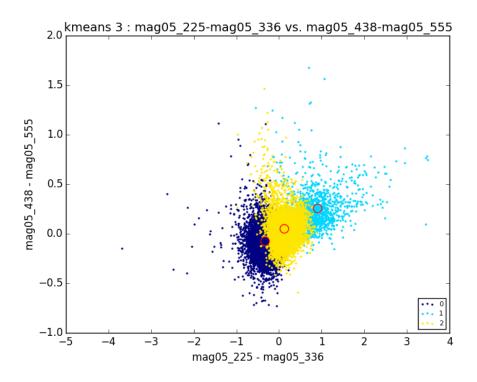
$Clustering\ output, found\ in/home/pauline/Research/m83_clustering/results/broad_narrow/UVW_U/clustering/mag05_225-mag05_336_mag05_225-mag05_225-mag05_225-mag05_255$

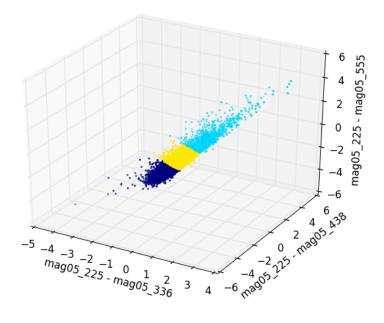
K-means results

Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	4105.14199902	0.495611180021	14943	8387	5389	1167	0	0	0	0	0
4	2826.60003979	0.45552862258	14943	6163	5878	2270	632	0	0	0	0
5	2138.10384999	0.425551270314	14943	5836	4069	3441	1253	344	0	0	0
6	1707.57353933	0.407816934822	14943	5277	3796	3139	1756	797	178	0	0
7	1438.87507439	0.380754354574	14943	4111	3949	2633	2185	1280	635	150	0
8	1254.92430095	0.363178070755	14943	3765	3640	2821	1691	1563	867	470	126

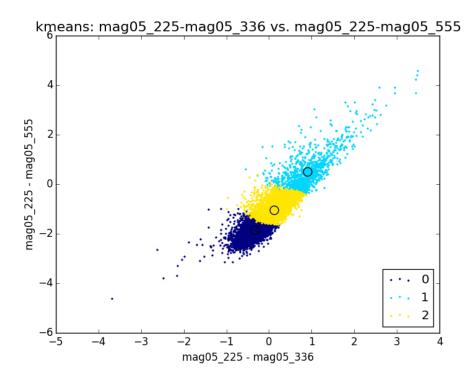


 $Figure~1:~kmeans_base_color_3cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

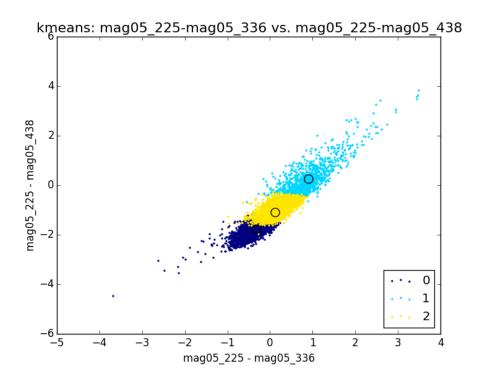
Cluster	Nobi	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	8387	0.495611180021	0.53625429993	1.5058	0	5.7745			-0.321192917611	-
2	1167	0.495611180021	0.43055115864	0.8809	1.1888	7.2269	0.0078	0.691	0.903007712082	0
3	5389	0.495611180021	0.446446436706	0.9212	0.5702	2.1508	0.0014	0.6251	0.118422341807	



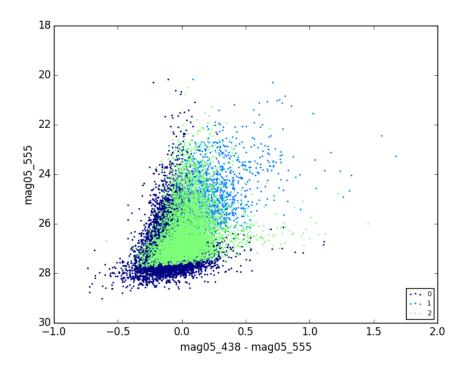
 $\label{eq:figure 2: kmeans_3d_color_3cl_mag05_225-mag05_336vsmag05_225-mag05_255.png} \\ \text{kmeans_3d_color_3cl_mag05_225-mag05_336vsmag05_225-mag05_225-mag05_326vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05_336vsmag05$



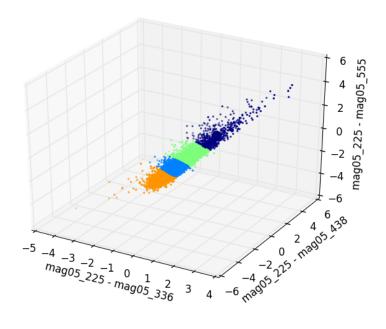
 $Figure \ 3: \ kmeans_3d_3cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$



 $Figure~4:~kmeans_3d_3cl_mag05_225-mag05_336vsmag05_225-mag05_438.png$

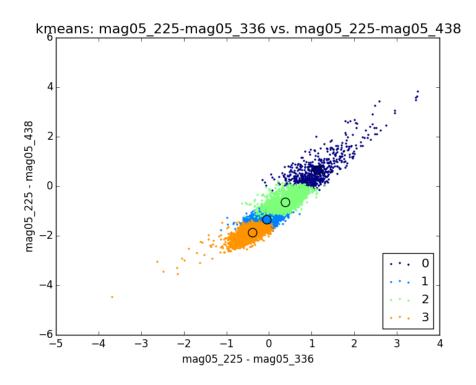


 $Figure~5:~kmeans_CMD_3cl_mag05_438-mag05_555vsmag05_555.png$

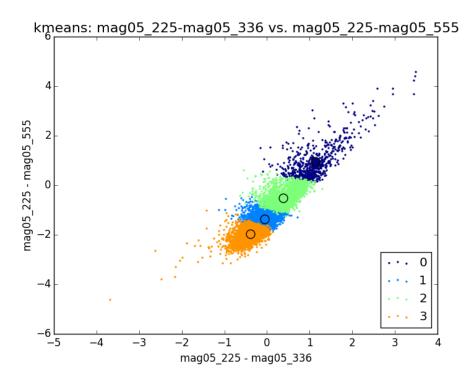


 $\label{eq:figure 6: kmeans_3d_color_4cl_mag05_225-mag05_336vsmag05_225-mag05_255.png} \\ \text{kmeans_3d_color_4cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_555.png}$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	632	0.45552862258	0.415563060374	1.1274	1.1873	6.5160	0.0085	0.6622	1.13408860759	0
2	6163	0.45552862258	0.447687333993	1.1283	0.4157	1.9854	0.0010	0.6466	-0.0511496024663	
3	2270	0.45552862258	0.409818206233	0.6112	0.6256	2.2425	0.0030	0.552	0.392701762115	-(
4	5878	0.45552862258	0.485699895458	1.5973	0.4338	5.4776	0.0010	0.7521	-0.3904047295	



 $Figure~7:~kmeans_3d_4cl_mag05_225-mag05_336vsmag05_225-mag05_438.png$



 $Figure~8:~kmeans_3d_4cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$

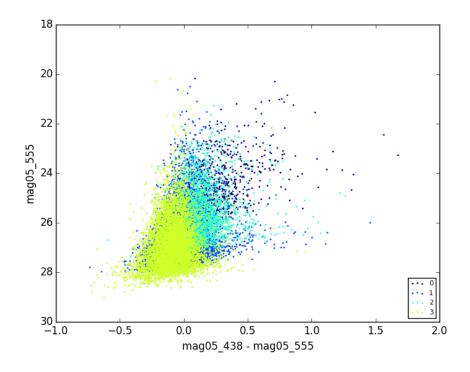
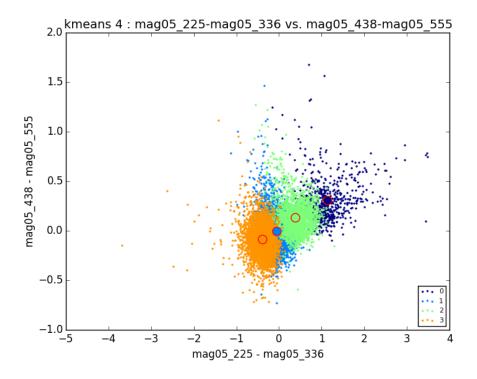
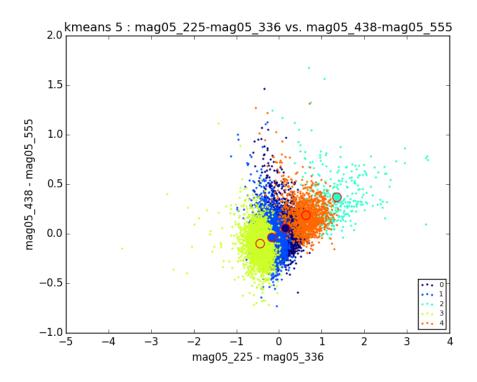


Figure 9: kmeans_CMD_4cl_mag05_438-mag05_555vsmag05_555.png

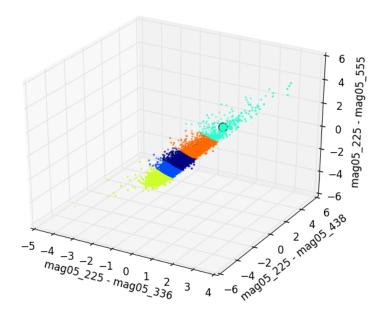


 $Figure~10:~kmeans_base_color_4cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$



 $Figure~11:~kmeans_base_color_5cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	3441	0.425551270314	0.40655382788	0.8635	0.4414	1.6718	0.0014	0.5918	0.155866027318
2	5836	0.425551270314	0.425844247225	1.2766	0.3471	1.7818	0.0010	0.6701	-0.165731494174
3	344	0.425551270314	0.384370860605	1.4244	1.2289	5.9551	0.0222	0.6613	1.35163662791
4	4069	0.425551270314	0.445886170959	1.6742	0.3961	5.3089	0.0010	0.7641	-0.447557630868
5	1253	0.425551270314	0.421627676039	0.5011	0.6717	2.1740	0.0050	0.4899	0.626628890662



 $\label{lem:figure 12:mag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-$

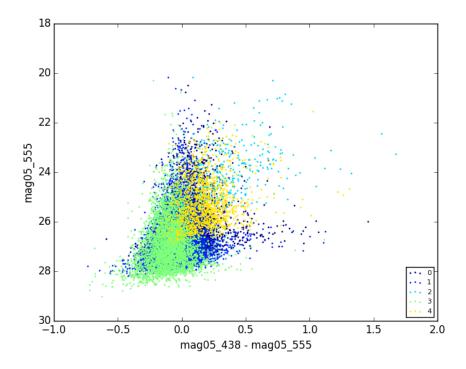
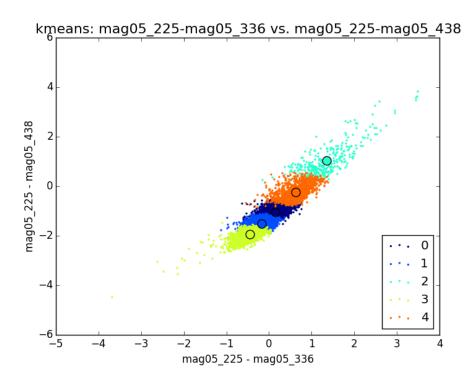
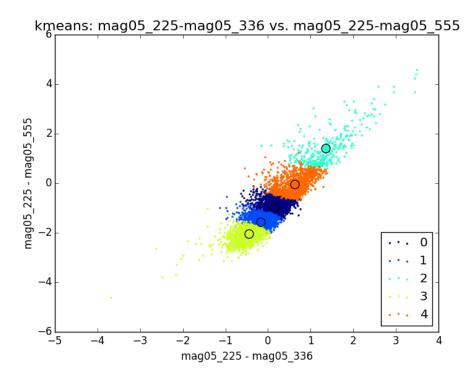


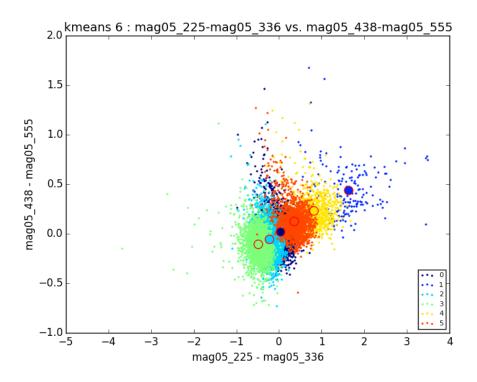
Figure 13: kmeans_CMD_5cl_mag05_438-mag05_555vsmag05_555.png



 $Figure~14:~kmeans_3d_5cl_mag05_225-mag05_336vsmag05_225-mag05_438.png$

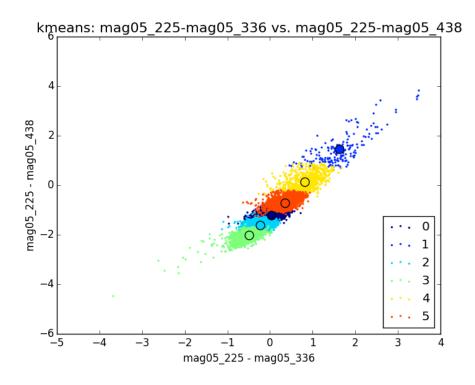


 $Figure~15:~kmeans_3d_5cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$

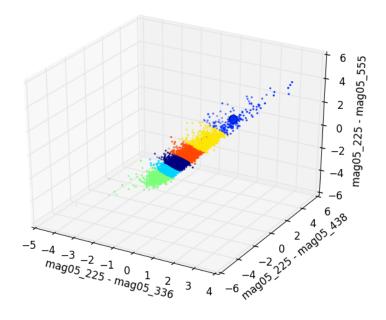


 $Figure~16:~kmeans_base_color_6cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	3796	0.407816934822	0.401170151862	1.0132	0.3556	1.9063	0.0014	0.6139	0.0311198630137	
2	178	0.407816934822	0.399714413967	1.7844	1.2597	5.1814	0.0222	0.6659	1.63452808989	
3	5277	0.407816934822	0.403620468686	1.3587	0.3166	1.5956	0.0010	0.6859	-0.224668561683	
4	3139	0.407816934822	0.428571674503	1.7227	0.3767	5.2215	0.0010	0.7736	-0.481291812679	
5	797	0.407816934822	0.421626157351	0.6159	0.7019	2.2669	0.0078	0.4388	0.824245922208	
6	1756	0.407816934822	0.392249230045	0.6185	0.4839	2.1182	0.0030	0.5303	0.357911731207	



 $Figure\ 17:\ kmeans_3d_6cl_mag05_225-mag05_336vsmag05_225-mag05_438.png$



 $\label{lem:figure 18: kmeans_3d_color_6cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_555.png$

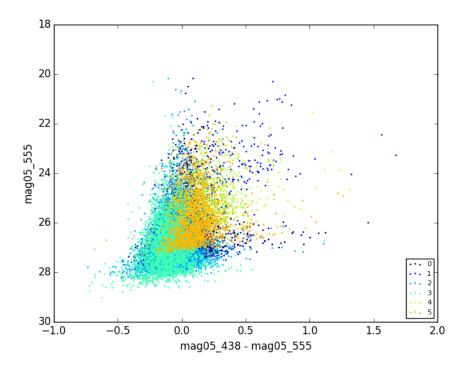
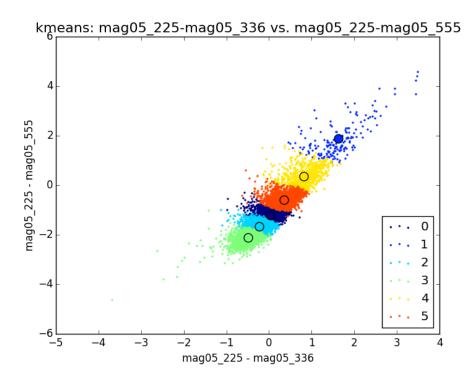
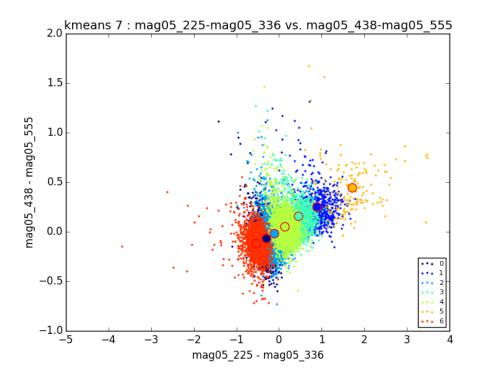


Figure 19: kmeans_CMD_6cl_mag05_438-mag05_555vsmag05_555.png

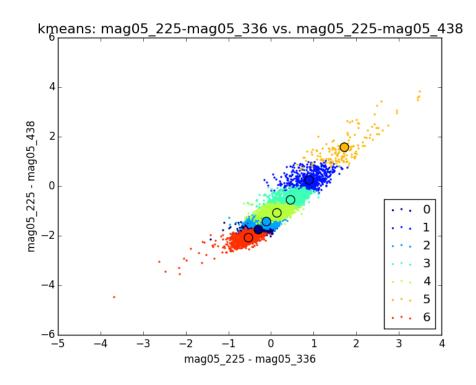


 $Figure~20:~kmeans_3d_6cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$

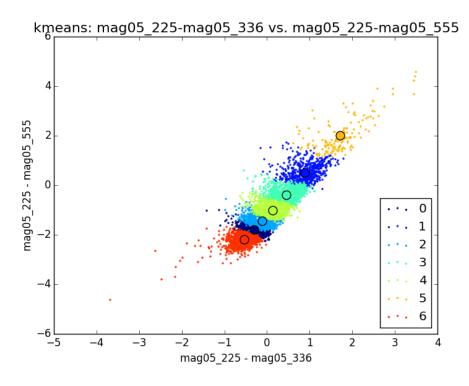


 $Figure~21:~kmeans_base_color_7cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

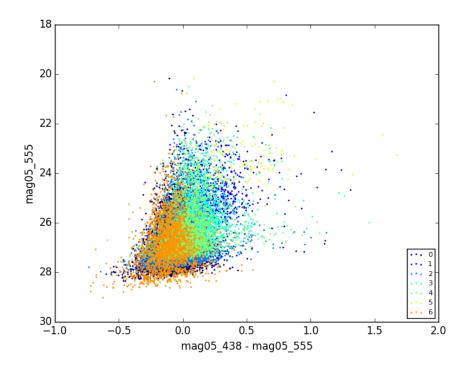
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	4111	0.380754354574	0.388691820813	1.4632	0.2818	1.9044	0.0010	0.708	-0.29650620287	-1
2	635	0.380754354574	0.417144539912	0.6911	0.6893	2.2084	0.0085	0.414	0.896595275591	0.
3	3949	0.380754354574	0.366896303426	1.1843	0.2985	1.6977	0.0010	0.6443	-0.102821220562	-1
4	1280	0.380754354574	0.381109623188	0.5248	0.4941	1.8887	0.0030	0.4988	0.45873046875	
5	2633	0.380754354574	0.371496402523	0.8768	0.3605	1.6718	0.0014	0.5854	0.140967337638	-1
6	150	0.380754354574	0.400772751856	1.8824	1.2422	5.0257	0.0223	0.6598	1.71855333333	1
7	2185	0.380754354574	0.389864394356	1.7825	0.3595	5.0061	0.0010	0.7814	-0.531964302059	-2



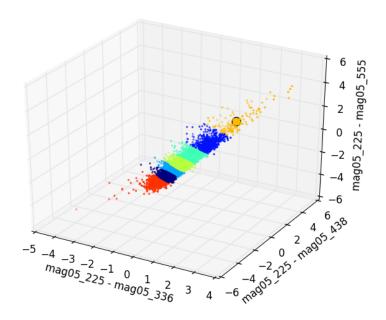
 $Figure~22:~kmeans_3d_7cl_mag05_225-mag05_336vsmag05_225-mag05_438.png$



 $Figure~23:~kmeans_3d_7cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$



 $Figure~24:~kmeans_CMD_7cl_mag05_438-mag05_555vsmag05_555.png$



 $\label{eq:figure 25} Figure 25: kmeans_3d_color_7cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_555.png$

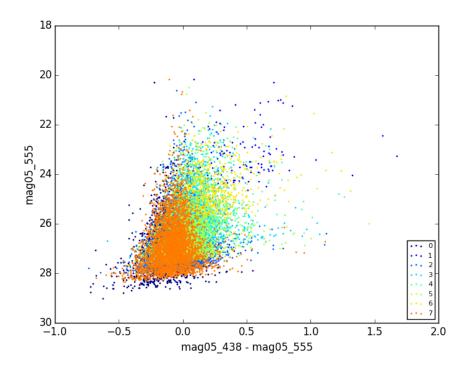
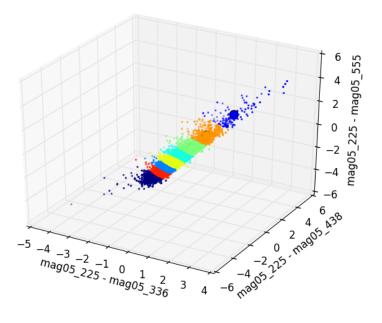
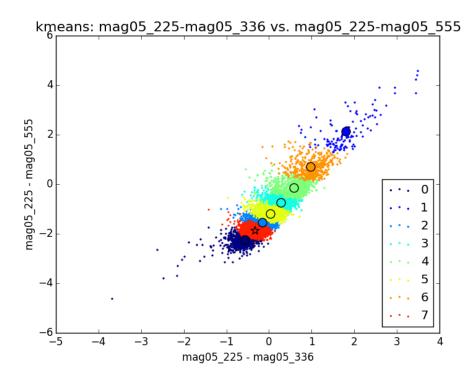


Figure 26: kmeans_CMD_8cl_mag05_438-mag05_555vsmag05_555.png

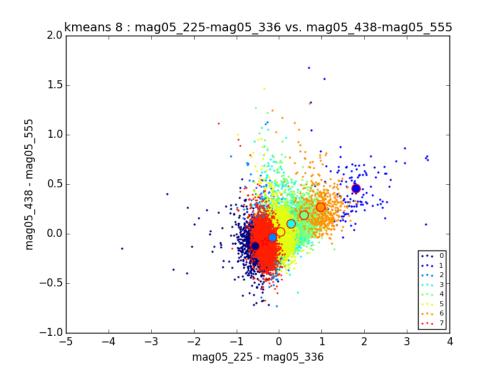
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	1691	0.363178070755	0.378901198353	1.8214	0.3548	4.9926	0.0010	0.7878	-0.563700768776	
2	126	0.363178070755	0.385055985582	1.9843	1.2354	4.8027	0.0366	0.6571	1.81064285714	
3	3765	0.363178070755	0.352009719495	1.2602	0.2766	1.5956	0.0010	0.6599	-0.157461088977	
4	1563	0.363178070755	0.359191321559	0.6982	0.3813	1.5534	0.0030	0.5404	0.278797184901	-
5	867	0.363178070755	0.37009567027	0.4563	0.4995	2.1003	0.0050	0.4547	0.583196078431	-
6	2821	0.363178070755	0.357351255707	0.9966	0.3073	1.9063	0.0014	0.6067	0.0440918114144	
7	470	0.363178070755	0.410982062407	0.7965	0.6658	2.1181	0.0085	0.3825	0.981625531915	
8	3640	0.363178070755	0.36507579489	1.5161	0.2740	1.9044	0.0010	0.7197	-0.332713461538	



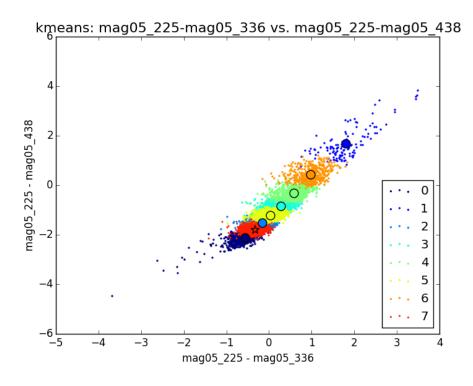
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 $Figure~28:~kmeans_3d_8cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$



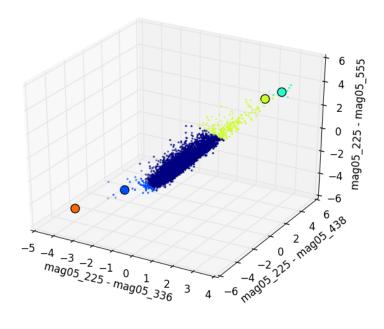
 $Figure~29:~kmeans_base_color_8cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$



 $Figure~30:~kmeans_3d_8cl_mag05_225-mag05_336vsmag05_225-mag05_438.png$

Meanshift results

Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
0.6821	7	0.50420180635	14943	14477	433	13	8	7	4	1	0	0	0
0.6000	9	0.352912845844	14943	14329	411	105	83	6	4	3	1	1	0
0.7200	6	0.496408683469	14943	14471	427	33	7	4	1	0	0	0	0
0.7500	6	0.496301053607	14943	14473	425	33	7	4	1	0	0	0	0
0.8000	5	0.405868348442	14943	14645	215	76	6	1	0	0	0	0	0



 $Figure 31: meanshift_3d_color_5cl_mag05_225-mag05_336vsmag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	14645	0.405868348442	0.400949135192	1.2663	1.0164	5.2184	0.0010	0.8167	-0.203366812227	-
2	76	0.405868348442	0.679620159951	2.2373	0.6287	2.4255	0.0128	0.7932	-1.80675	
3	6	0.405868348442	0.796853715133	3.6459	0.7551	1.1680	0.2449	0.476	3.19542857143	
4	215	0.405868348442	0.635155308971	1.5710	1.1167	4.1371	0.0222	0.5697	2.59928571429	
5	1	0.405868348442	0.0	N/A	N/A	N/A	N/A	0.4157	-3.682	

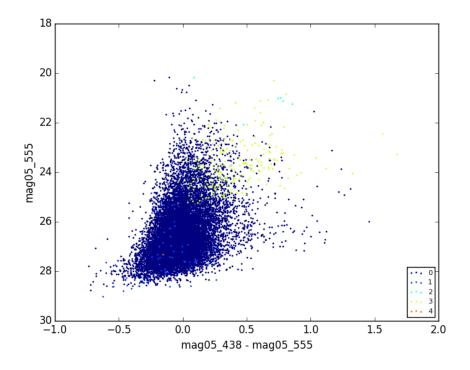
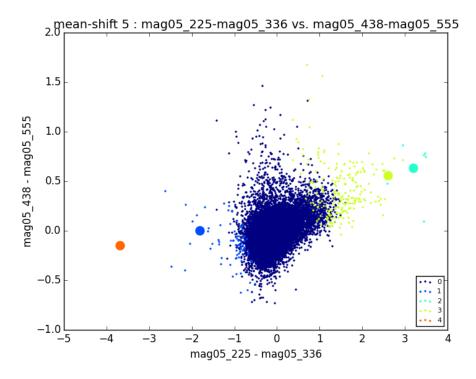
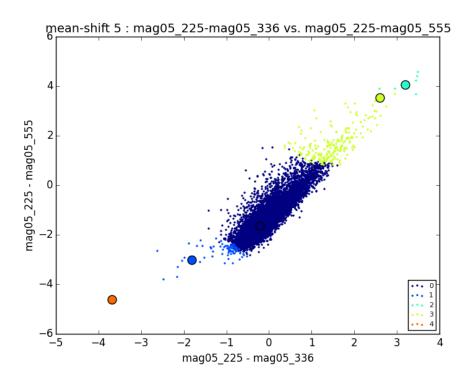


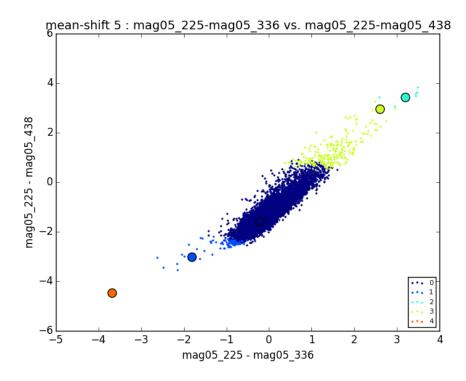
Figure 32: meanshift_CMD_5cl_mag05_438-mag05_555vsmag05_555.png



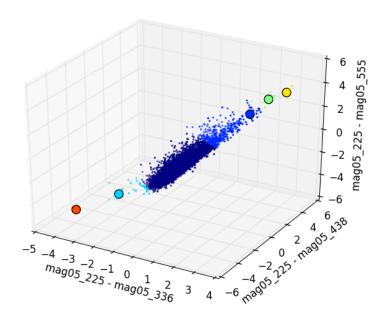
 $Figure~33:~meanshift_base_color_5cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$



 $Figure~34:~meanshift_3d_color_5cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$

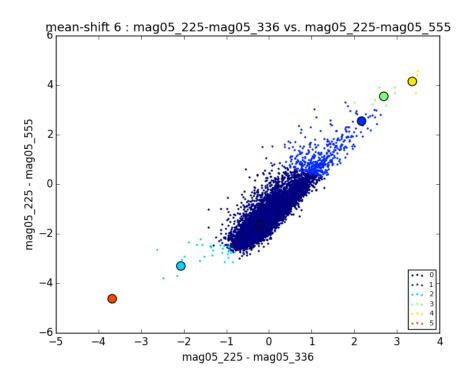


 $Figure~35:~meanshift_3d_color_5cl_mag05_225-mag05_336vsmag05_225-mag05_438.png$

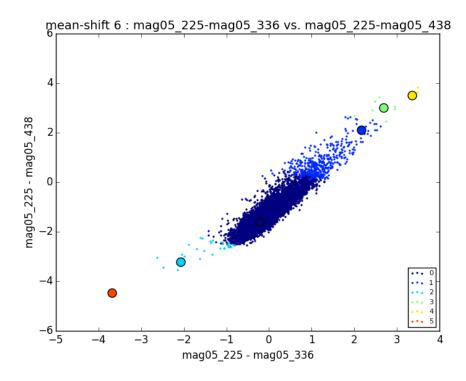


 $\label{eq:figure 36:mag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_336vsmag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag0$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	14471	0.496408683469	0.49309676552	1.2755	0.9587	4.7512	0.0010	0.7968	-0.207114036	-
2	427	0.496408683469	0.601742864041	1.2060	1.0697	3.8396	0.0085	0.5606	2.16807407407	
3	33	0.496408683469	0.608077230903	2.4001	0.8220	2.1681	0.0141	0.7497	-2.0646666667	-
4	4	0.496408683469	0.593120175429	3.7879	0.5391	0.9326	0.2449	0.3868	3.3616	
5	7	0.496408683469	0.406918709535	3.0618	0.7612	1.2508	0.2531	0.4835	2.687	
6	1	0.496408683469	0.0	N/A	N/A	N/A	N/A	0.4157	-3.682	
1	14473	0.496301053607	0.49300454893	1.2754	0.9592	4.7512	0.0010	0.7969	-0.206077530364	-
2	425	0.496301053607	0.601606134161	1.2081	1.0699	3.8396	0.0085	0.5606	2.16807407407	
3	33	0.496301053607	0.608129960278	2.4001	0.8220	2.1681	0.0141	0.7497	-2.0646666667	
4	7	0.496301053607	0.406918709535	3.0618	0.7612	1.2508	0.2531	0.4835	2.6975	
5	4	0.496301053607	0.593120175429	3.7879	0.5391	0.9326	0.2449	0.3868	3.3616	
6	1	0.496301053607	0.0	N/A	N/A	N/A	N/A	0.4157	-3.682	



 $Figure~37:~meanshift_3d_color_6cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$



 $Figure~38:~meanshift_3d_color_6cl_mag05_225-mag05_336vsmag05_225-mag05_438.png$

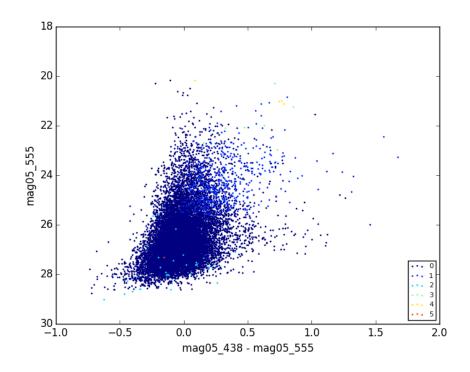
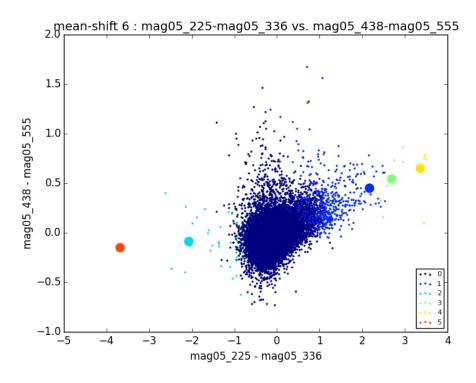
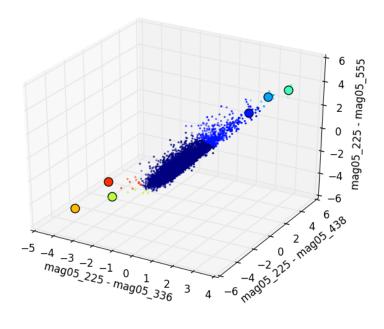


Figure 39: meanshift_CMD_6cl_mag05_438-mag05_555vsmag05_555.png

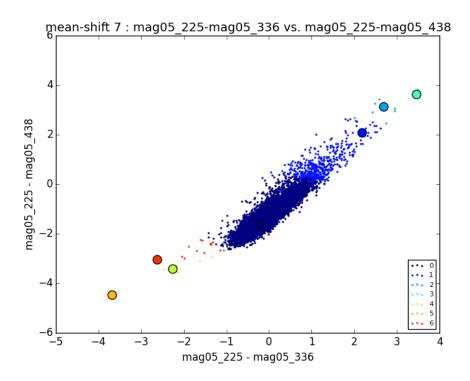


 $Figure~40:~meanshift_base_color_6cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

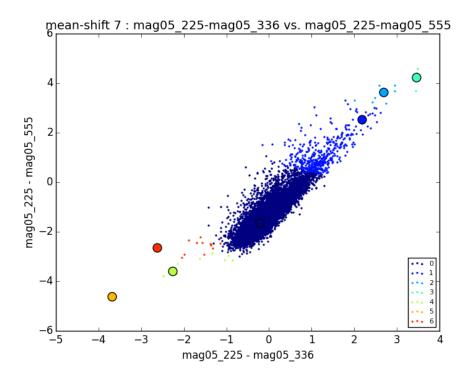


 $\label{eq:figure 41:meanshift_3d_color_7cl_mag05_225-mag05_336vsmag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-mag05_225-$

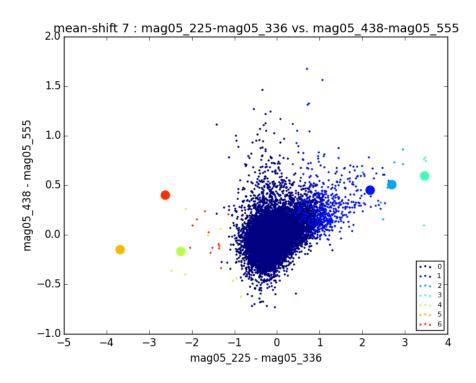
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	14477	0.50420180635	0.501696022947	1.2767	0.9587	4.7512	0.0010	0.7969	-0.21117561715	-1
2	433	0.50420180635	0.60186959872	1.1994	1.0702	3.8396	0.0085	0.5609	2.17826923077	2.
3	7	0.50420180635	0.406918709535	3.0618	0.7612	1.2508	0.2531	0.4835	2.687	
4	4	0.50420180635	0.593120175429	3.7879	0.5391	0.9326	0.2449	0.3868	3.464	
5	8	0.50420180635	0.0563081456583	2.7476	1.0159	1.9769	0.2020	0.8649	-2.252	-3
6	1	0.50420180635	0.0	N/A	N/A	N/A	N/A	0.4157	-3.682	
7	13	0.50420180635	0.381027308573	2.3428	0.6733	1.5328	0.0469	0.5375	-2.621	



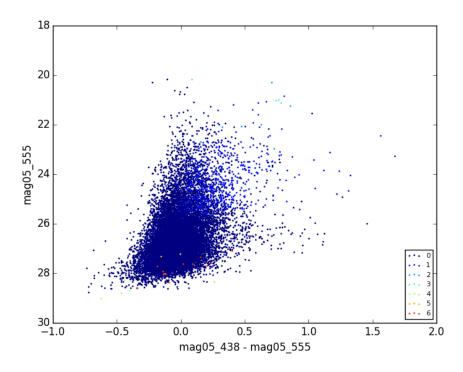
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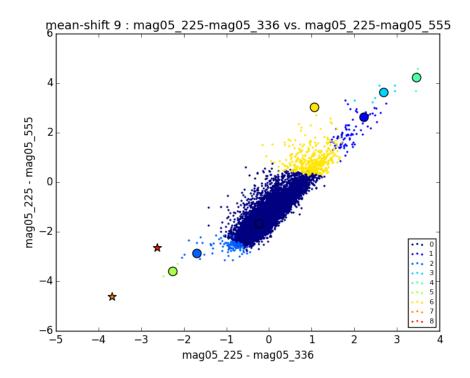
 $Figure~43:~meanshift_3d_color_7cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$



 $Figure~44:~meanshift_base_color_7cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

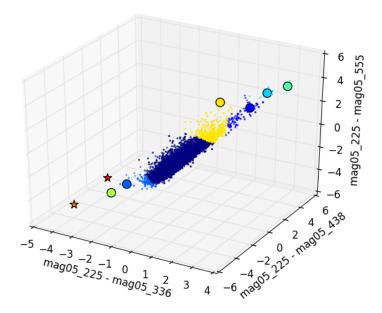


 $Figure~45:~meanshift_CMD_7cl_mag05_438-mag05_555vsmag05_555.png$

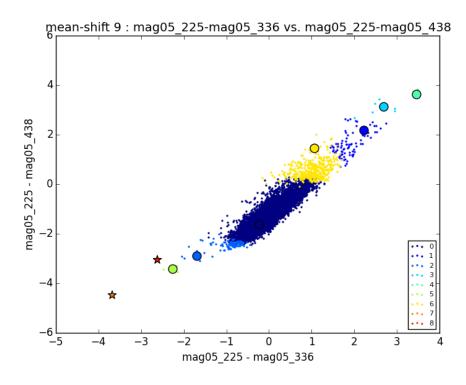


 $Figure~46:~meanshift_3d_color_9cl_mag05_225-mag05_336vsmag05_225-mag05_555.png$

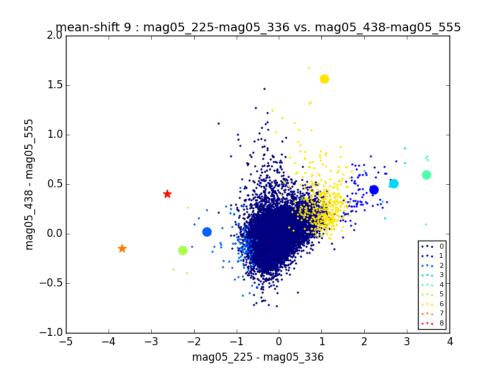
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	14329	0.352912845844	0.34502875508	1.2723	0.9351	4.2975	0.0010	0.7891	-0.218780004772	-
2	83	0.352912845844	0.308805639053	1.9054	0.9336	3.1326	0.0366	0.4776	2.23404761905	4
3	105	0.352912845844	0.687618725345	2.1379	0.4604	1.6794	0.0046	0.7898	-1.6945	
4	6	0.352912845844	0.40490380713	3.1029	0.7180	1.1807	0.2531	0.4967	2.687	
5	4	0.352912845844	0.574048477753	3.7879	0.5391	0.9326	0.2449	0.3868	3.464	
6	3	0.352912845844	0.557916499009	3.1561	0.4890	0.6203	0.3673	0.6221	-2.252	-
7	411	0.352912845844	0.548490081373	0.9208	0.7703	2.9984	0.0085	0.4154	1.071	
8	1	0.352912845844	0.0	N/A	N/A	N/A	N/A	0.4157	-3.682	
9	1	0.352912845844	0.0	N/A	N/A	N/A	N/A	0.1941	-2.621	



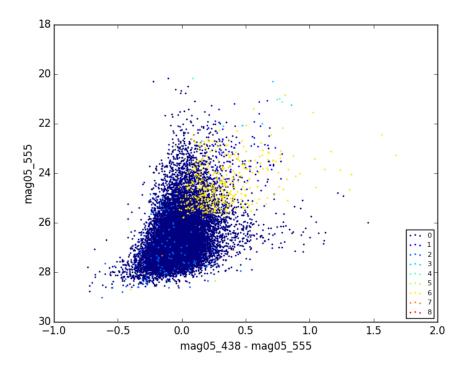
 $\label{eq:figure 47:meanshift_3d_color_9cl_mag05_225-mag05_336vsmag05_225-mag05_255.png} \\ \text{Figure 47:} \quad \text{meanshift_3d_color_9cl_mag05_225-mag05_336vsmag05_225-mag05_438vsmag05_225-mag05_555.png}$



 $Figure~48:~meanshift_3d_color_9cl_mag05_225-mag05_336vsmag05_225-mag05_438.png$



 $Figure~49:~meanshift_base_color_9cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$



 $Figure~50:~meanshift_CMD_9cl_mag05_438-mag05_555vsmag05_555.png$