.19542857143	3
4	44	0.336412627504	0.631269172791	2.3215	0.6402	2.1956	0.0287	0.9122	-2.0626	
5	11	0.336412627504	0.278883138671	1.9782	1.6202	4.3003	0.2524	1.5521	1.071	
6	3	0.336412627504	0.463469329547	2.1467	1.0284	1.5310	0.5485	0.5573	-2.621	
7	1	0.336412627504	0.0	N/A	N/A	N/A	N/A	0.3507	-3.682	
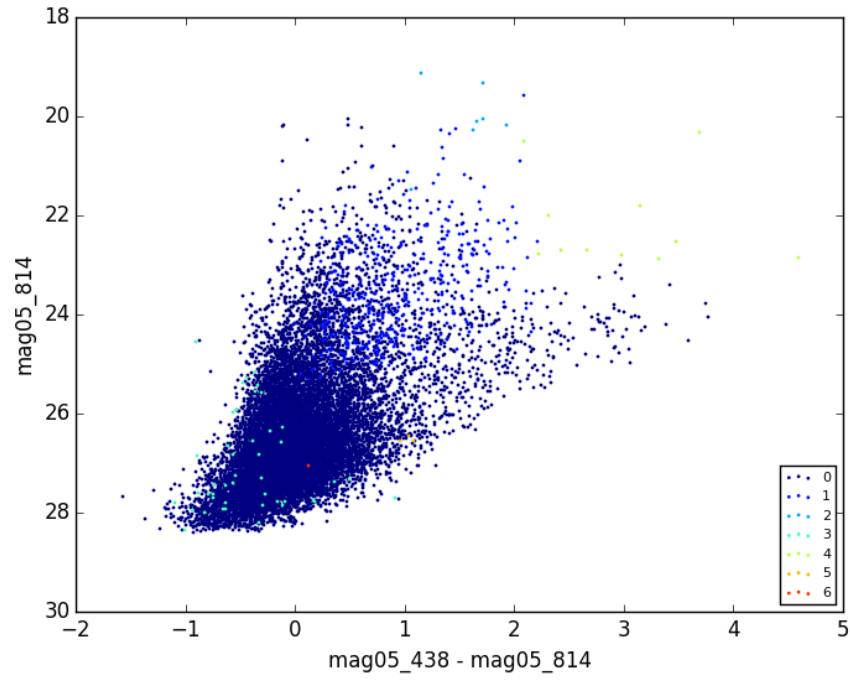
Figure 36: meanshift__CMD__7cl__mag05__438-mag05__814vsmag05__814.png
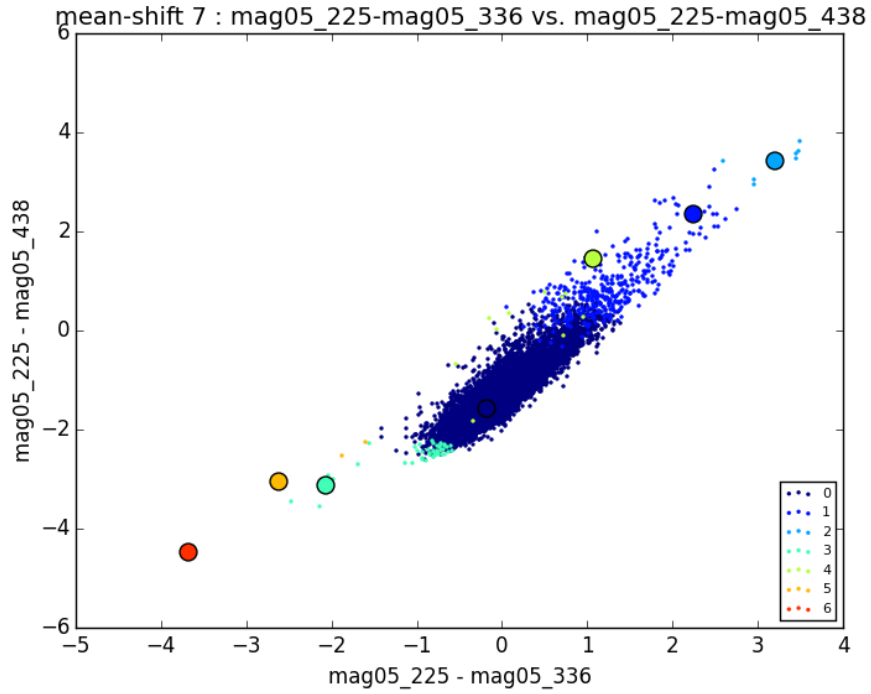

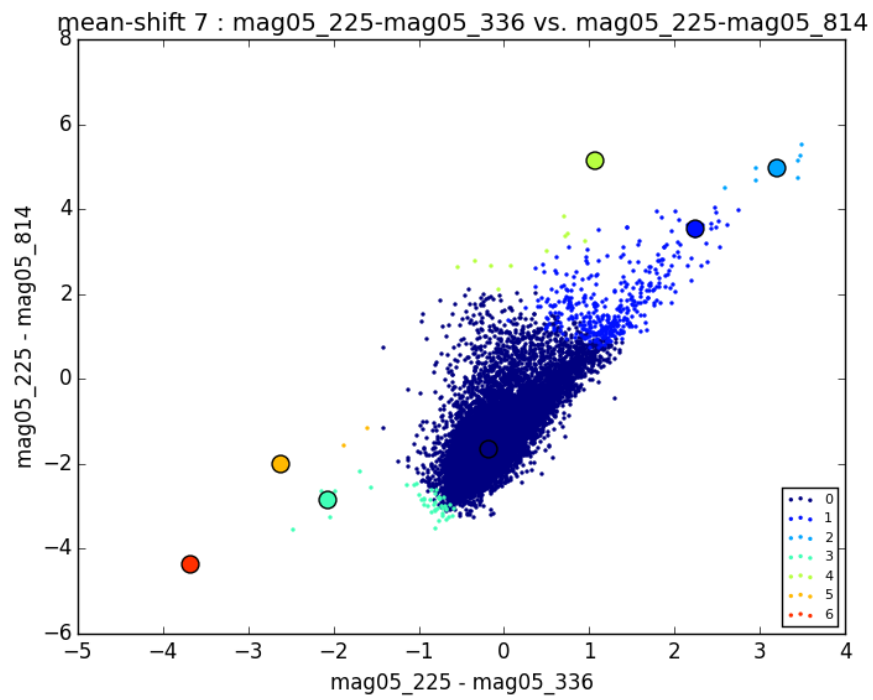Figure 37: meanshift__3d__color__7cl__mag05__225-mag05__336vsmag05__225-mag05__438.png

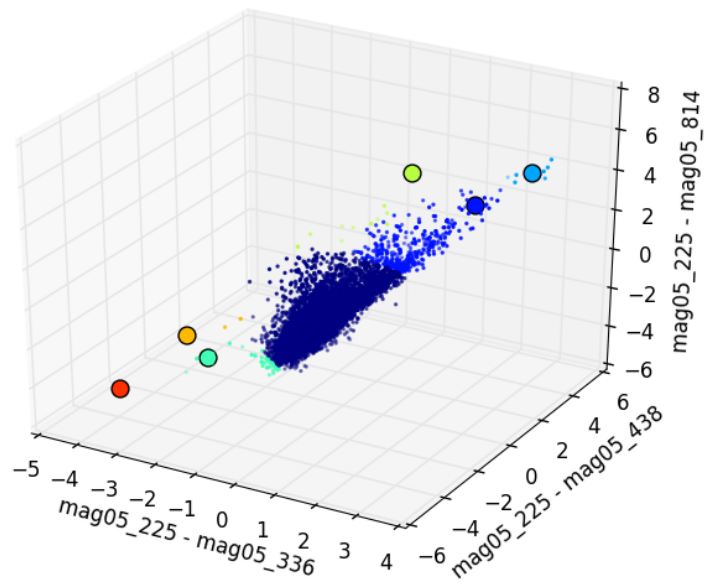Figure 38: meanshift__3d__color__7cl__mag05__225-mag05__336vsmag05__225-mag05__814.png

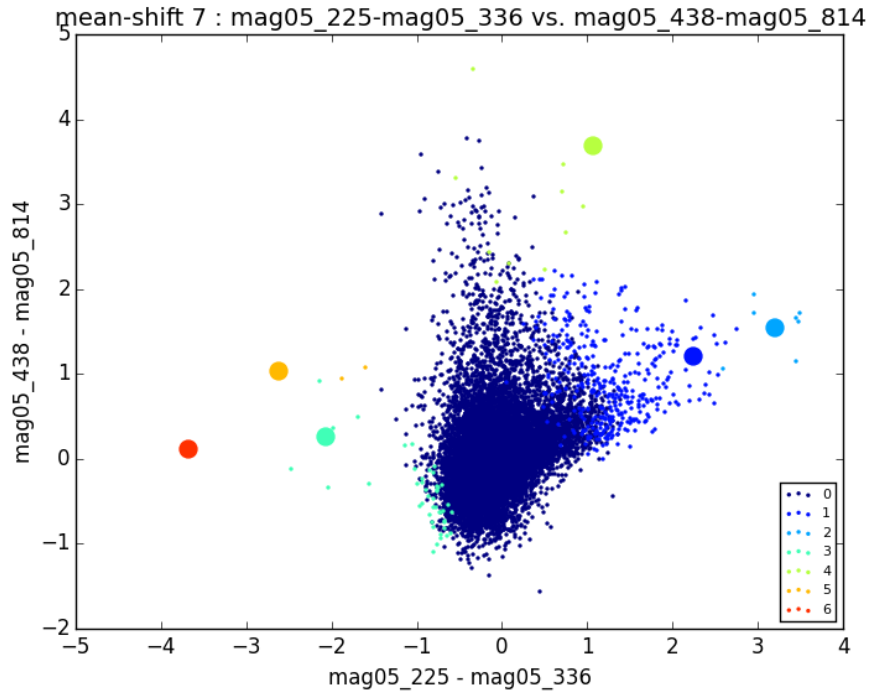Figure 39: meanshift__3d__color__7cl__mag05__225-mag05__336vsmag05__225-mag05__438vsmag05__225-mag05__814.png

Figure 40: meanshift__base__color__7cl__mag05__225-mag05__336vsmag05__438-mag05__814.png

meanshift results, Ncl=13

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	12996	0.289107609574	0.290993828531	1.2954	1.0446	4.5888	0.0010	0.8128	-0.195763389179	-
2	96	0.289107609574	0.208316105735	2.0985	1.0413	2.9168	0.0184	0.6386	2.1959047619	2
3	4	0.289107609574	0.503943570874	4.1563	0.4778	0.8424	0.2034	0.7856	3.3616	
4	58	0.289107609574	0.626697207596	2.2511	0.5787	2.0422	0.0287	0.8902	-1.961	
5	3	0.289107609574	0.407079078714	3.6639	0.5532	0.7108	0.3242	0.8441	2.83733333333	3
6	4	0.289107609574	0.382946322243	3.1053	0.6728	0.8567	0.4425	0.6571	2.50733333333	
7	354	0.289107609574	0.2958708145	1.1305	0.8871	3.5044	0.0037	0.5421	0.8345	
8	1	0.289107609574	0.0	N/A	N/A	N/A	N/A	1.8375	1.071	
9	1	0.289107609574	0.0	N/A	N/A	N/A	N/A	0.3507	-3.682	
10	40	0.289107609574	0.587681307942	1.2392	0.7402	2.3155	0.0420	1.1966	-0.346	
11	3	0.289107609574	0.396575027598	2.1467	1.0284	1.5310	0.5485	0.5573	-2.621	
12	1	0.289107609574	0.0	N/A	N/A	N/A	N/A	0.4895	-2.469	
13	534	0.289107609574	0.192256806428	0.7080	0.9208	2.9305	0.0208	0.6323	-0.544	
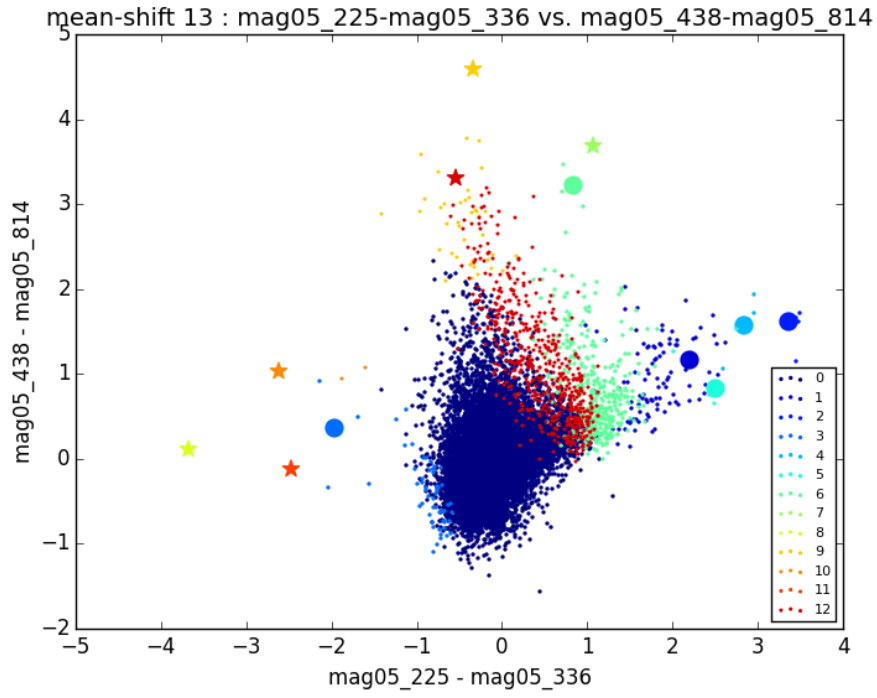
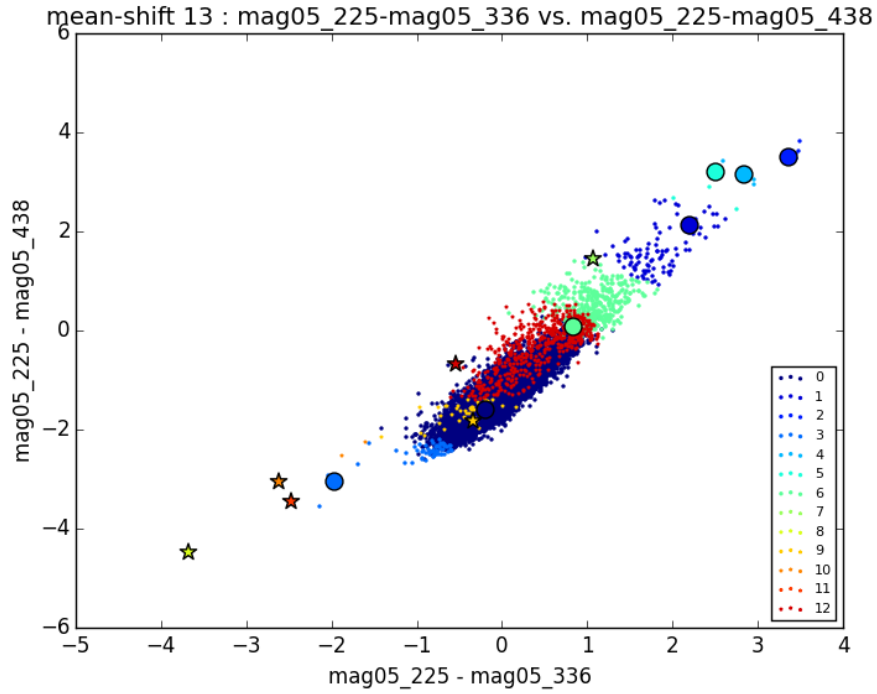Figure 41: meanshift_base_color_13cl_mag05_225-mag05_336vsmag05_438-mag05_814.png

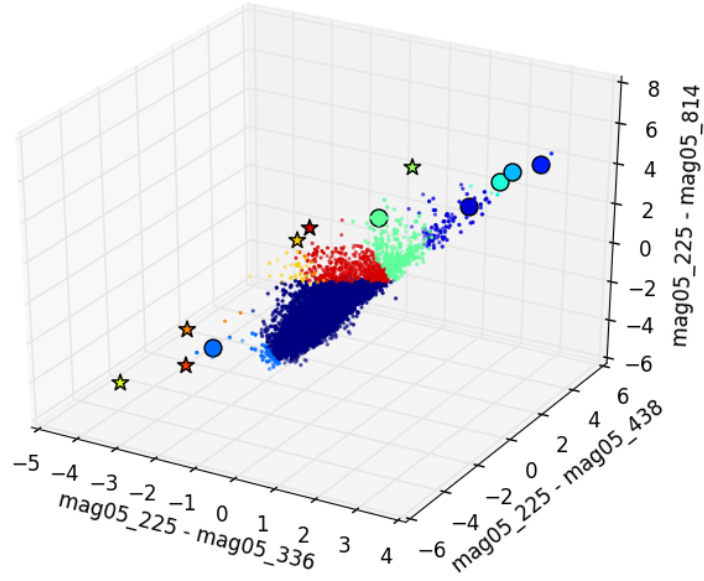Figure 42: meanshift_3d_color_13cl_mag05_225-mag05_336vsmag05_225-mag05_438.png

Figure 43: meanshift_3d_color_13cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_814.png
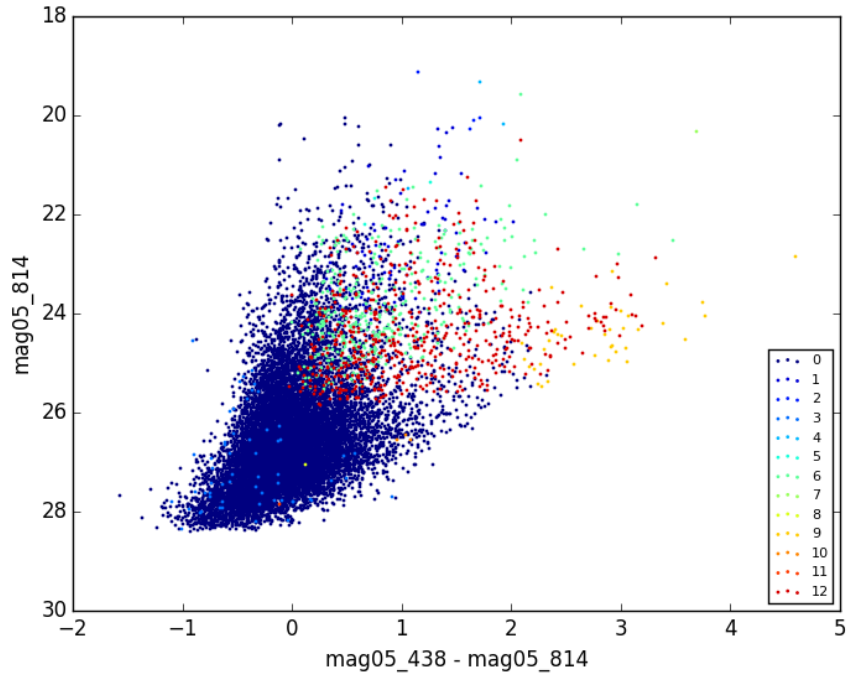

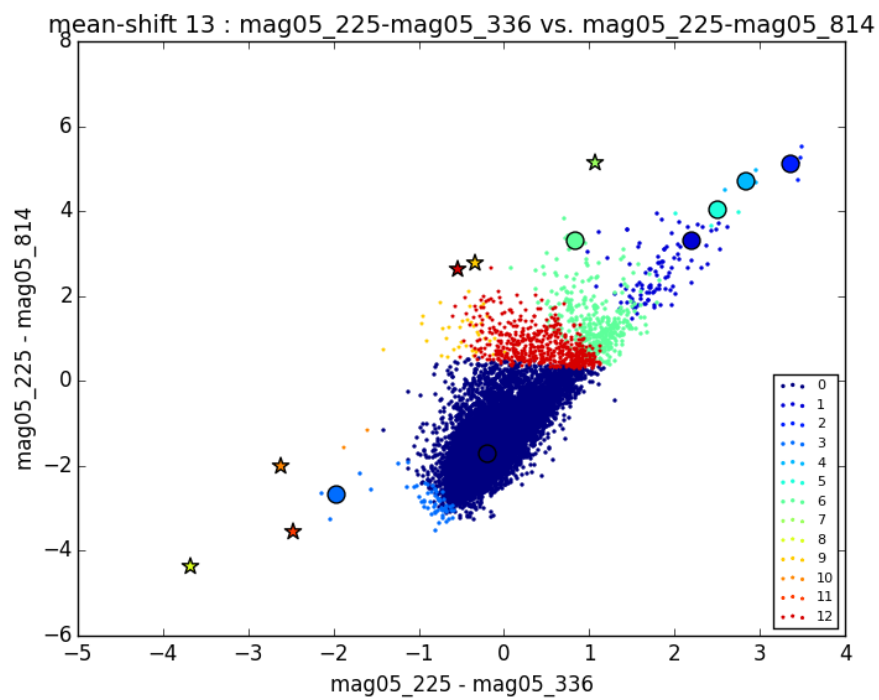Figure 44: meanshift_CMD_13cl_mag05_438-mag05_814vsmag05_814.png

Figure 45: meanshift__3d__color__13cl__mag05__225-mag05__336vsmag05__225-mag05__814.png