Clustering output, found in/home/pauline/Research/m83_clustering/results/broad_narrow/SII_I/clustering/mag05_673-mag05_814_mag05_336-mag05_673_mag05_438-mag05_673

K-means results

| Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	5825.91330202	0.437131478607	14577	7291	5173	2113	0	0	0	0	0
4	4626.80088025	0.372269361941	14577	5657	4627	3191	1102	0	0	0	0
5	4010.84461892	0.319889908376	14577	4315	4236	3256	2066	704	0	0	0
6	3616.80140585	0.31228582963	14577	4150	3953	2515	1969	1307	683	0	0
7	3270.72371477	0.314797759394	14577	4113	3868	2495	1722	1333	541	505	0
8	2941.9417861	0.296913525138	14577	3747	2940	2514	2215	1187	1102	471	401
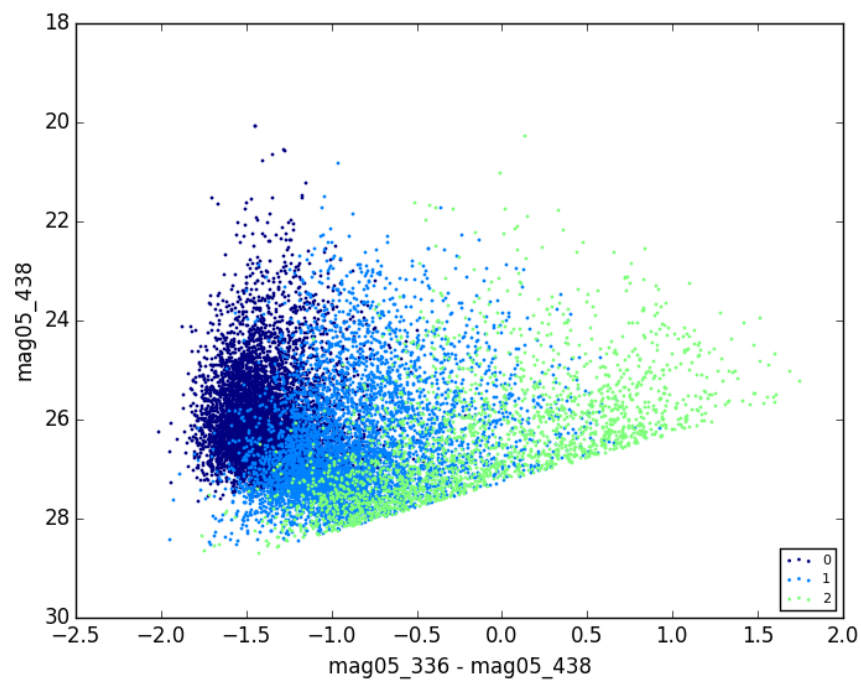
Figure 1: kmeans_CMD_3cl_mag05_336-mag05_438vsmag05_438.png

kmeans results, Ncl=3

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	7291	0.437131478607	0.546212246082	0.8377	0.6023	3.1891	0.0010	0.6938	-0.0462475654917
2	5173	0.437131478607	0.338321364601	0.5299	0.8061	4.3088	0.0041	0.5118	0.0526647979896
3	2113	0.437131478607	0.302648205579	1.1927	1.2150	5.6968	0.0033	0.7108	0.363400851869
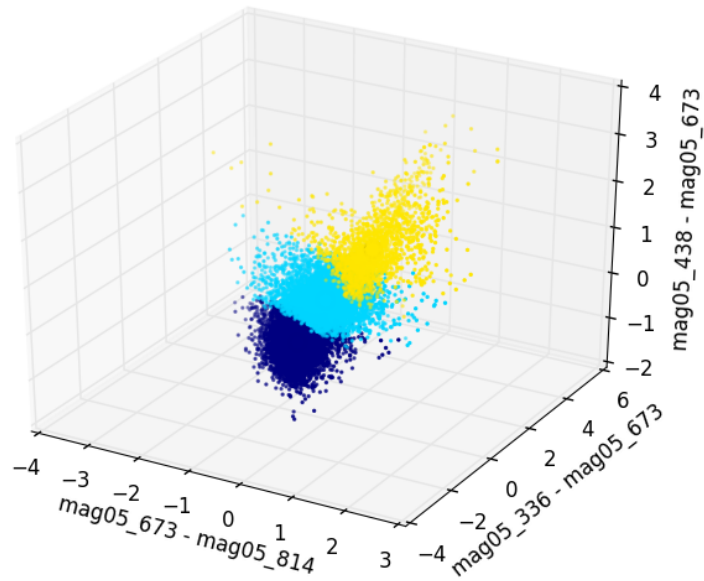
Figure 2: kmeans_3d_color_3cl_mag05_673-mag05_814vsmag05_336-mag05_673vsmag05_438-mag05_673.png
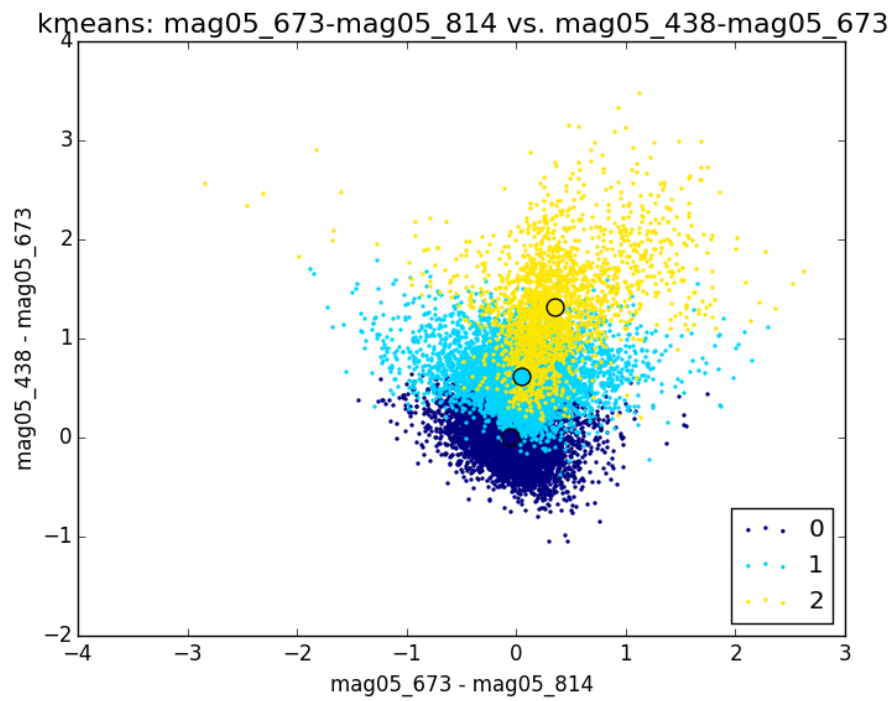

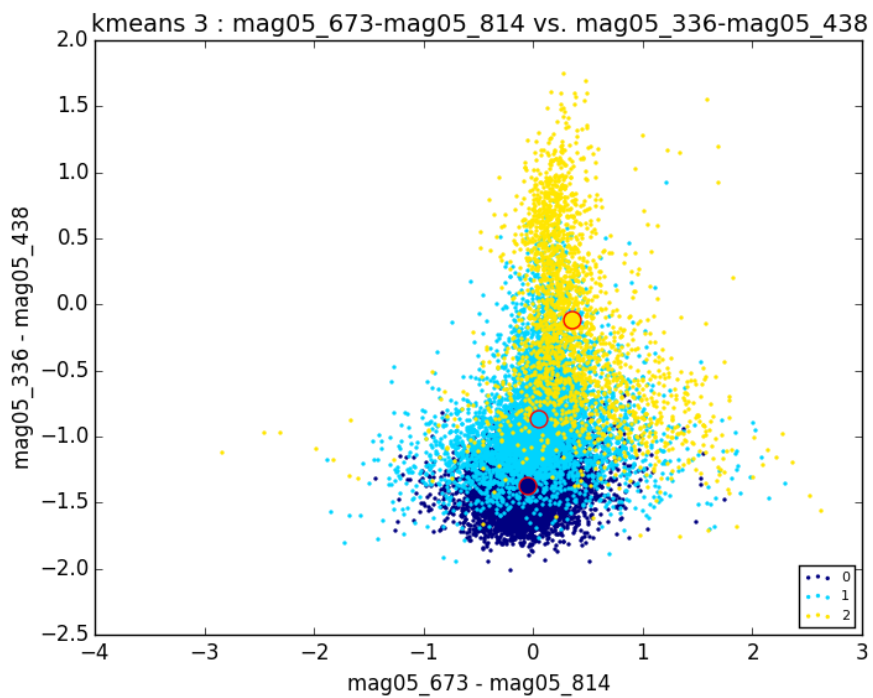Figure 3: kmeans_3d_3cl_mag05_673-mag05_814vsmag05_438-mag05_673.png

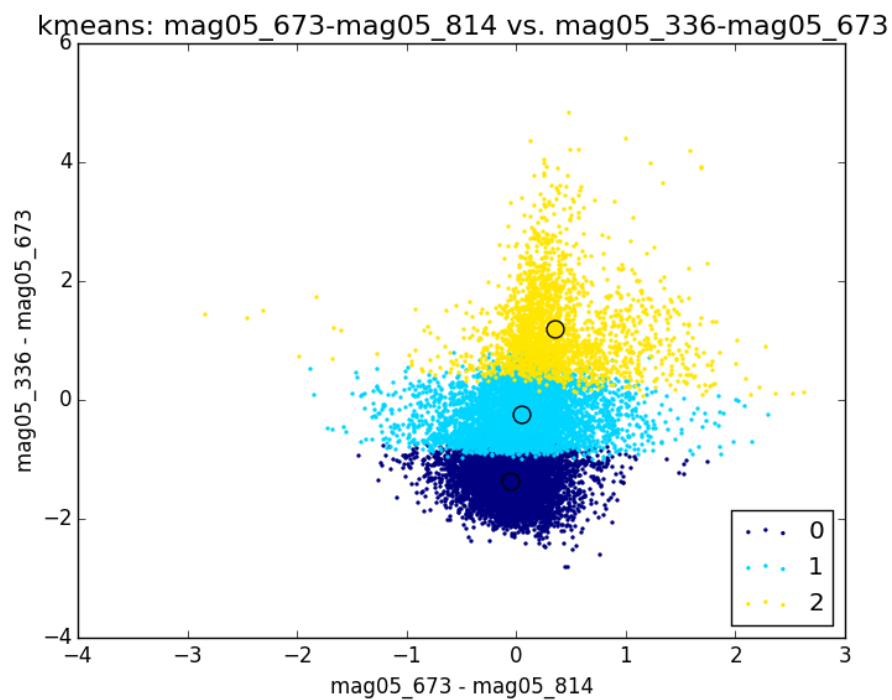Figure 4: kmeans_base_color_3cl_mag05_673-mag05_814vsmag05_336-mag05_438.png

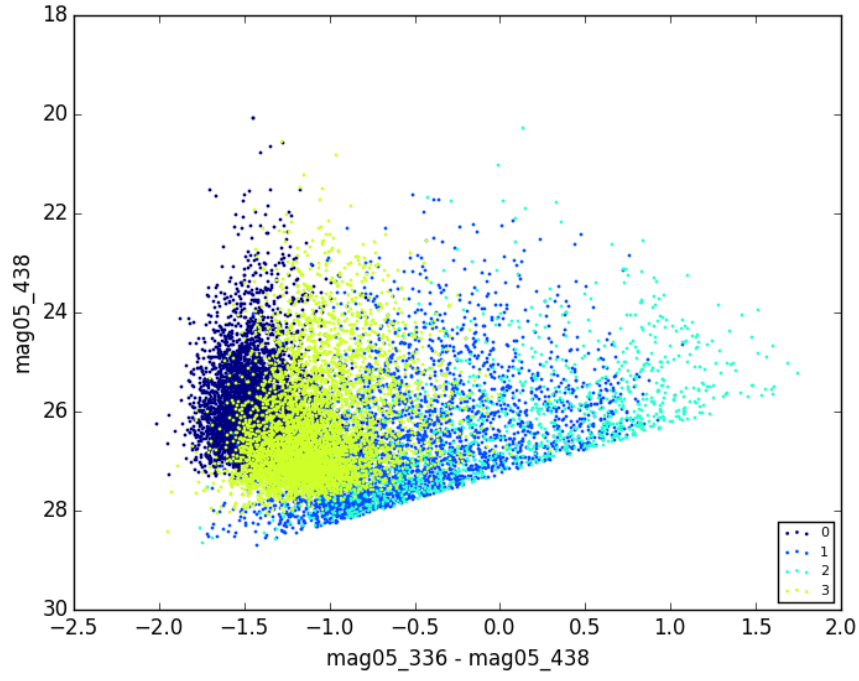Figure 5: kmeans_3d_3cl_mag05_673-mag05_814vsmag05_336-mag05_673.png

Figure 6: kmeans_CMD_4cl_mag05_336-mag05_438vsmag05_438.png

kmeans results, Ncl=4

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	5657	0.372269361941	0.492835741174	0.8925	0.5166	2.7981	0.0010	0.7173	-0.0399050733604	-
2	3191	0.372269361941	0.283203055633	0.6598	0.8466	4.6516	0.0040	0.4814	0.190482293952	(
3	1102	0.372269361941	0.287154773409	1.4497	1.2065	5.2160	0.0033	0.7911	0.431449183303	
4	4627	0.372269361941	0.306560015209	0.5428	0.6427	3.7747	0.0028	0.5335	-0.033376485844	-
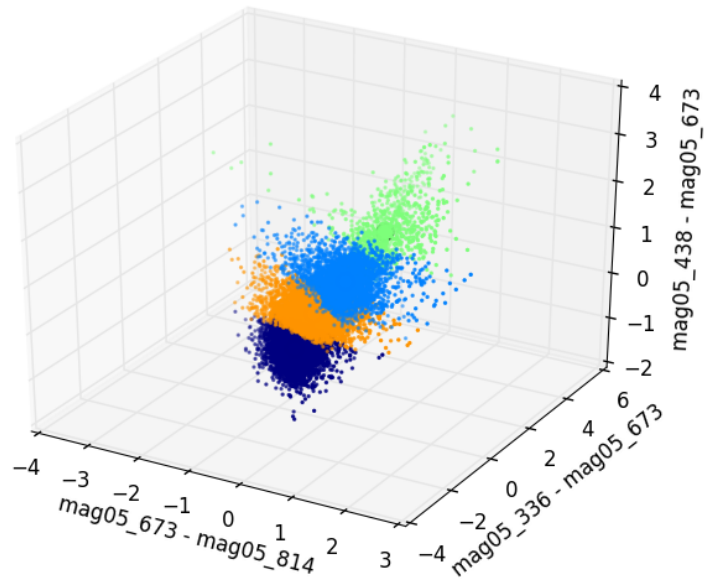
Figure 7: kmeans_3d_color_4cl_mag05_673-mag05_814vsmag05_336-mag05_673vsmag05_438-mag05_673.png
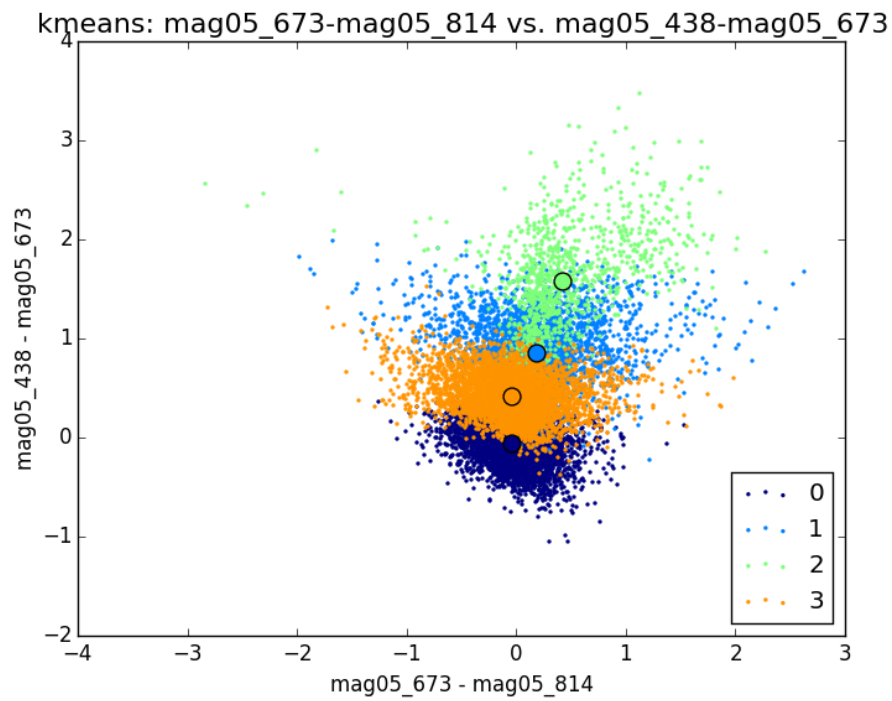

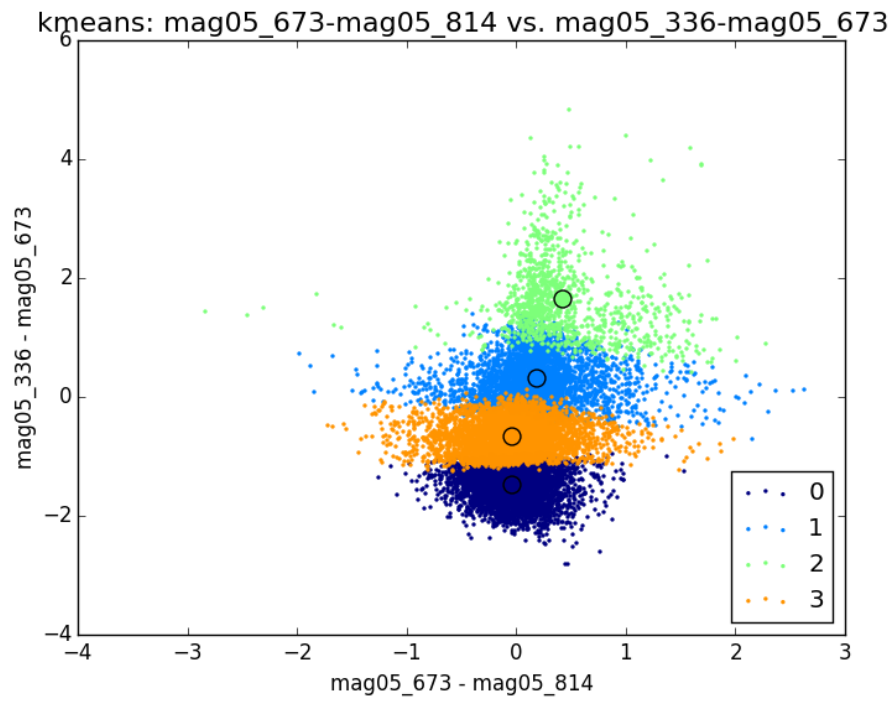Figure 8: kmeans_3d_4cl_mag05_673-mag05_814vsmag05_438-mag05_673.png

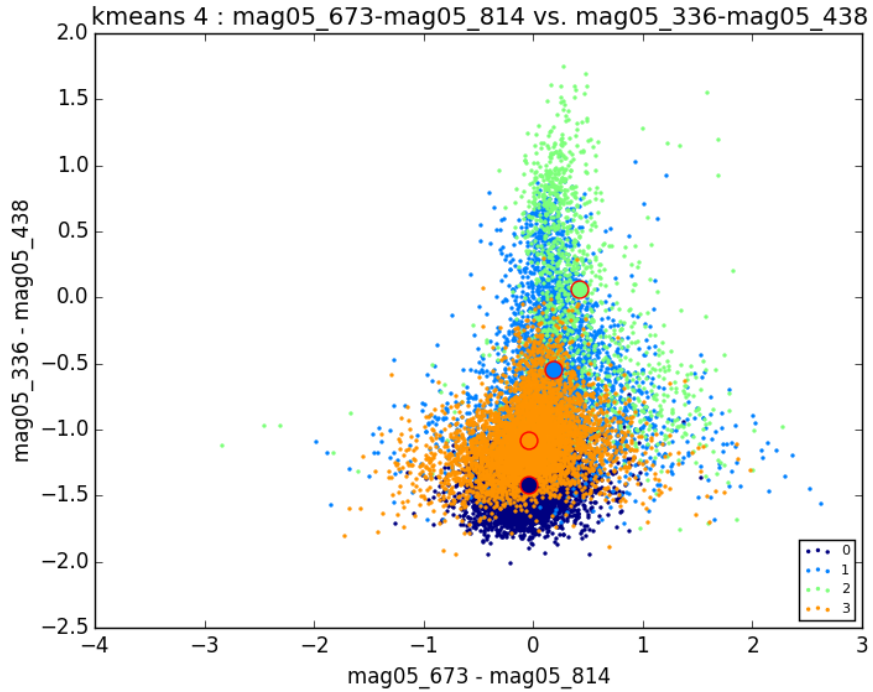Figure 9: kmeans_3d_4cl_mag05_673-mag05_814vsmag05_336-mag05_673.png

Figure 10: kmeans_base_color_4cl_mag05_673-mag05_814vsmag05_336-mag05_438.png
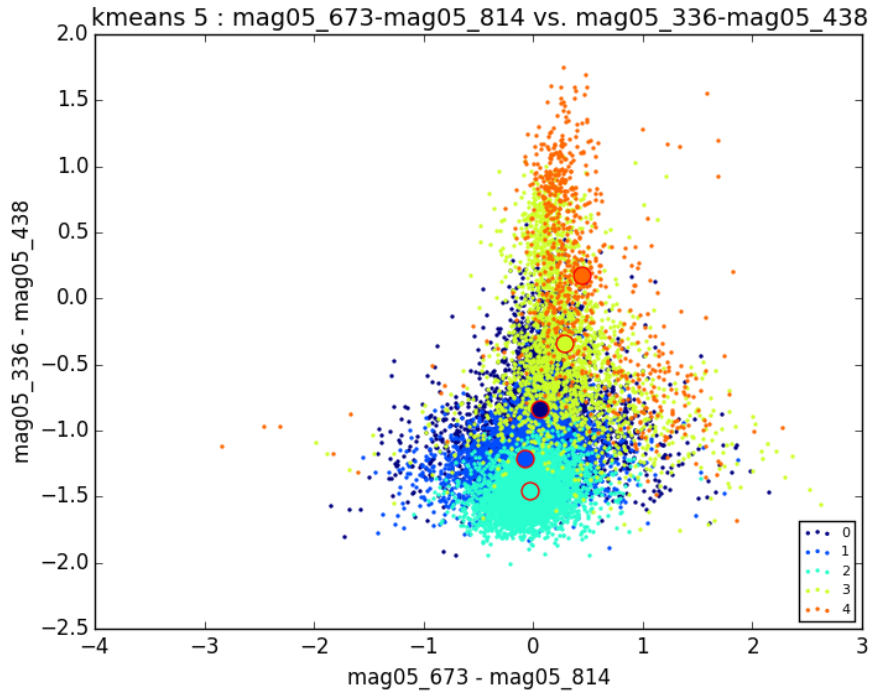
Figure 11: kmeans__base__color__5cl__mag05__673-mag05__814vsmag05__336-mag05__438.png

kmeans results, Ncl=5

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	3256	0.319889908376	0.248921895696	0.5057	0.7027	4.1548	0.0041	0.4766	0.0672966830467	-
2	4315	0.319889908376	0.298174145991	0.6227	0.5316	3.4594	0.0017	0.5673	-0.0696169177289	-
3	4236	0.319889908376	0.440148125834	0.9460	0.4644	2.6437	0.0010	0.745	-0.0299844192635	
4	2066	0.319889908376	0.246473317935	0.8295	0.8698	4.6516	0.0040	0.4975	0.287194578896	
5	704	0.319889908376	0.273072054223	1.6239	1.1996	5.2160	0.0033	0.8641	0.451788352273	
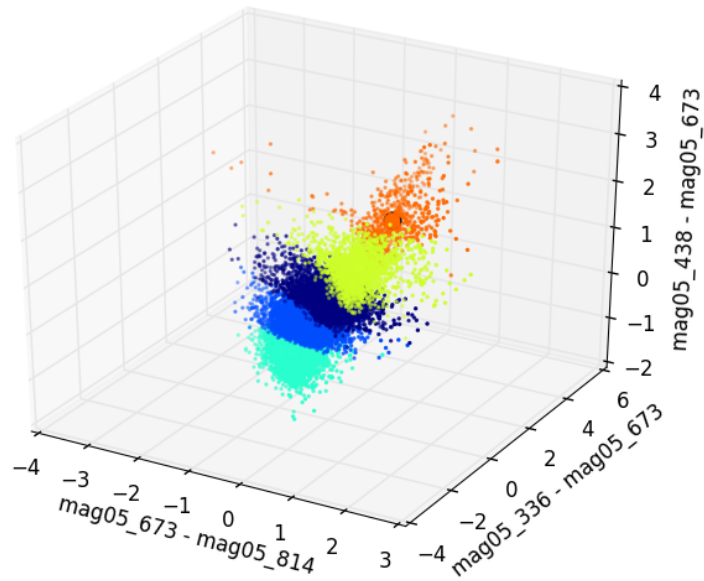
Figure 12: kmeans_3d_color_5cl_mag05_673-mag05_814vsmag05_336-mag05_673vsmag05_438-mag05_673.png
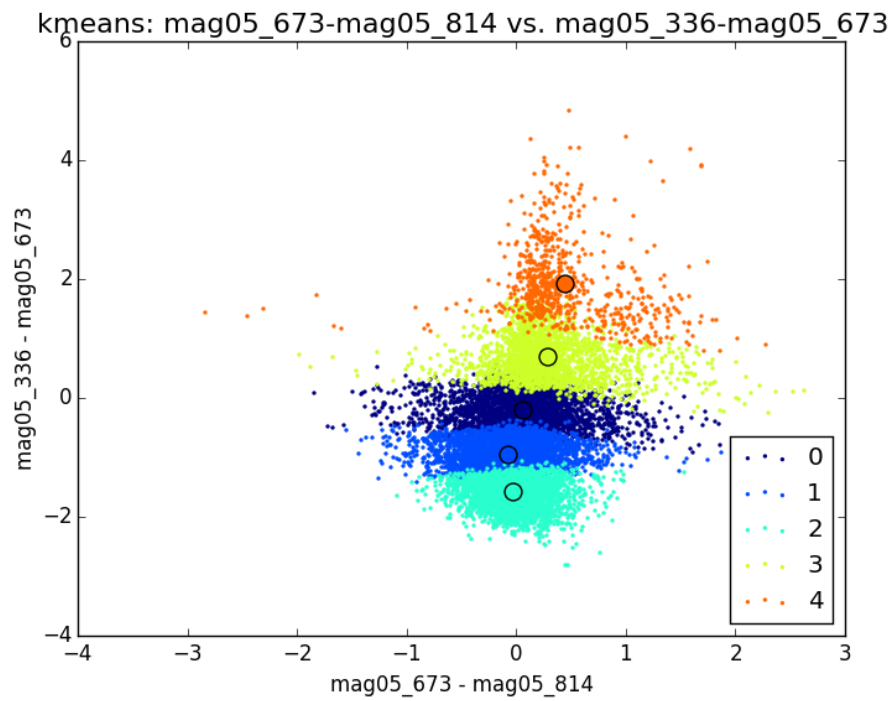

Figure 13: kmeans_3d_5cl_mag05_673-mag05_814vsmag05_336-mag05_673.png
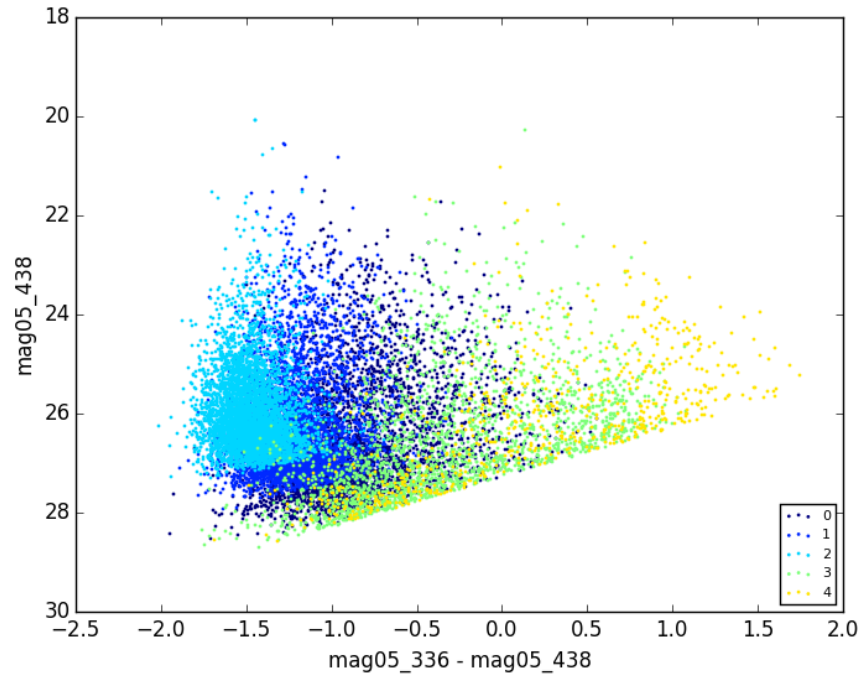
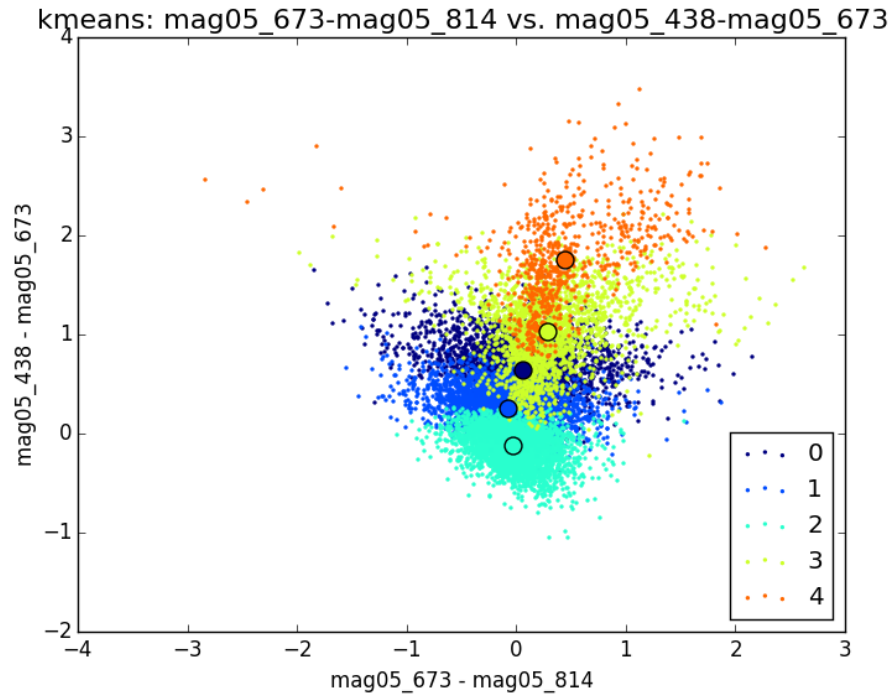Figure 14: kmeans_CMD_5cl_mag05_336-mag05_438vsmag05_438.png

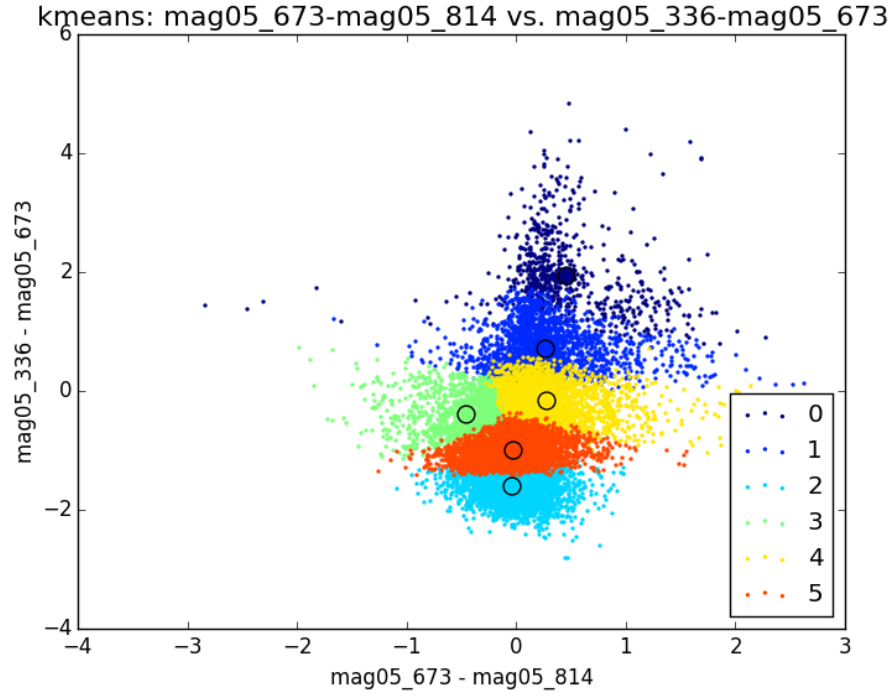Figure 15: kmeans_3d_5cl_mag05_673-mag05_814vsmag05_438-mag05_673.png

Figure 16: kmeans_3d_6cl_mag05_673-mag05_814vsmag05_336-mag05_673.png

kmeans results, Ncl=6

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	683	0.31228582963	0.266409487078	1.6354	1.1958	5.2160	0.0033	0.8654	0.459941434846	1
2	1969	0.31228582963	0.247838512054	0.8341	0.8410	4.4517	0.0040	0.4932	0.269590655155	0
3	3953	0.31228582963	0.419099979366	0.9580	0.4551	2.3141	0.0010	0.7504	-0.0335709587655	-1
4	1307	0.31228582963	0.227091096437	0.6143	0.6415	2.6953	0.0041	0.6128	-0.449443764346	-0
5	2515	0.31228582963	0.24723775092	0.4872	0.6420	2.7789	0.0041	0.4293	0.275099403579	-0
6	4150	0.31228582963	0.314921832186	0.6325	0.4828	2.8487	0.0017	0.5707	-0.0273734939759	-1

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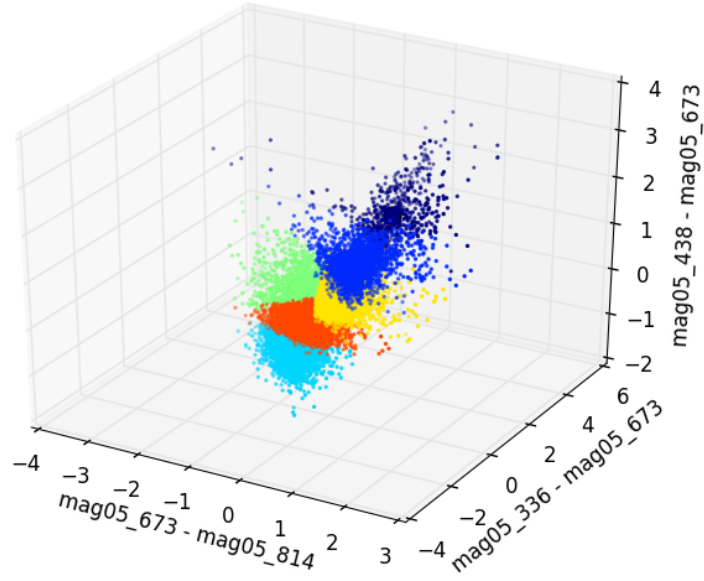
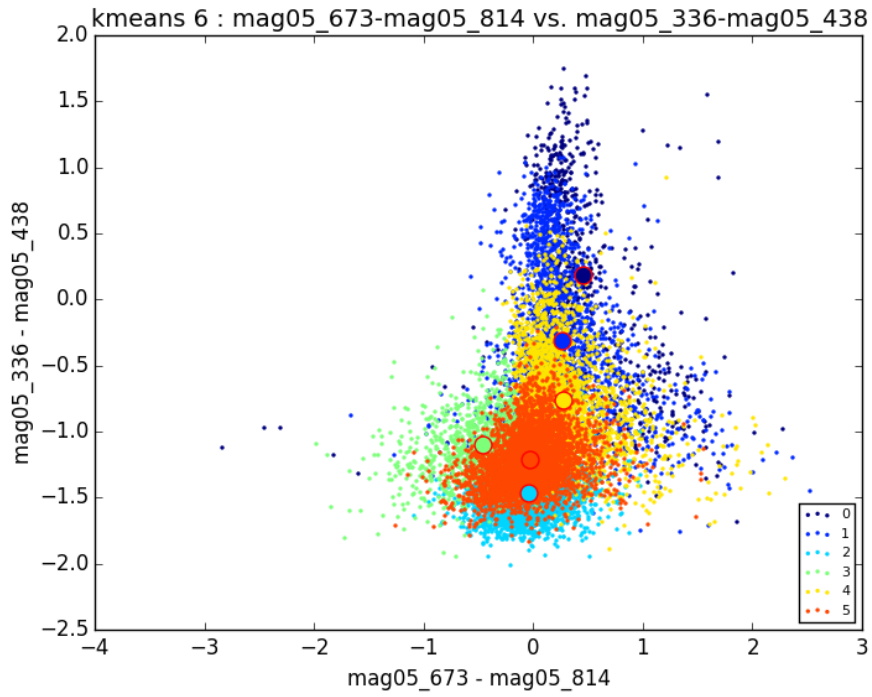Figure 17: kmeans_3d_color_6cl_mag05_673-mag05_814vsmag05_336-mag05_673vsmag05_438-mag05_673.png

Figure 18: kmeans_base_color_6cl_mag05_673-mag05_814vsmag05_336-mag05_438.png
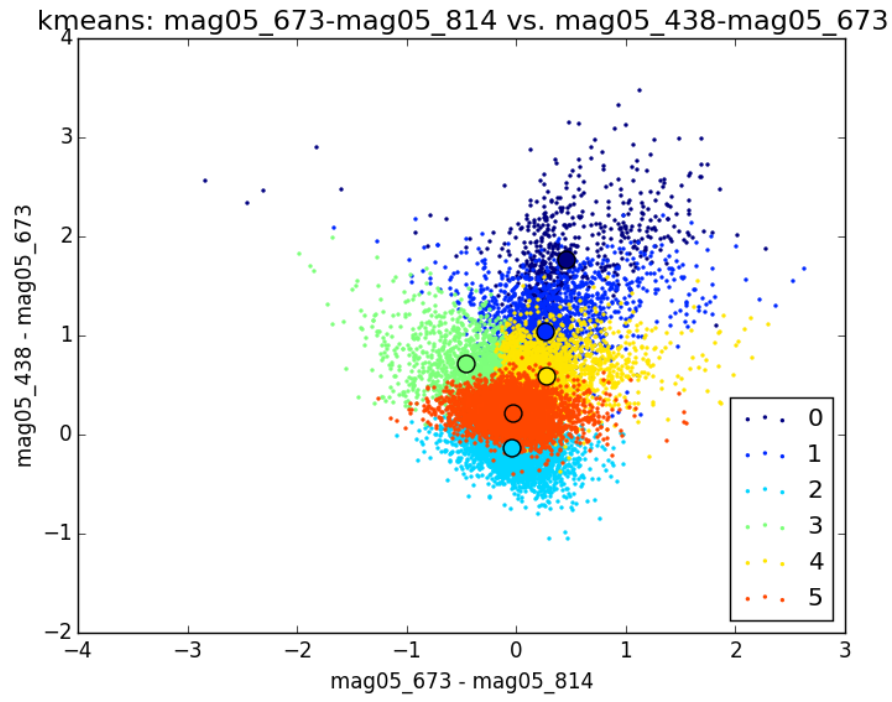
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Figure 19: kmeans__3d__6cl__mag05__673-mag05__814vsmag05__438-mag05__673.png
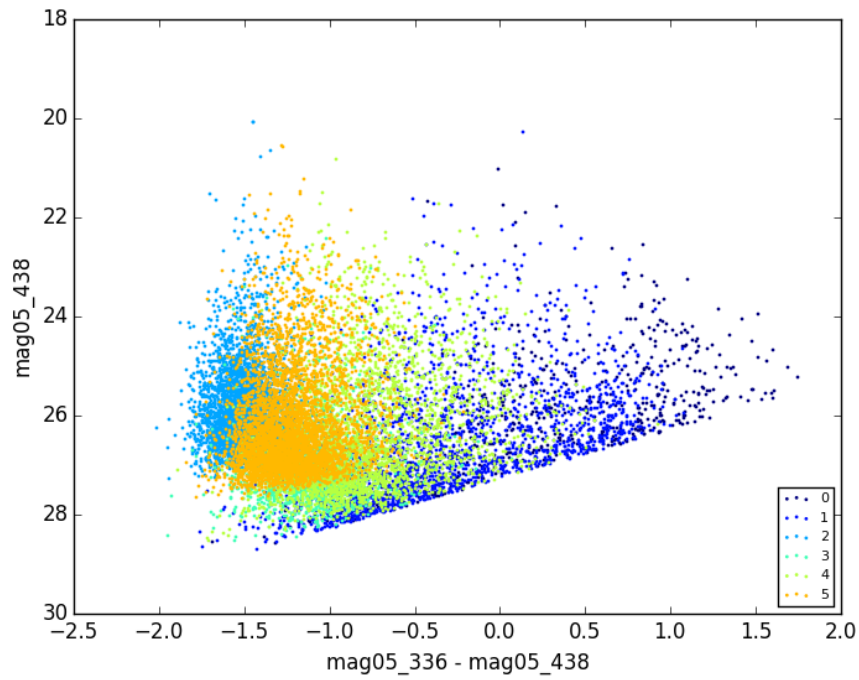

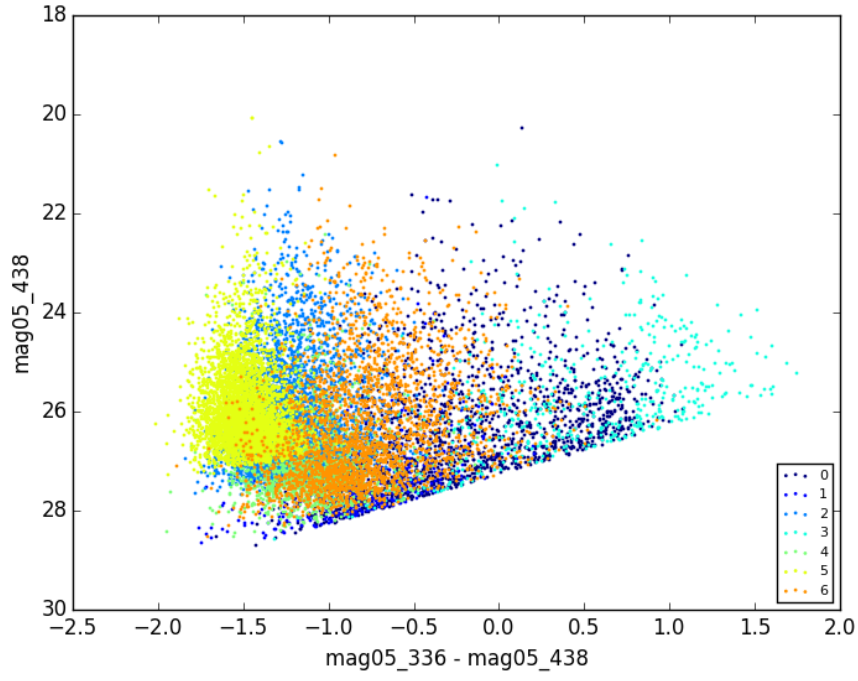
Figure 20: kmeans__CMD__6cl__mag05__336-mag05__438vsmag05__438.png

Figure 21: kmeans_CMD_7cl_mag05_336-mag05_438vsmag05_438.png

kmeans results, Ncl=7

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	1722	0.314797759394	0.279388397574	0.7573	0.7341	3.4119	0.0040	0.4759	0.118265969803	
2	505	0.314797759394	0.251975590643	1.2306	0.8986	2.9916	0.0134	0.5364	0.976615841584	
3	4113	0.314797759394	0.314716407782	0.6389	0.4758	2.7023	0.0017	0.5738	-0.0276046681255	
4	541	0.314797759394	0.301660926754	1.6662	1.0997	5.2160	0.0033	0.9356	0.31141219963	
5	1333	0.314797759394	0.222801640049	0.6088	0.6310	2.7136	0.0041	0.6059	-0.445465866467	-
6	3868	0.314797759394	0.414783657094	0.9616	0.4524	2.3141	0.0010	0.7525	-0.0327205274043	-
7	2495	0.314797759394	0.249077164884	0.4786	0.6210	2.6353	0.0041	0.4264	0.269217635271	-
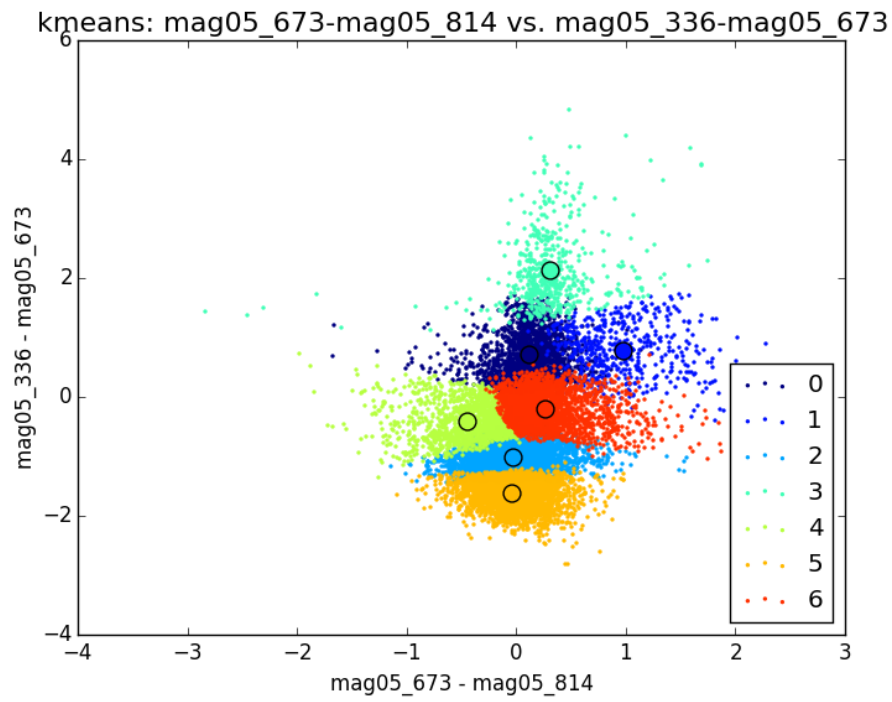
Figure 22: kmeans__3d__7cl__mag05__673-mag05__814vsmag05__336-mag05__673.png
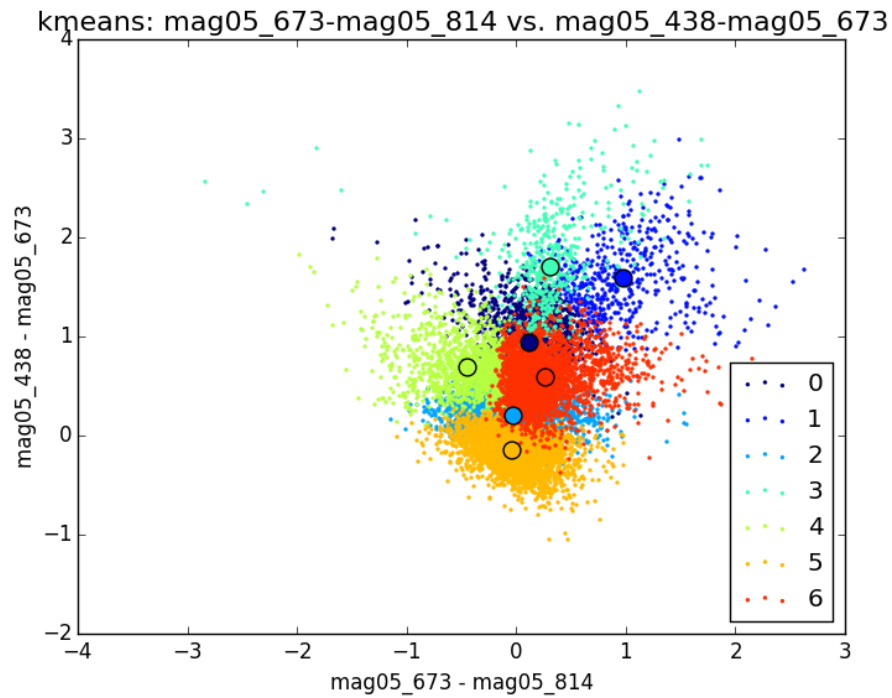

Figure 23: kmeans__3d__7cl__mag05__673-mag05__814vsmag05__438-mag05__673.png
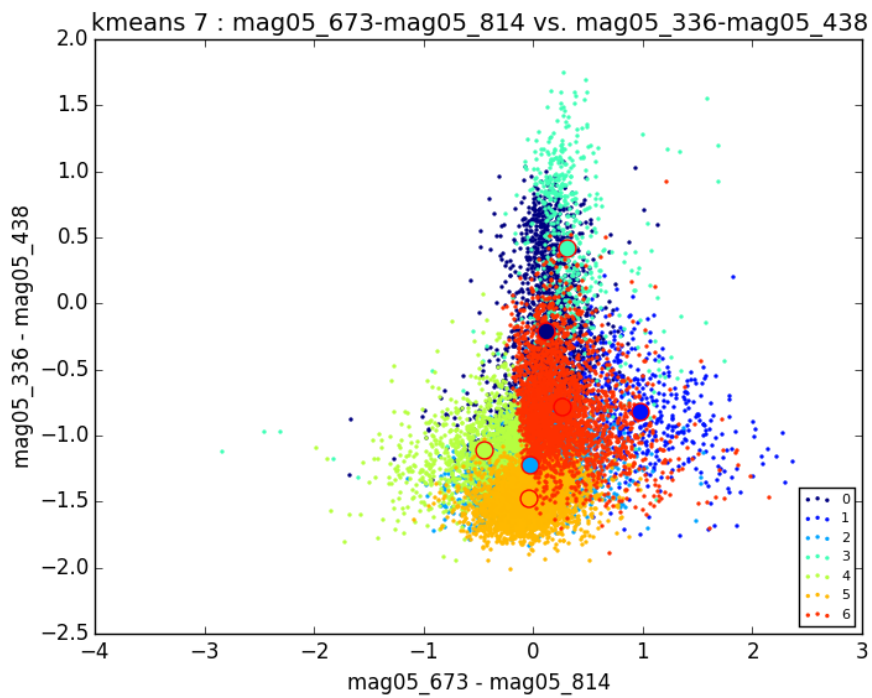
Figure 24: kmeans_base_color_7cl_mag05_673-mag05_814vsmag05_336-mag05_438.png
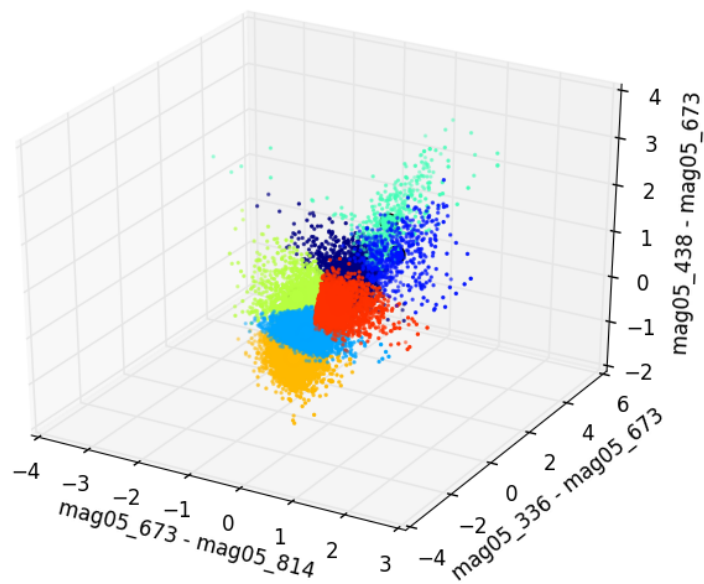

Figure 25: kmeans_3d_color_7cl_mag05_673-mag05_814vsmag05_336-mag05_673vsmag05_438-mag05_673.png
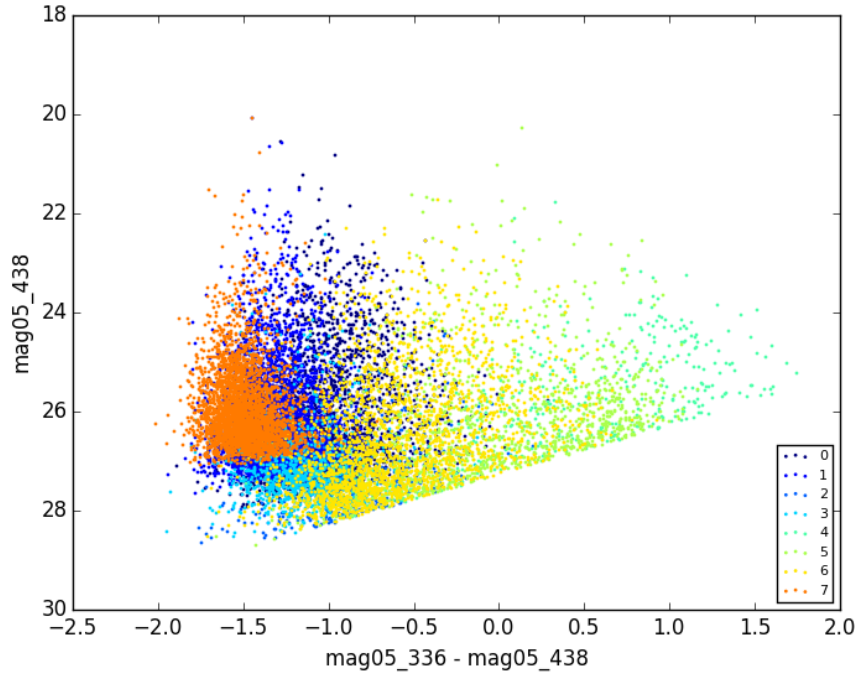
Figure 26: kmeans_CMD_8cl_mag05_336-mag05_438vsmag05_438.png

kmeans results, Ncl=8

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	2514	0.296913525138	0.250641613641	0.5055	0.5245	2.3166	0.0041	0.5051	0.193210421639	
2	3747	0.296913525138	0.313006491142	0.7215	0.4199	2.0690	0.0017	0.6034	-0.119642647451	
3	471	0.296913525138	0.240470061054	1.2044	0.9017	2.9162	0.0140	0.5453	1.02596602972	
4	1102	0.296913525138	0.226912755439	0.6329	0.6330	2.6670	0.0041	0.6284	-0.510440108893	
5	401	0.296913525138	0.297073675512	1.8030	1.0964	4.2246	0.0033	0.952	0.423860349127	
6	1187	0.296913525138	0.263538662633	0.9273	0.7627	4.4384	0.0040	0.557	0.127363100253	
7	2215	0.296913525138	0.275951303304	0.5170	0.6088	2.3792	0.0041	0.3848	0.179815801354	
8	2940	0.296913525138	0.380497206952	1.0001	0.4233	1.9648	0.0010	0.7811	0.00867857142857	
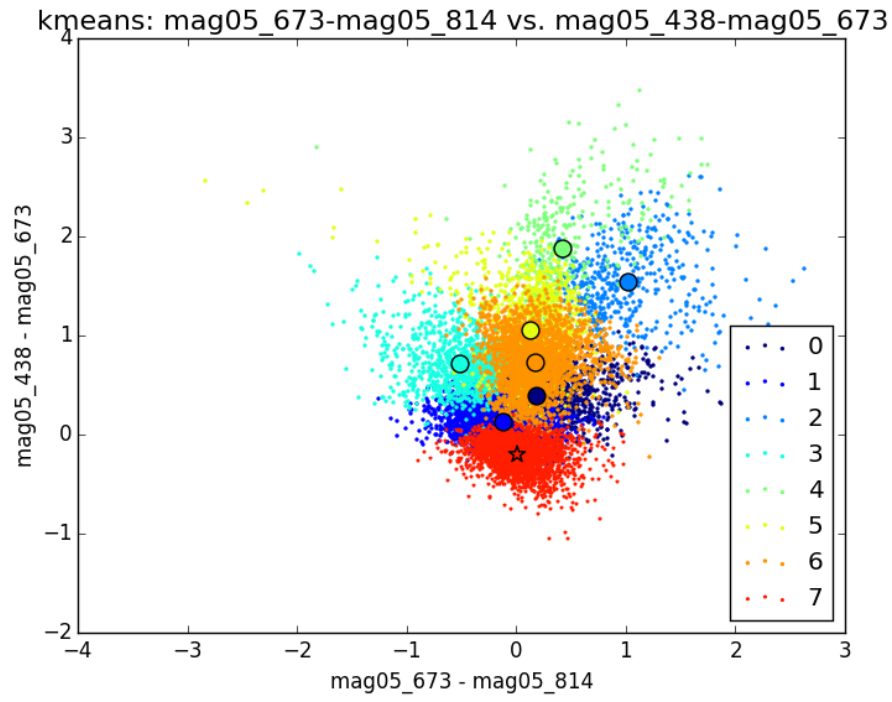
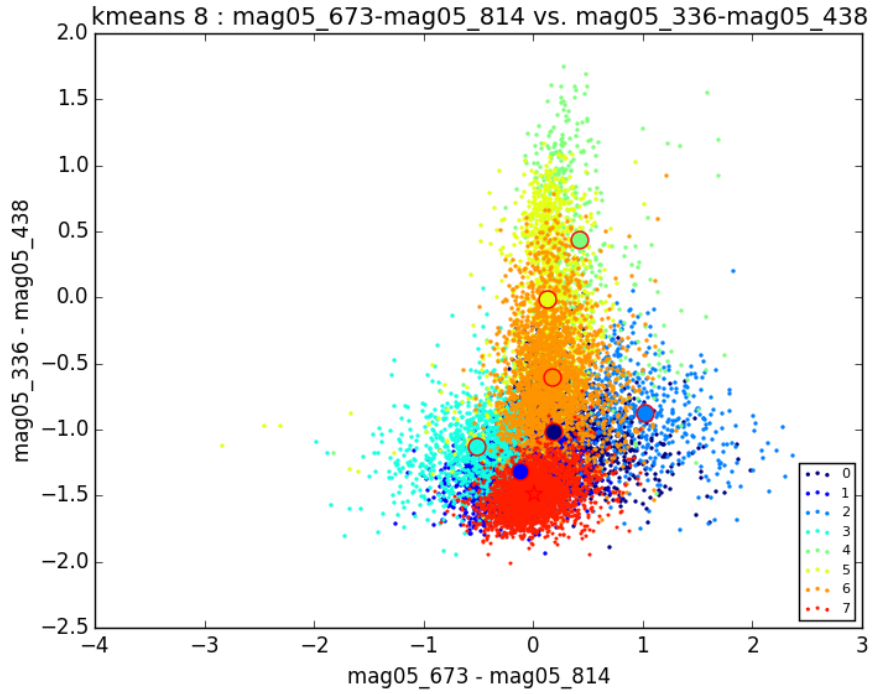Figure 27: kmeans_3d_8cl_mag05_673-mag05_814vsmag05_438-mag05_673.png

Figure 28: kmeans_base_color_8cl_mag05_673-mag05_814vsmag05_336-mag05_438.png
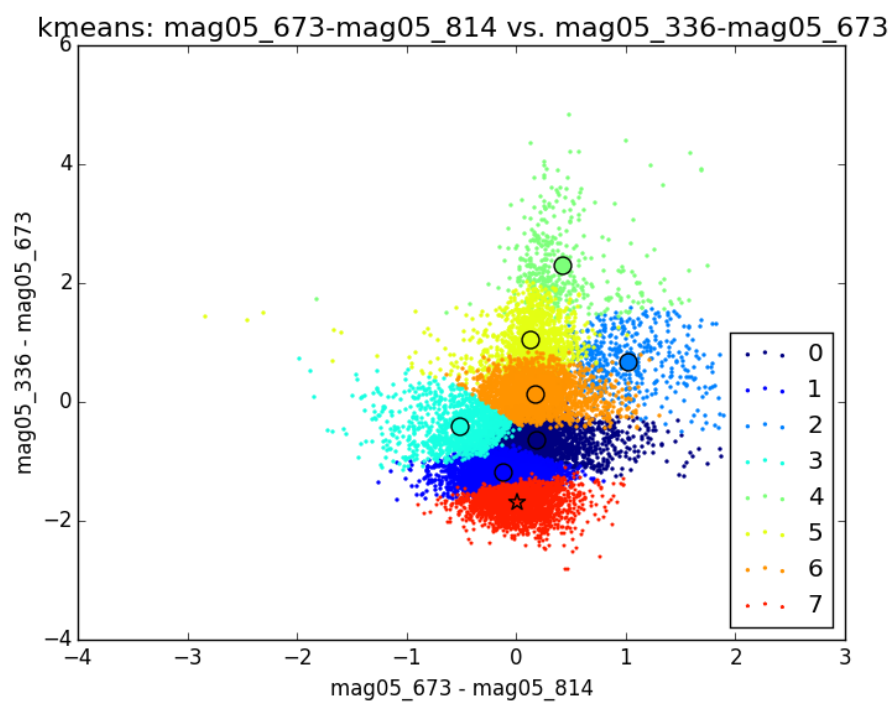
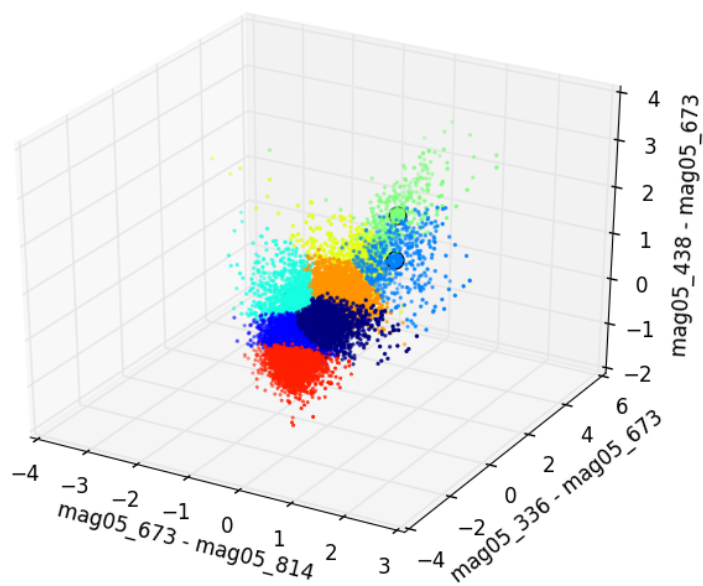Figure 29: kmeans_3d_8cl_mag05_673-mag05_814vsmag05_336-mag05_673.png

Figure 30: kmeans_3d_color_8cl_mag05_673-mag05_814vsmag05_336-mag05_673vsmag05_438-mag05_673.png

Meanshift results

| Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
0.8929	3	0.448775854368	14577	13539	692	346	0	0	0	0	0	0	0
0.5500	11	0.377103930066	14577	11783	1905	478	278	82	33	7	6	3	1
0.6000	7	0.418668976676	14577	12578	1323	598	53	21	3	1	0	0	0
0.6500	7	0.418344367021	14577	12618	1284	592	65	14	3	1	0	0	0
0.7000	3	0.455632797676	14577	13473	782	322	0	0	0	0	0	0	0
0.8000	4	0.451741609687	14577	13133	1151	289	4	0	0	0	0	0	0
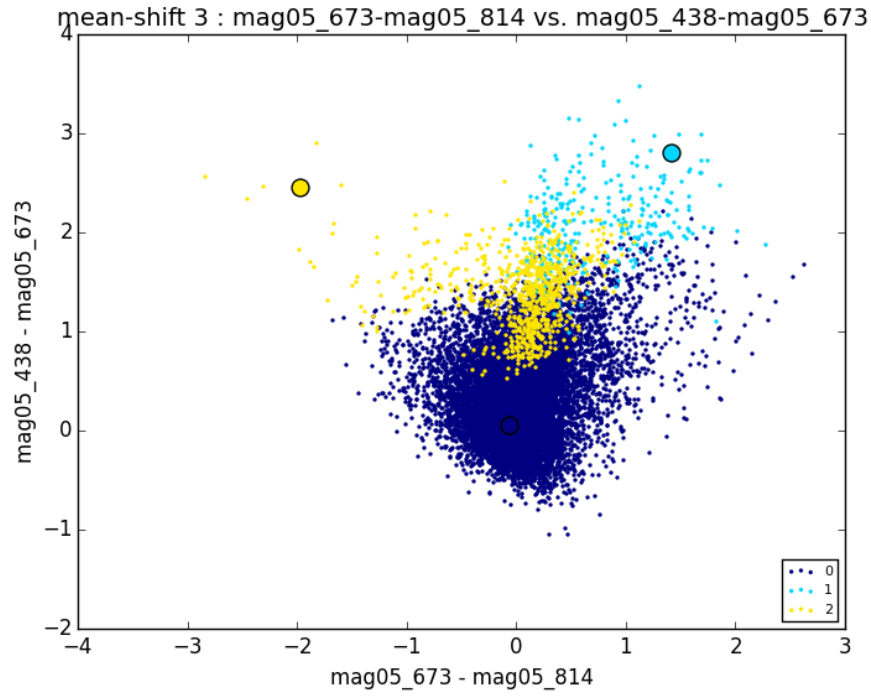
Figure 31: meanshift__3d__color__3cl__mag05__673-mag05__814vsmag05__438-mag05__673.png

meanshift results, Ncl=3

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	13539	0.448775854368	0.457573854559	0.7381	1.1733	4.8894	0.0010	0.7249	-0.0452416083501
2	692	0.448775854368	0.3951825218	1.1837	0.9545	3.9354	0.0033	0.7668	-2.041875
3	346	0.448775854368	0.211696263481	1.8844	1.2638	4.5213	0.0141	0.9086	1.42283333333
1	13473	0.455632797676	0.464520432597	0.7364	1.1626	4.8259	0.0010	0.722	-0.0549726767972
2	322	0.455632797676	0.209057976699	1.9054	1.2841	4.5213	0.0141	0.9091	1.42283333333
3	782	0.455632797676	0.404039430747	1.1864	0.9539	4.0198	0.0033	0.7496	-1.9694
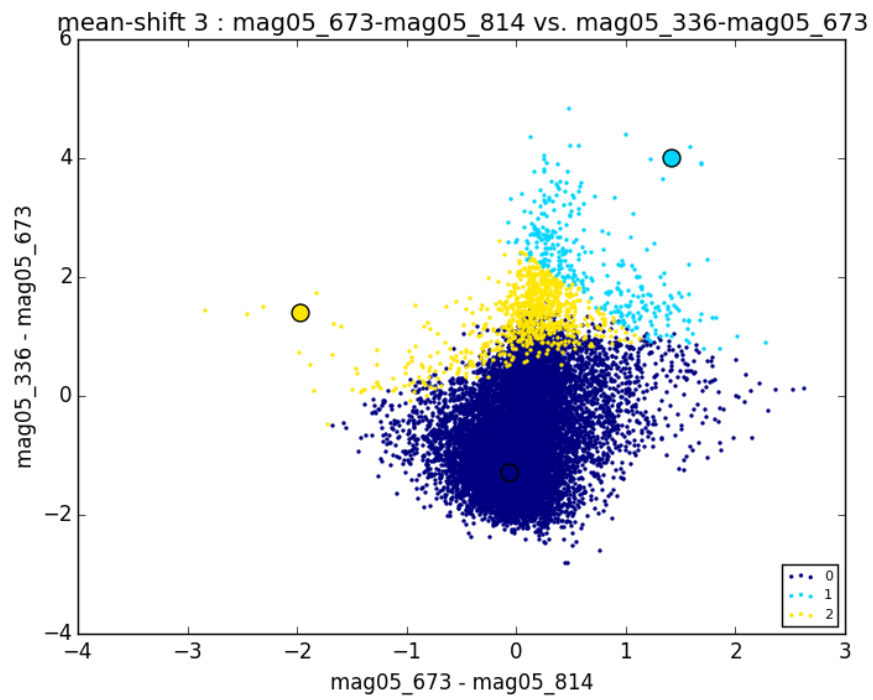
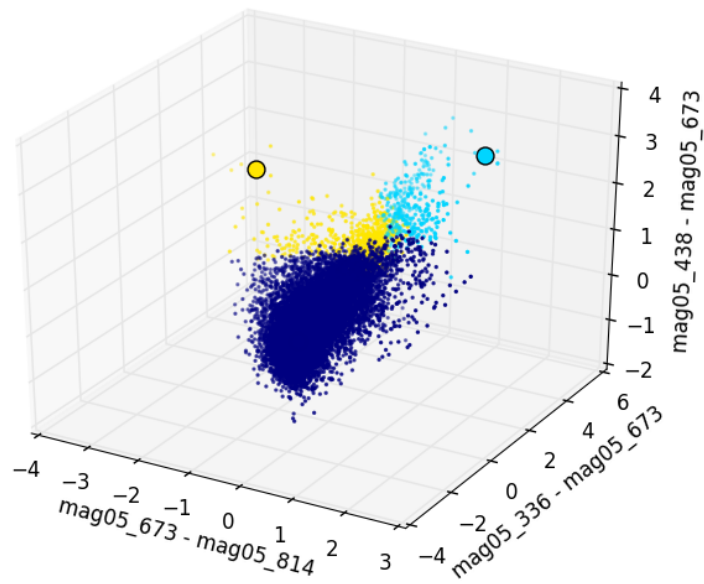Figure 32: meanshift__3d__color__3cl__mag05__673-mag05__814vsmag05__336-mag05__673.png

Figure 33: meanshift__3d__color__3cl__mag05__673-mag05__814vsmag05__336-mag05__673vsmag05__438-mag05__673.png
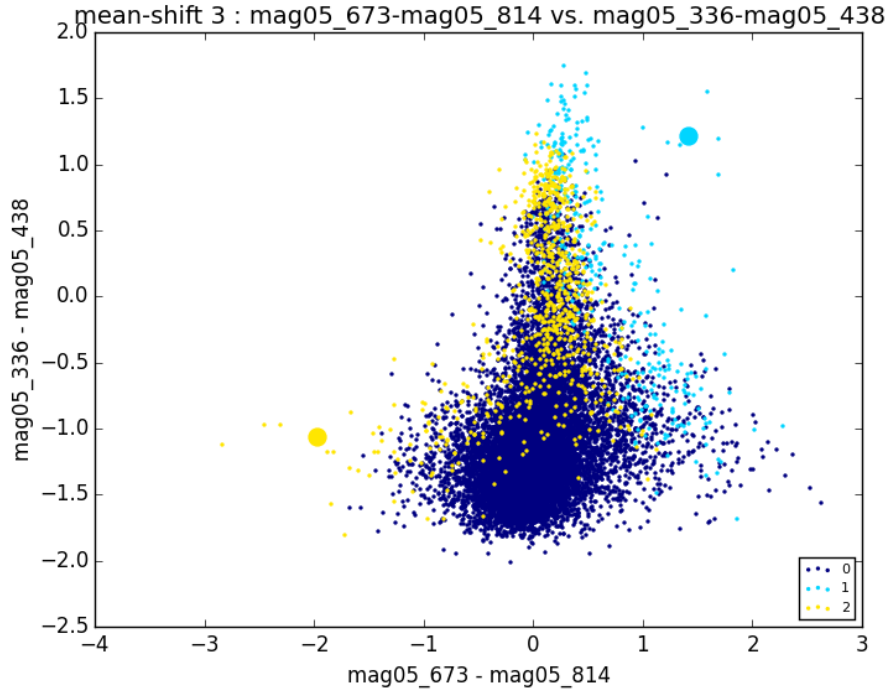
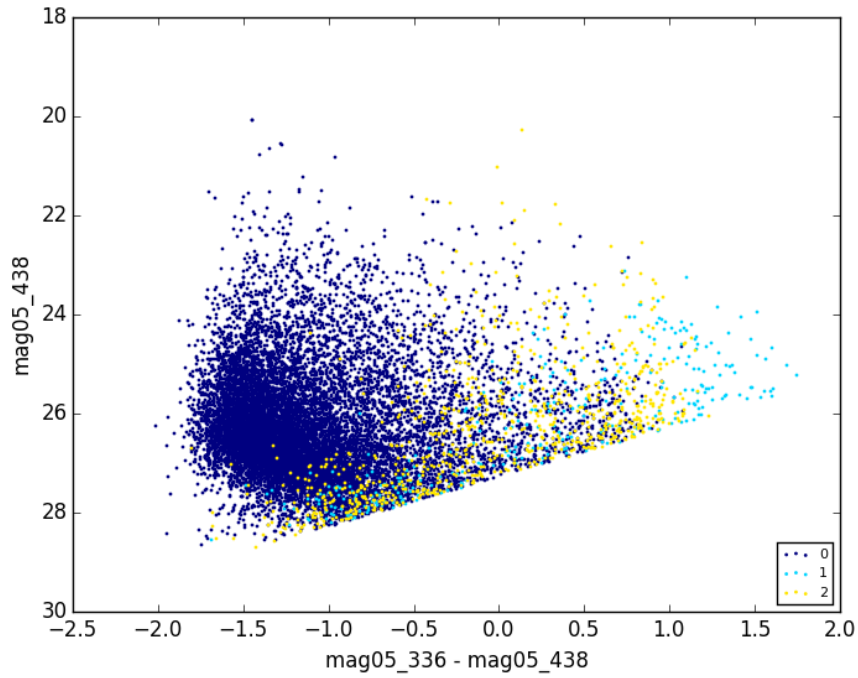Figure 34: meanshift_base_color_3cl_mag05_673-mag05_814vsmag05_336-mag05_438.png

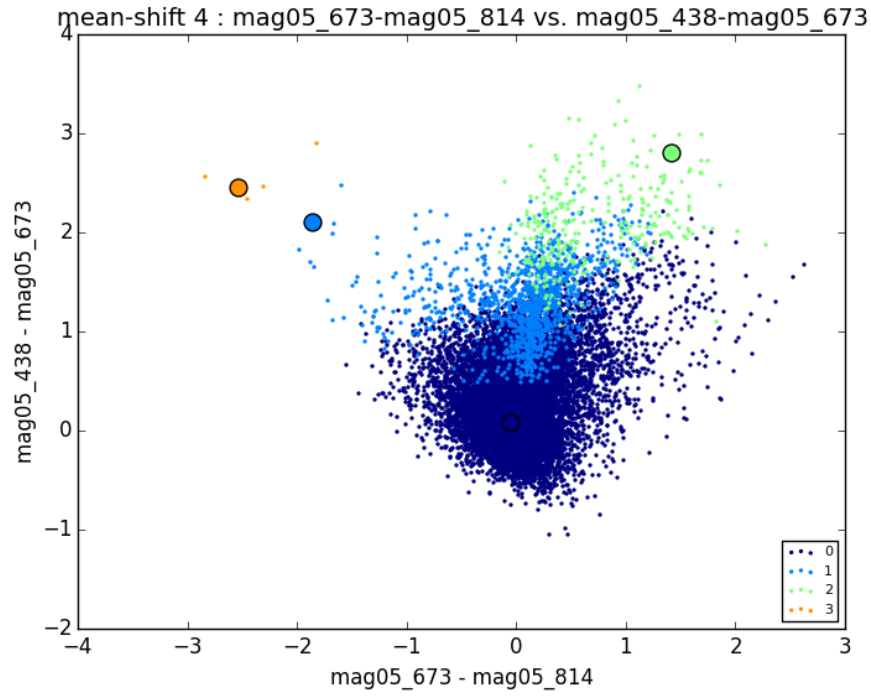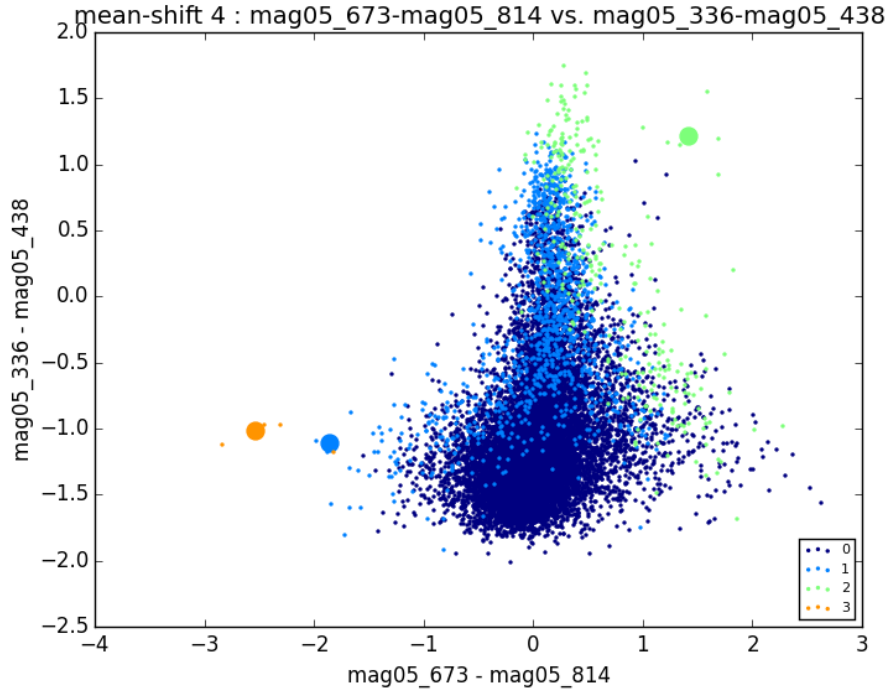Figure 35: meanshift_CMD_3cl_mag05_336-mag05_438vsmag05_438.png

Figure 36: meanshift__3d__color__4cl__mag05__673-mag05__814vsmag05__438-mag05__673.png

meanshift results, Ncl=4

Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	13133	0.451741609687	0.460500566049	0.7323	1.1203	4.8083	0.0010	0.7136	-0.0509175003248
2	1151	0.451741609687	0.390208960427	1.1074	1.0094	3.4090	0.0033	0.7159	-1.85175
3	289	0.451741609687	0.294355366986	1.9528	1.2795	4.5213	0.0141	0.9366	1.42283333333
4	4	0.451741609687	0.77107399554	2.2054	0.6542	1.1051	0.2272	2.1303	-2.535

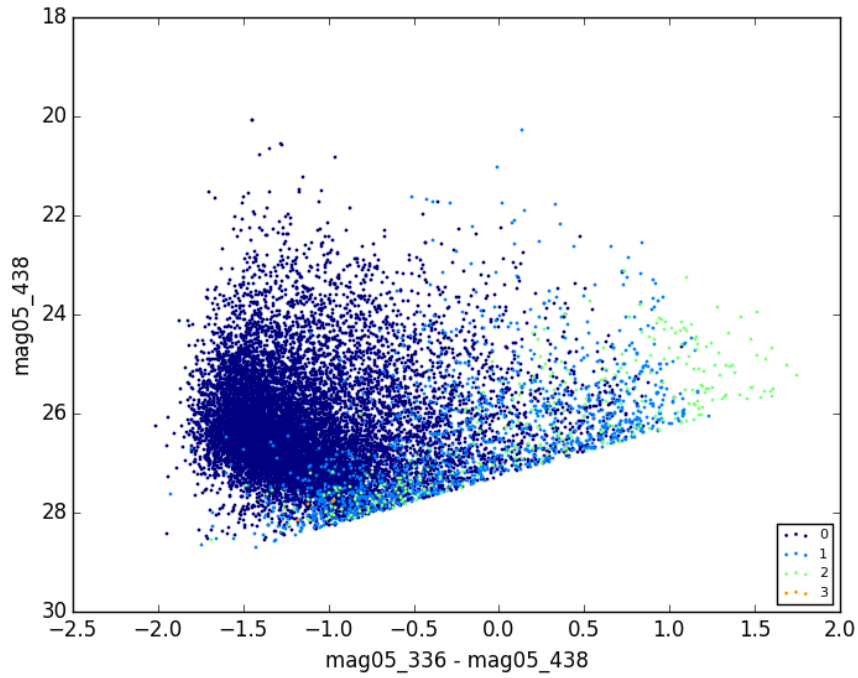Figure 37: meanshift__base__color__4cl__mag05__673-mag05__814vsmag05__336-mag05__438.png

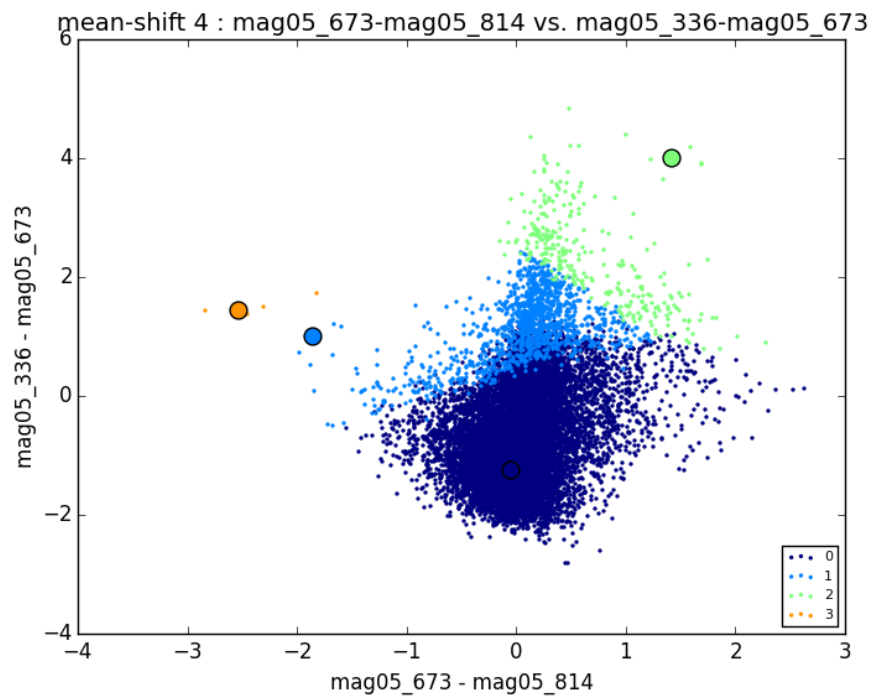Figure 38: meanshift__CMD__4cl__mag05__336-mag05__438vsmag05__438.png

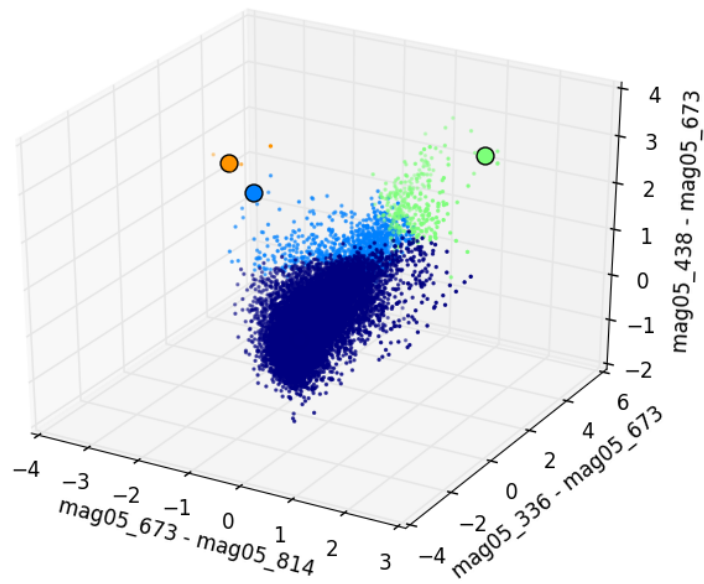Figure 39: meanshift__3d__color__4cl__mag05__673-mag05__814vsmag05__336-mag05__673.png

Figure 40: meanshift__3d__color__4cl__mag05__673-mag05__814vsmag05__336-mag05__673vsmag05__438-mag05__673.png

meanshift results, Ncl=7

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	12578	0.418668976676	0.439028164057	0.7257	1.0470	4.2828	0.0010	0.6972	-0.0576432194792
2	53	0.418668976676	0.30567044286	2.3935	0.7498	2.7266	0.0230	1.3379	0.49
3	1323	0.418668976676	0.352522958004	0.9315	0.9130	3.2770	0.0040	0.6474	-1.67483333333
4	21	0.418668976676	-0.0567958613132	2.3513	1.1053	2.5427	0.0885	1.1331	1.5082
5	3	0.418668976676	0.540797256536	2.2035	0.4063	0.5421	0.2272	2.1569	-2.535
6	598	0.418668976676	0.163584180431	1.5105	1.1128	3.7566	0.0033	0.6749	1.026
7	1	0.418668976676	0.0	N/A	N/A	N/A	N/A	2.006	-1.824
1	12618	0.418344367021	0.438176512926	0.7256	1.0517	4.2828	0.0010	0.6977	-0.0568321853475
2	1284	0.418344367021	0.3478703181	0.9382	0.9135	3.2770	0.0040	0.6517	-1.67483333333
3	14	0.418344367021	-0.0507765358179	2.3398	1.2158	2.5427	0.0885	1.1381	1.5082
4	65	0.418344367021	0.340371808927	2.3657	0.7788	2.7266	0.0230	1.3025	0.82375
5	3	0.418344367021	0.540797256536	2.2035	0.4063	0.5421	0.2272	2.1569	-2.535
6	592	0.418344367021	0.168232131222	1.5057	1.1032	3.7346	0.0033	0.6694	1.026
7	1	0.418344367021	0.0	N/A	N/A	N/A	N/A	2.006	-1.824
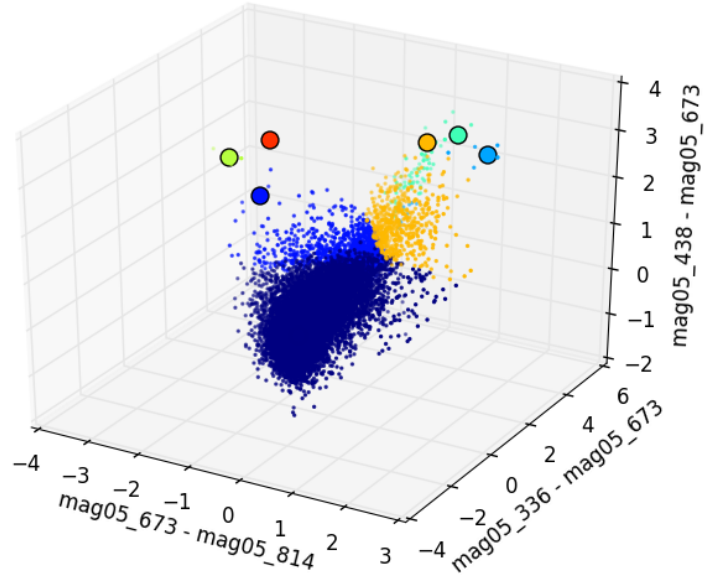
Figure 41: meanshift_3d_color_7cl_mag05_673-mag05_814vsmag05_336-mag05_673vsmag05_438-mag05_673.png
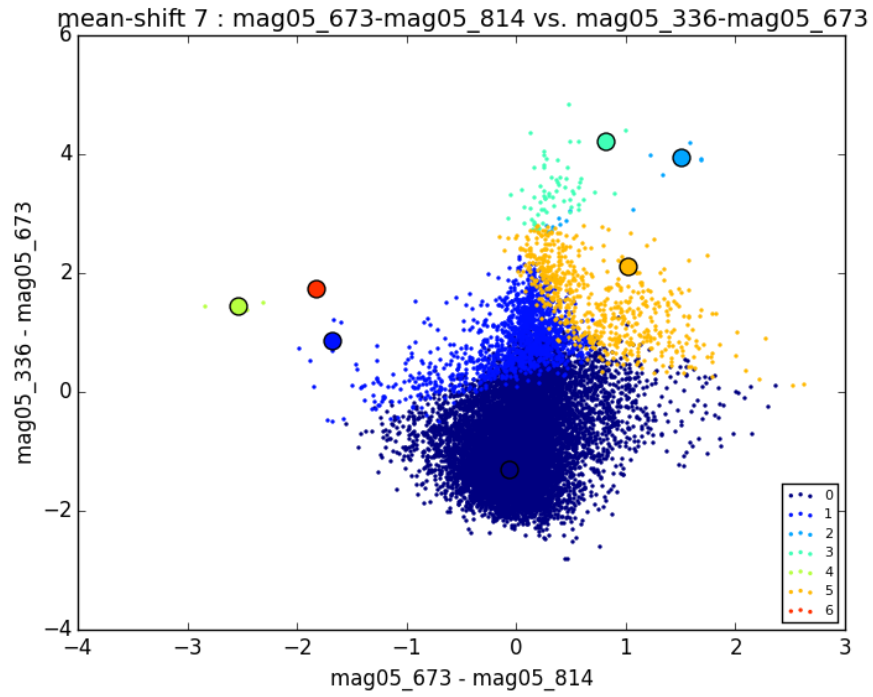

Figure 42: meanshift_3d_color_7cl_mag05_673-mag05_814vsmag05_336-mag05_673.png
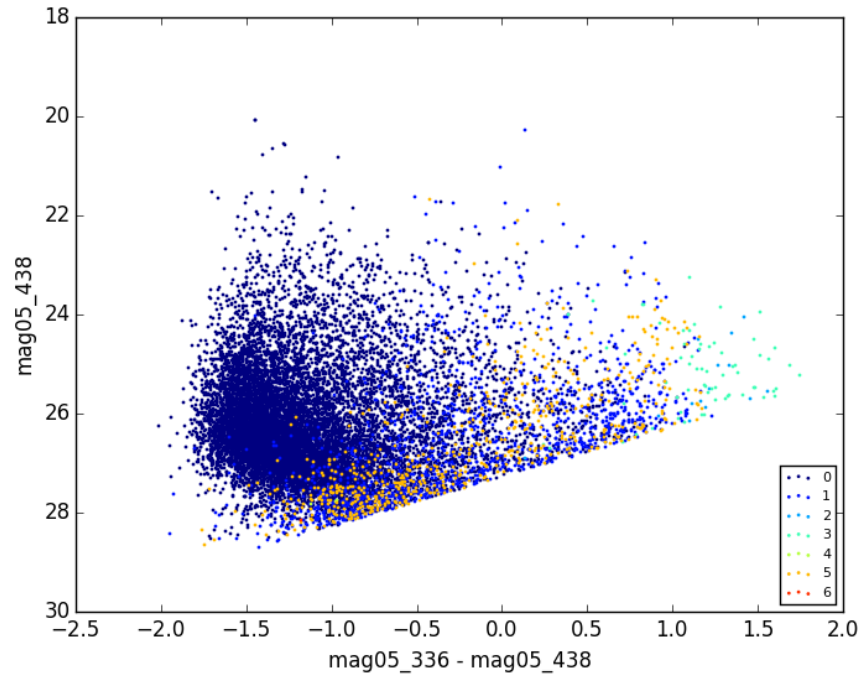
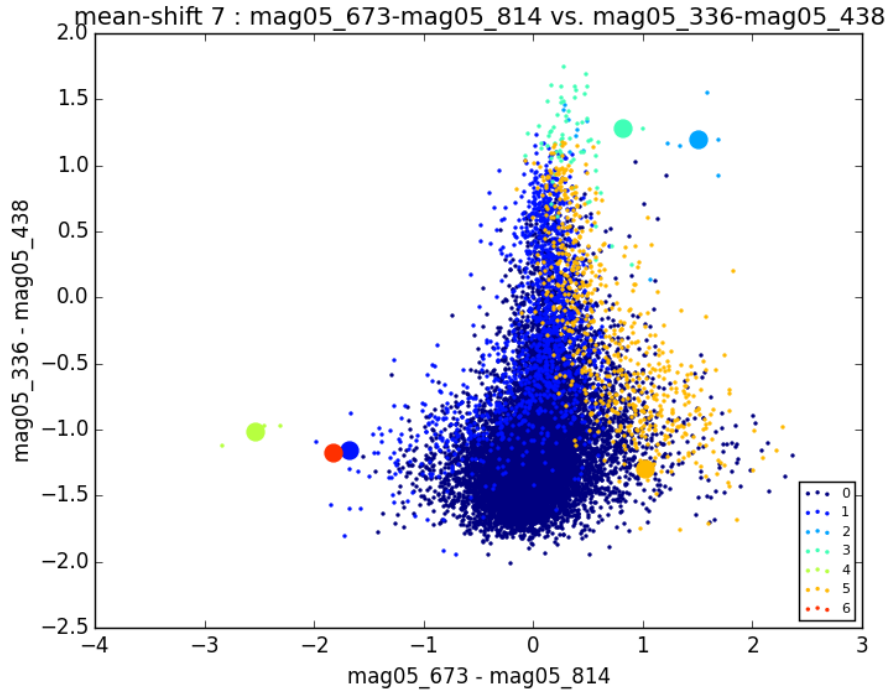Figure 43: meanshift__CMD__7cl_mag05__336-mag05__438vsmag05__438.png

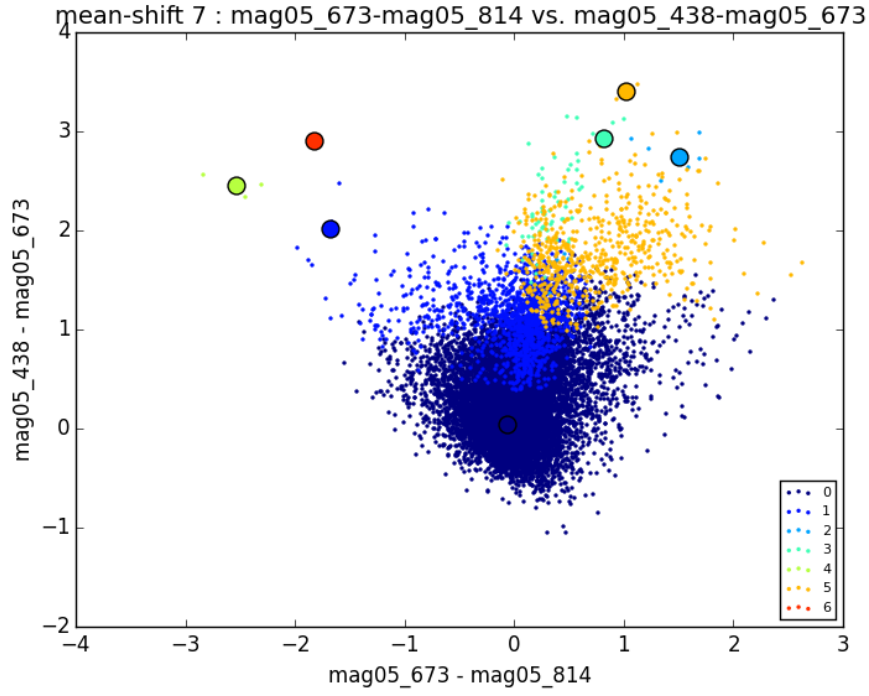Figure 44: meanshift__base__color__7cl_mag05__673-mag05__814vsmag05__336-mag05__438.png

Figure 45: meanshift__3d__color__7cl__mag05__673-mag05__814vsmag05__438-mag05__673.png

meanshift results, Ncl=11

| Cluster	Nobj	tScore	cScore	rms	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	11783	0.377103930066	0.425464289273	0.7256	0.9482	3.8802	0.0010	0.6793	-0.0586154562384
2	278	0.377103930066	0.219091128724	1.7607	0.8719	2.5945	0.0033	0.9792	0.319
3	478	0.377103930066	0.308353510926	0.8475	0.7741	2.6155	0.0095	0.7508	-1.691
4	6	0.377103930066	0.451946947847	2.8650	0.6297	1.1926	0.2632	1.0243	1.5082
5	7	0.377103930066	0.263418914628	2.8953	0.6033	1.1199	0.1558	1.5553	0.55025
6	3	0.377103930066	0.540797256536	2.2035	0.4063	0.5421	0.2272	2.1569	-2.535
7	82	0.377103930066	0.31617073445	1.8101	0.8216	2.2371	0.0430	0.7176	0.914
8	33	0.377103930066	0.425640904053	1.3740	0.6641	1.9098	0.0719	1.0016	-1.629
9	1905	0.377103930066	0.120392546003	0.9438	0.9709	3.3000	0.0040	0.5079	1.825
10	1	0.377103930066	0.0	N/A	N/A	N/A	N/A	1.796	0.479
11	1	0.377103930066	0.0	N/A	N/A	N/A	N/A	2.006	-1.824
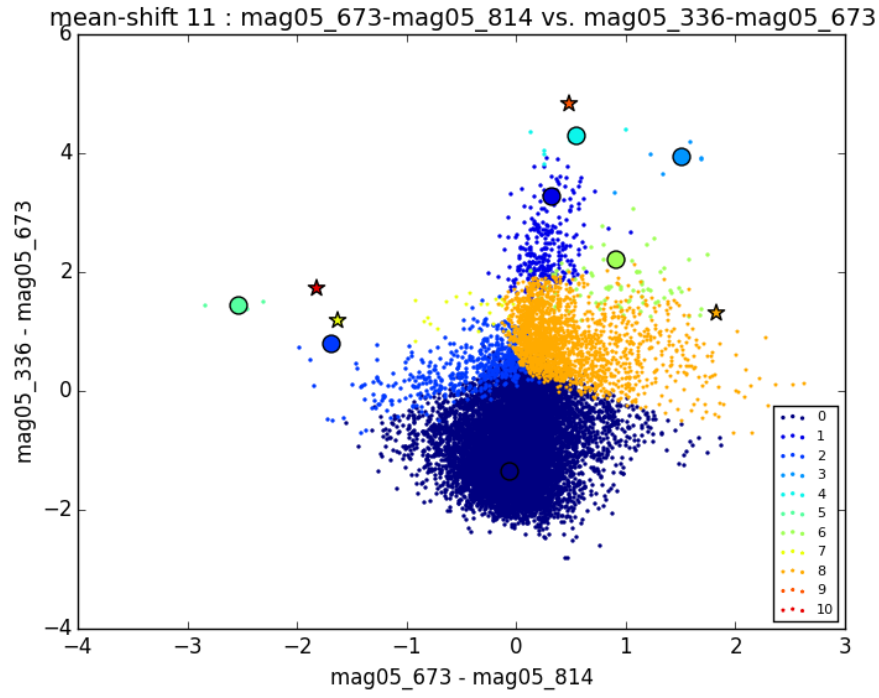
Figure 46: meanshift_3d_color_11cl_mag05_673-mag05_814vsmag05_336-mag05_673.png
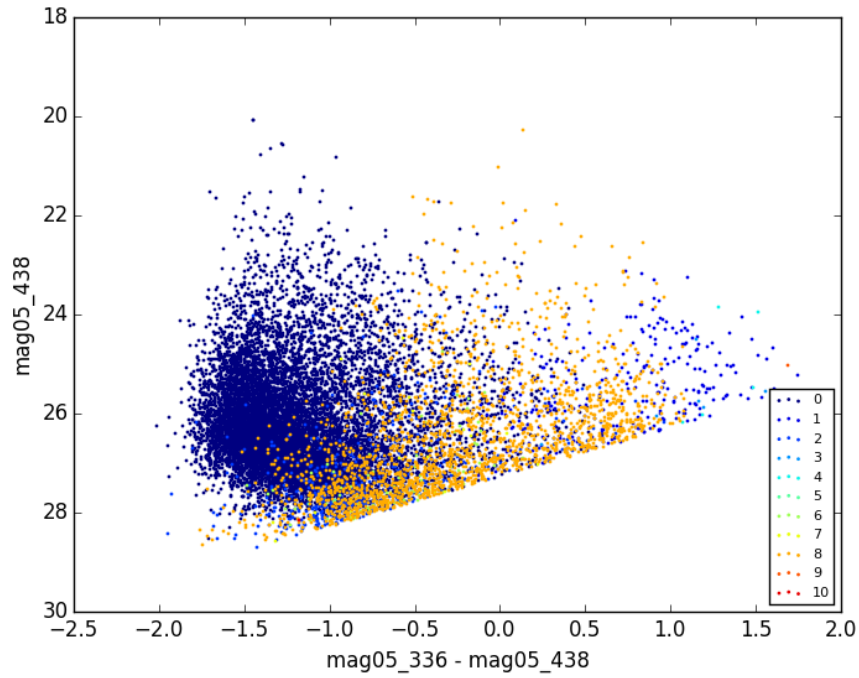

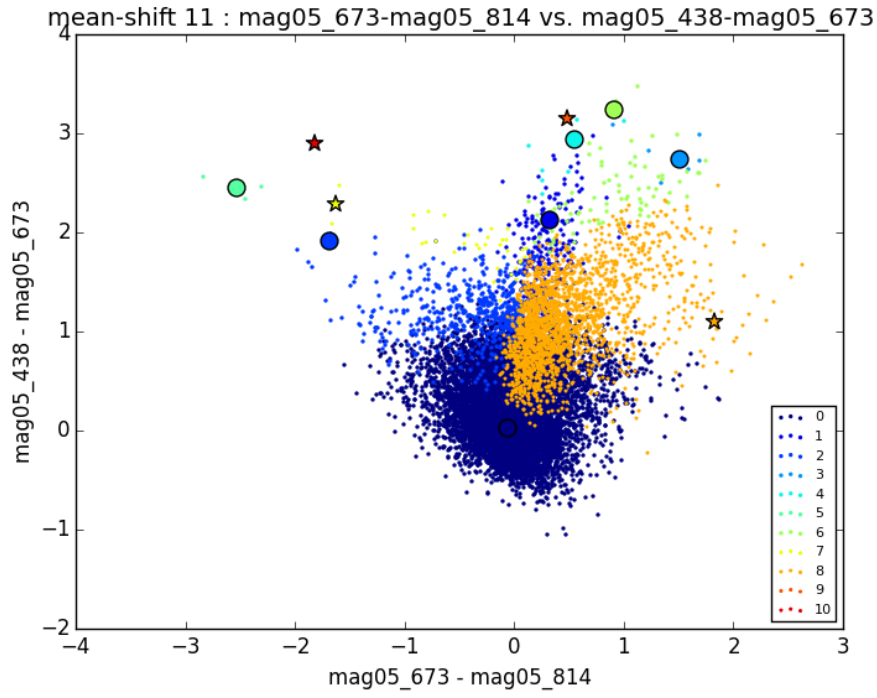Figure 47: meanshift_CMD_11cl_mag05_336-mag05_438vsmag05_438.png

Figure 48: meanshift_3d_color_11cl_mag05_673-mag05_814vsmag05_438-mag05_673.png
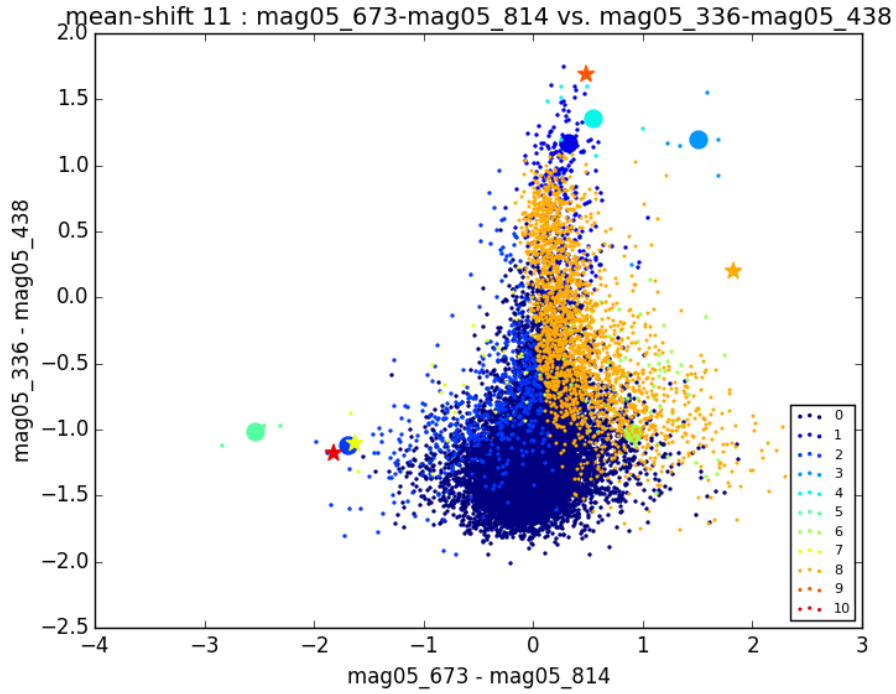

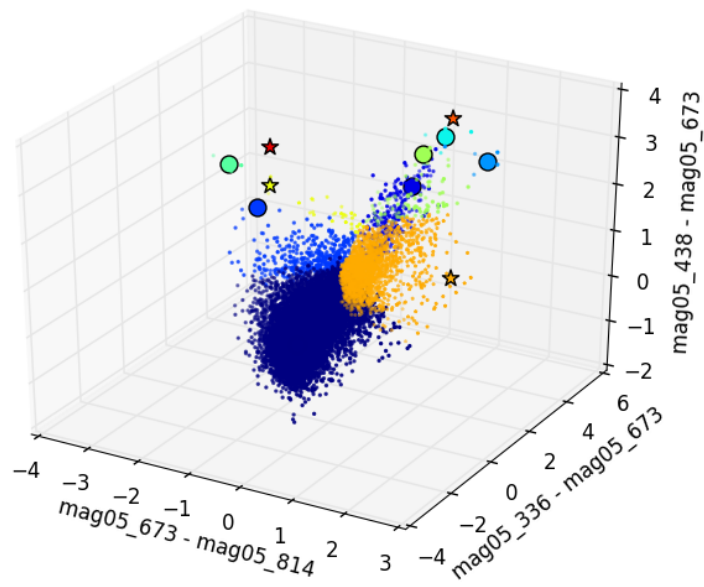Figure 49: meanshift_base_color_11cl_mag05_673-mag05_814vsmag05_336-mag05_438.png

Figure 50: meanshift_3d_color_11cl_mag05_673-mag05_814vsmag05_336-mag05_673vsmag05_438-mag05_673.png